



SDP-LCD8 is a DALI Master display with a series of configurable buttons with which we can control DALI addresses, DALI groups or broadcast, in addition we can configure the type of control of these buttons, for example; ON/OFF, DIMMING, TC, RGBW, XY,...



On our product website you can find the datasheet of SDP-LCD8 where all functions of the display are explained in detail.

We also have another document where we explain the control possibilities when connecting a Casambi-DALI gateway, such as the CBU-DA-1P, with a DALI Gateway fixture profile.

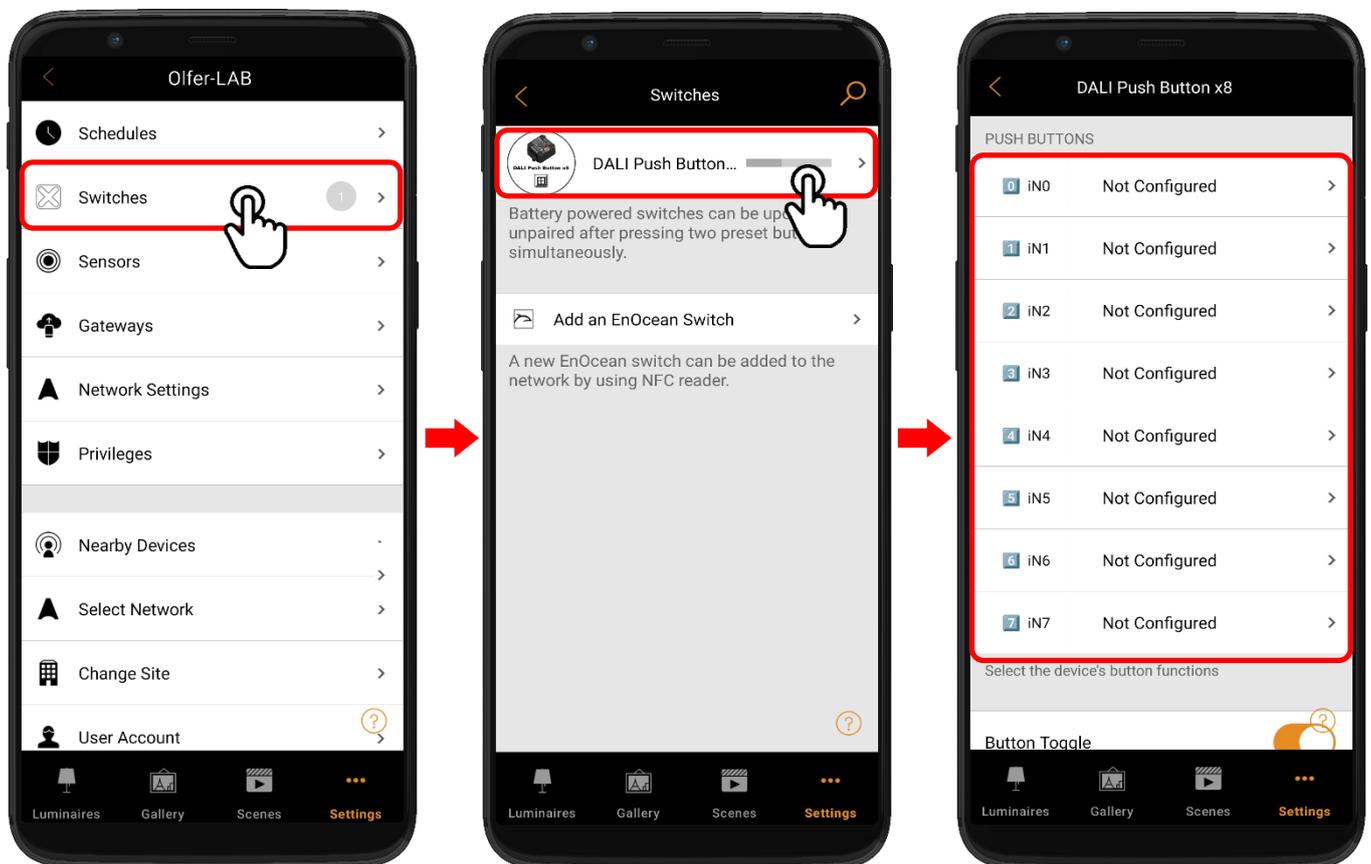
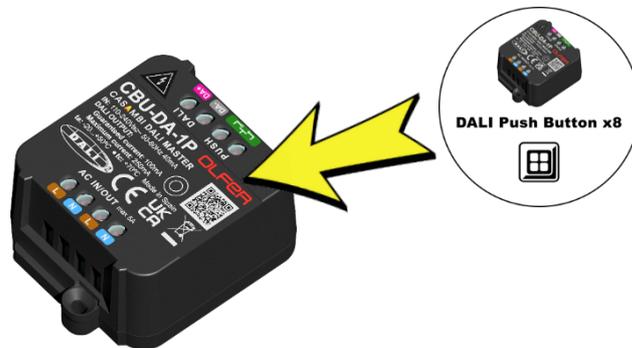


That document shows how we can control Casambi devices via a display that only controls DALI drivers. In short, Casambi devices can be virtualized as if they were DALI DT6/DT8 devices with their own short addresses. However, in the document we emphasize the control limitations that can arise when we have this type of installation as not all types of Casambi profiles can be correctly virtualized to DALI.



In this document we are going to explain an alternative control mode, also using our CBU-DA-1P connected to the display, but with another Casambi fixture profile, the "DALI Push Button x8", to control this time **scenes, animations and other Casambi functionalities** from the SDP-LCD8 display.

This is possible thanks to fixture profiles like "DALI Push button". These are Casambi fixture profiles that would allow us to control devices/groups/scenes/etc. in the switch section of the App via DALI push button instances.

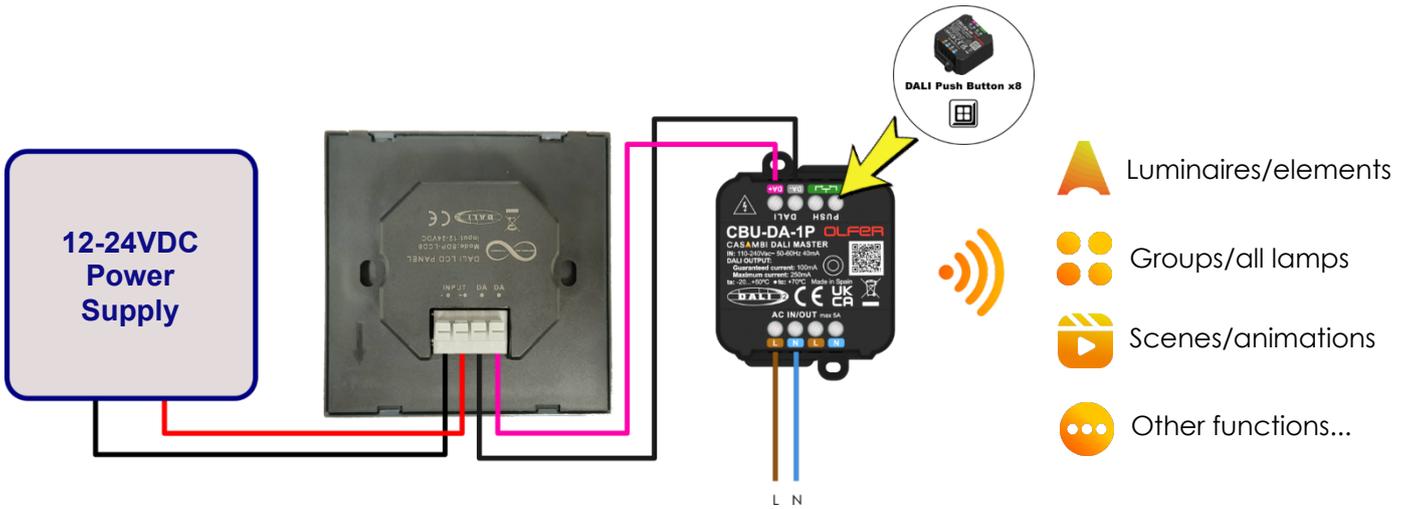


These push button functions can be configured to control various Casambi functions. Normally, these functions would be triggered by receiving "Short press" type instance events that would be sent by a push button panel via the DALI bus. **However, they can also be triggered by 'GO TO SCENE X' type commands.**

The display, as a Single Master Application Controller, does not send instance events, but it can send control commands such as "GO TO SCENE". Therefore, we can take advantage of the latter to obtain a wider range of control possibilities.



Before going deeper into how this control would be implemented, let's remember what the wiring diagram would look like:

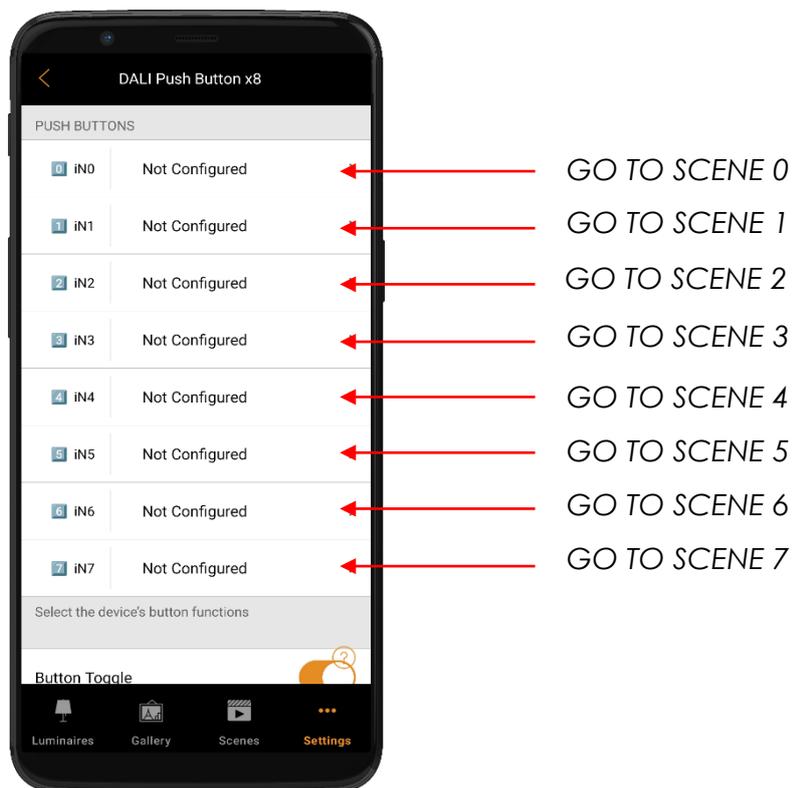


We need a DC power supply with an output voltage between 12 and 24V which will go to the INPUT connectors of the display, then the DALI connectors will go to the CBU-DA-1P.

The CBU-DA-1P will have to be configured with the DALI Push Button x8 fixture profile and will have to be added to the network where we want to control the Casambi devices/scenes/functions...

Once added to the network, go to "Settings •••" > "Switches" > "DALI Push button x8 (CBU-DA-1P)"

Up to 8 Casambi functions are available which can be configured and activated via DALI scenes with "GO TO SCENE" commands. These functions are numbered from 0 to 7 and correspond respectively to the commands "GO TO SCENE 0" to "GO TO SCENE 7".





By pressing on any function we will see that we have many control options. We find that we can control: Lamps, elements, groups, adjust color temperature, scenes, animations, resume automation...

The screenshot shows the 'DALI Push Button x8' app interface. The top section is titled 'PUSH BUTTONS' and lists eight buttons (iN0 to iN7), all currently 'Not Configured'. A red box highlights the first button (iN0) with a hand icon pointing to it. Below the list is a 'Button Toggle' section. At the bottom, there are navigation icons for 'Luminaires', 'Gallery', 'Scenes', and 'Settings'.

The control functions listed are:

- Controls a Luminaire**: Tap to turn a luminaire on or off - hold to adjust luminaire brightness.
- Controls an Device Element**: Tap to turn a device element on or off - hold to adjust the element value.
- Controls a Group**: Tap to turn a group ON or OFF - hold to adjust brightness.
- Control a Scene**: Tap to turn a scene on or off - hold to adjust scene brightness.
- Controls all Luminaires**: Tap to turn all luminaires ON or OFF - hold to adjust brightness.
- Controls Priority**: Changes control behavior of luminaires in the selected scenes.
- Control Function**: Control of the last active device.
- Adjust the temperature of a luminaire**: Tap or hold to adjust the color temperature.
- Adjust the temperature of a group**: Tap or hold to adjust color temperature.
- Adjust the temperature of all the luminaires**: Tap or hold to adjust the color temperature.
- Cycle Scenes**: Press to cycle through selected scenes - hold to dim the current scene.
- Active/Standby**: Tap to switch between two scenes - hold to adjust current scene brightness.
- Occupancy**: Activates a scene after detecting motion. When motion is no longer detected and the delay time has passed it will be faded out.
- Occupancy/Vacancy**: Activates a scene after detecting motion. When the motion is no longer detected and the delay time has passed the absence scene will be faded in.
- Vacancy**: Not a direct control; will time out the manual control on affected luminaires after the occupancy is no longer detected and the delay time has passed.
- Resumes Automation (of a group)**: Removes the manual control from affected luminaires and resumes lighting automation.
- Resumes Automation**: Removes the manual control from affected luminaires and resumes lighting automation.
- Cycle through Modes**: Tap to cycle through selected luminaire modes and OFF - hold to adjust luminaire brightness.

All available control functions are shown in the images above. It is important to note that **long presses are not possible** when using the display, so functions that require this type of interaction (such as gradually adjusting temperature level/color) cannot be executed.

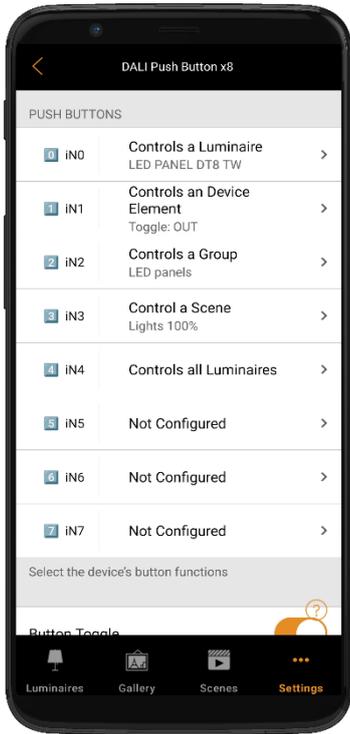
**Controls a Luminaire**  
Tap to turn a luminaire on or off - hold to adjust luminaire brightness.

**Cycle Scenes**  
Press to cycle through selected scenes - hold to dim the current scene.

It should be noted that although it is not possible to dim the intensity level and color temperature by long presses from the display, **it is possible to send DALI commands** such as UP or DOWN to adjust the last activated control mode. We will explain how to carry out this process later on.



There are also other functions, such as 'Control function', which would allow us to control the last activated function, however, it is not yet fully optimized and sometimes does not respond properly.



With all this in mind, we recommend keeping the configuration simple and assigning simpler 'Control Lamp/Element/Scene' type functions, as they allow you to reliably and consistently activate or deactivate whatever you control.

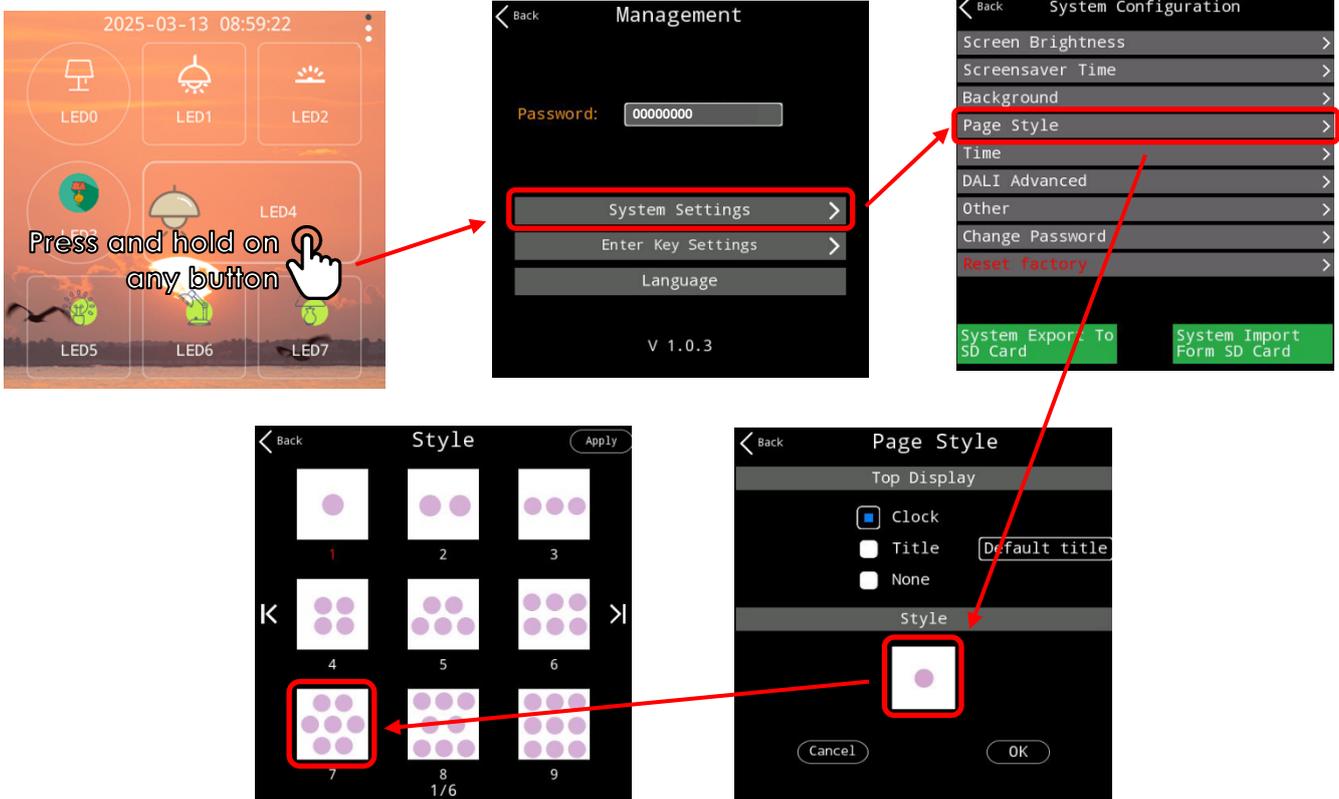
Once we have established the different functions that we want to control in the parameters section of the CBU-DA-1P in Casambi, we will have to configure the SDP-LCD8 display so that it can activate them correctly.

Let's assume that the final configuration is as shown in the image on the left.

We have 5 actions that we want to be able to trigger with the display, so we will have to create 5 buttons that send the 'GO TO SCENE X' commands for each of these actions.

We will create 2 extra buttons, (a total of 7) that will send UP and DOWN commands, to dim the last action that we have activated with the display.

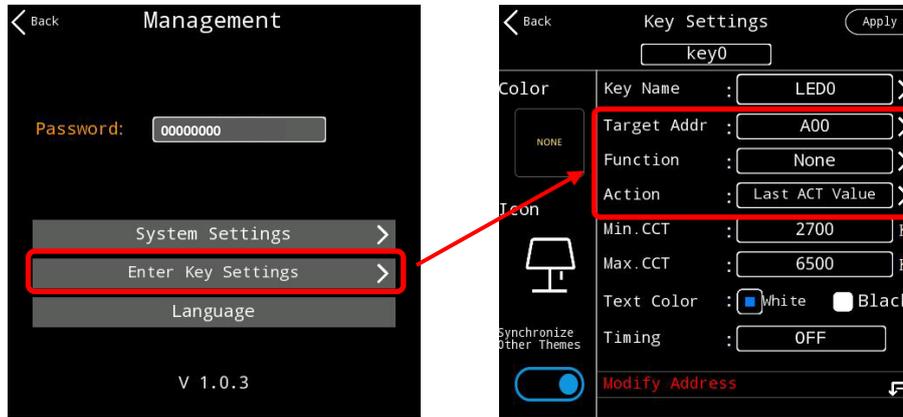
To configure the display, we will have to press and hold on any button to access the Management menu, in this screen we can go to "System settings" > "Page style" to select the number and style of buttons we want to appear on the screen.





Then go back to the settings screen and press on: "Enter Key Settings" here we will configure the button on the display to launch the "GO TO SCENE X" which will trigger the actions we have configured in Casambi.

In the button settings screen, the three parameters that need to be changed are: "Target Address", "Function" and "Action".



These three parameters have to be configured as follows:

- **Target Address:** "Broadcast"
- **Function:** "ON"
- **Action:** here we will set "SceneX" where "X" is the scene number that corresponds to the Casambi action we want to activate. If we are configuring the button that will activate the first function of all, we will select "Scene0".

The rest of the parameters do not matter; they can be left as they are by default.

The screen should look something like this:



The rest of the buttons have to be configured in the same way in "Target Address" and "Function". In "Action" we will have to assign to each button the corresponding scene number, if the first button has been configured as "Scene0", the second button will be "Scene1", the third button will be "Scene2" and so on...



After configuring the first 5 buttons that will activate the corresponding actions in the Casambi app, we still need to create the 2 regulation buttons, these are configured as follows:

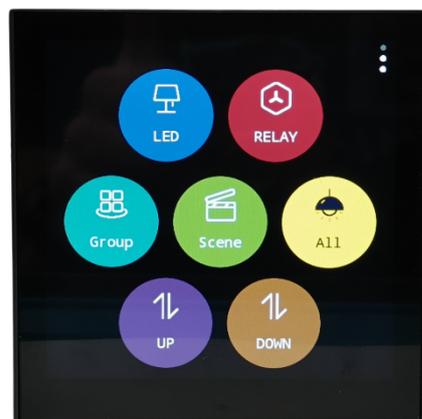
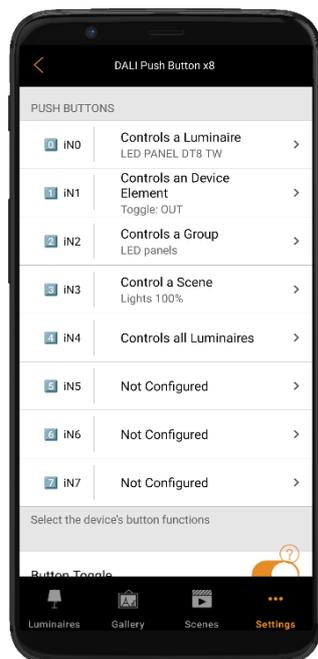


Again in "Target Address" we will set "Broadcast" and in "Function" we will configure one button as "UP" and another as "DOWN". In this case the parameter you have set in "Action" does not matter.

The "UP" and "DOWN" buttons are independent from the limit of 8 actions that can be configured in the Casambi app. This means that, if we want to take full advantage of the possibilities, we could use 10 buttons on the display: 8 for Casambi actions and 2 additional ones to regulate the last action activated. It is important to remember that the maximum number of buttons that can be created on the screen is 16.

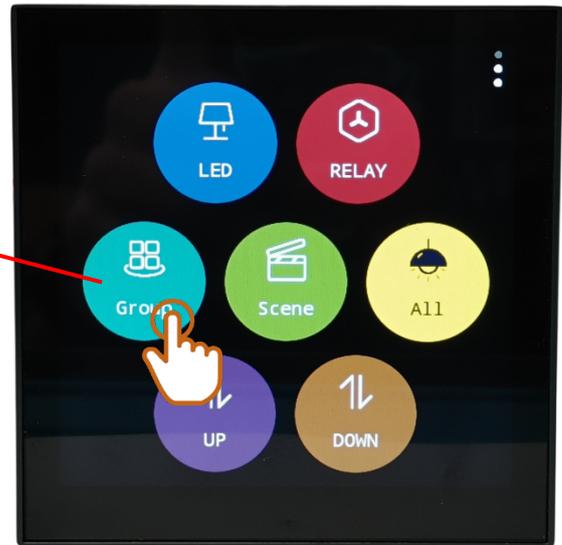
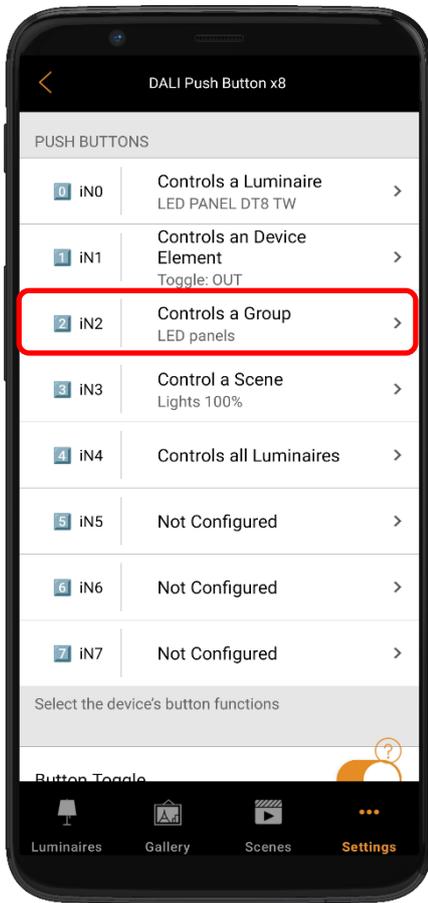
It is also important to note that the "UP" and "DOWN" commands are DALI commands that adjust the dimming level by very small DAPC increments. For this reason, multiple button presses may be necessary to achieve the desired dimming level.

After configuring all the buttons, the Casambi pushbutton configuration screen and the main screen of the SDP-LCD8 should look like this:





Therefore, when we press any button what will happen is that the button will send a "GO TO SCENE X" command and will activate the corresponding action that we have configured in the Casambi app.



"GO TO SCENE 2"

For example, when we press on the "Group" button we have created, it will send a "GO TO SCENE 2" command through the DALI bus to the CBU-DA-1P and will activate the corresponding configured action in the Casambi configuration screen, controlling the luminaires of the group.



Then we could use the "UP" and "DOWN" buttons to dim that group of luminaires since it would be the last action activated.



As mentioned above, a Casambi pushbutton input can be configured to perform different control functions. However, we insist that, in order to keep the configuration simple and functional, it is better to assign all actions to the Casambi scene control. In this way, the display will be limited to activating or deactivating scenes.

Here is an alternative example where only Casambi scenes would be activated:



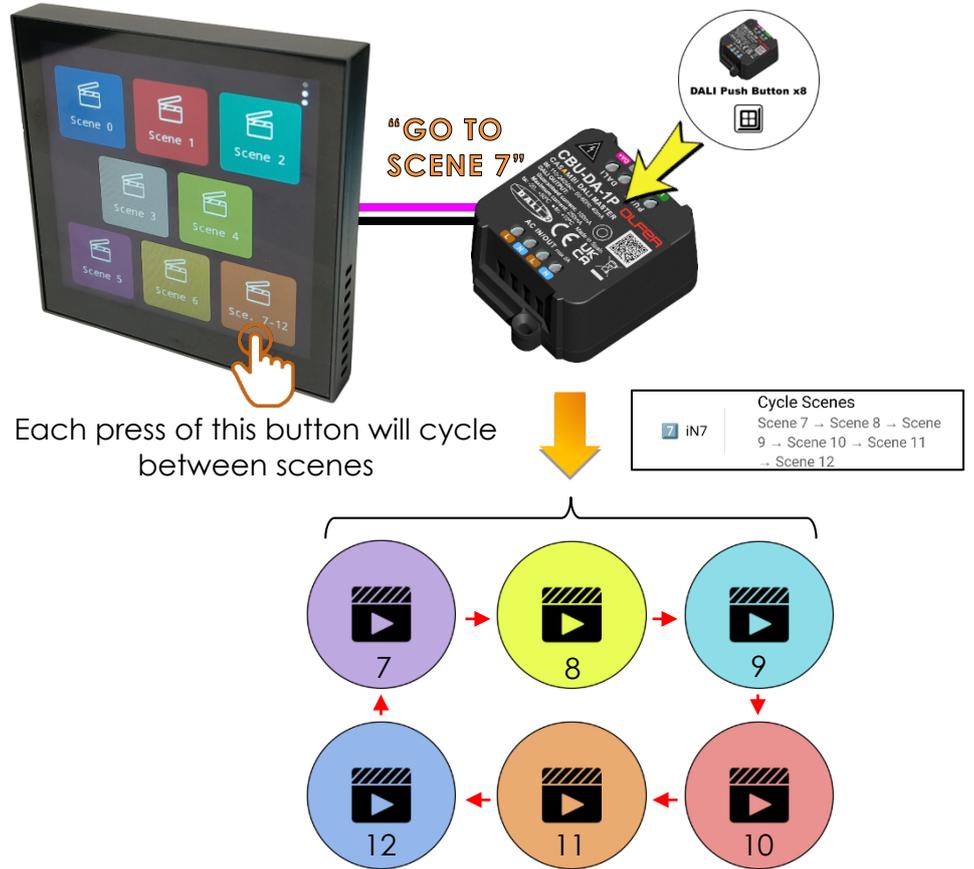
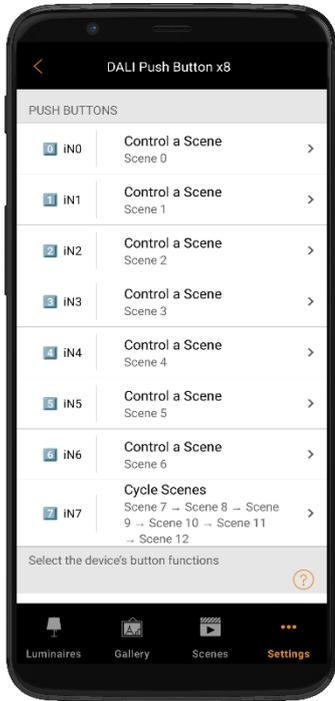
In this example all the buttons are configured practically in the same way: in "Target Address" they are set to "Broadcast" and in "Function" they are set to "ON". In "Action" we will have to assign the corresponding scene number to each button. In this case we have not included "UP" or "DOWN" buttons.



Example configuration of button 4



In case we need to control more than 8 scenes with the screen, a solution would be to configure an action to cycle between different scenes and in that action select all the scenes that we need to control.



It should be noted that, when using this function to cycle between different scenes, when switching from one scene to another, the previous scene is deactivated.

Again, all buttons on the screen should have the same settings under "Target Address" and "Function". In "Action" they should have the corresponding scene number.



Example configuration of button 7