



DALI-2 Display 7"

Datasheet DALI-2 Control System

Multifunctional DALI-2 control
and operating unit



DALI-2 Display 7"

Art.Nr.: 86456840-W (white)

DALI-2 Display 7" plus

Art.Nr.: 86456840-P-W (white)

black or colour version on request

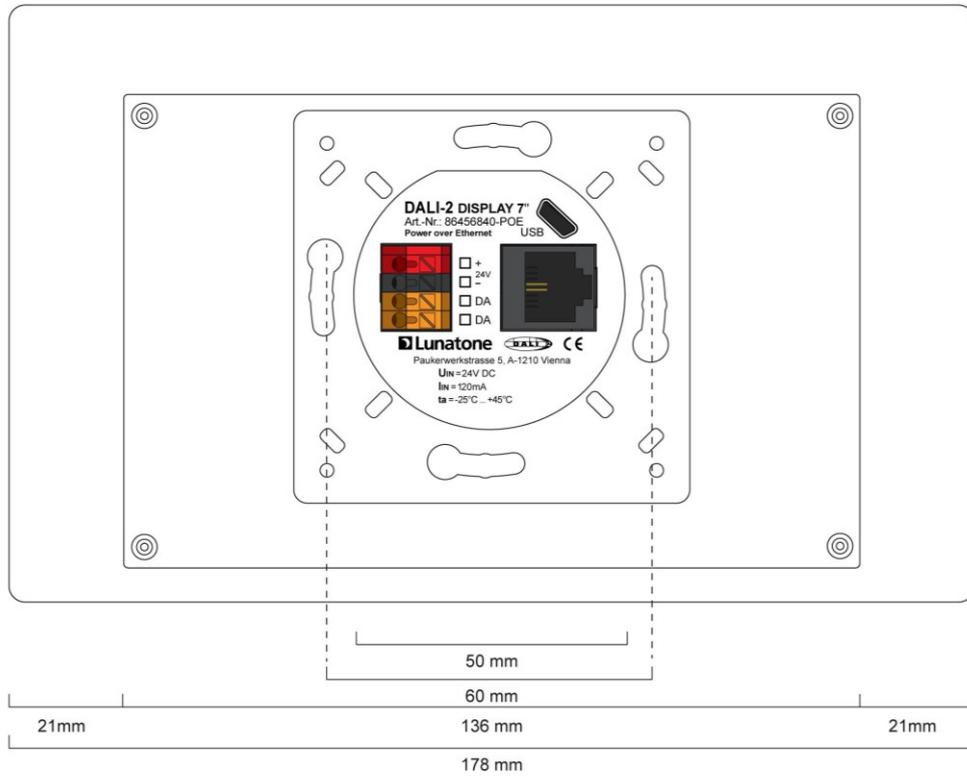
DAI-2 Display 7" Multifunctional Control Device

Overview

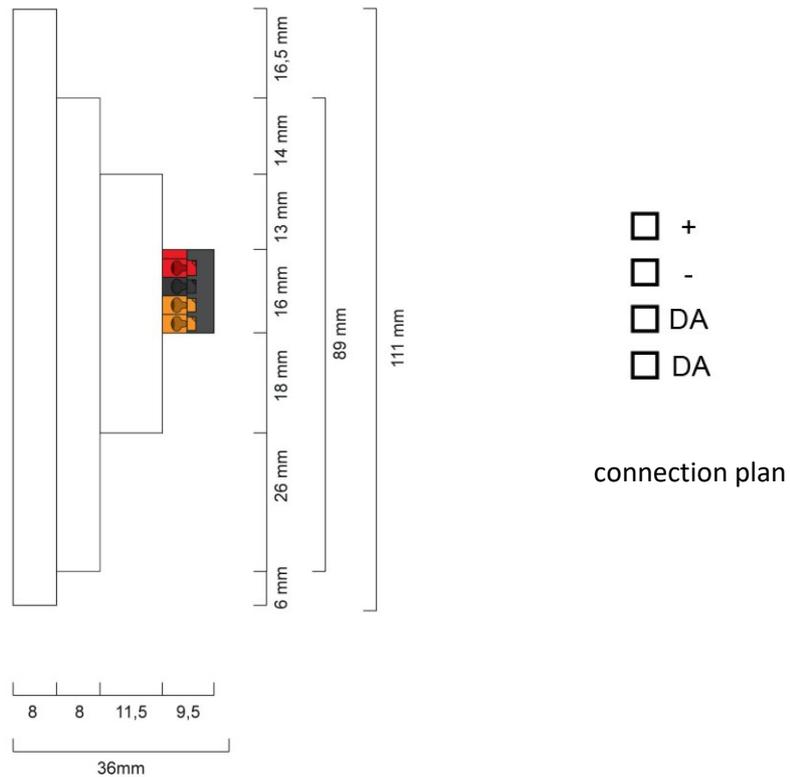
- Multifunctional control device for DALI and DALI-2 systems
 - 7" capacitive touchscreen with 24-bit color depth
 - Dimensions: 178 x 111 x 8 mm
 - comfortable operation via numerous widgets
 - customisable user interface
 - integration via LAN or WLAN in building management systems – *coming soon*
 - dimming and switching of groups and individual addresses
 - Tunable White and RGB colour management
 - configuration of groups and scenes
 - measurement and visualisation of sensor values such as temperature, air quality, air pressure and humidity
 - Multi-master capable: several modules can be installed within a DALI circuit.
 - Easy installation: the device can be installed on a flush-mounted installation box.
 - 24V or Power Over Ethernet - POE
- Additional functionality of the Display 7" plus:
- addressing and set-up of DALI systems
 - circadian daylight curves (human centric lighting) – *coming soon*
 - week schedules – *coming soon*
 - sequences – *coming soon*
 - automatizations – *coming soon*
 - control of blinds – *coming soon*
 - version for emergency light monitoring – *coming soon*

Specification, Characteristics

Type	DAI-2 Display 7" (plus)
article number	86456840-W 86456840-P-W
Electrical data:	
rated supply voltage display	24-56V DC
power consumption	3,5W
number of DALI lines	1
Current consumption DALI-line	<2mA
Interface	DALI
Mechanical data:	
ambient temperature	-10...50°C
type of protection	IP20
dimensions L x W x H	178x111x8mm
touchscreen size	7"
touchscreen pixel	1024 x 600 px
colours	24Bit
colour display frame	white (black or special colour on request)
colour housing	metallic grey



dimensions Art.Nr.: 86456840-...



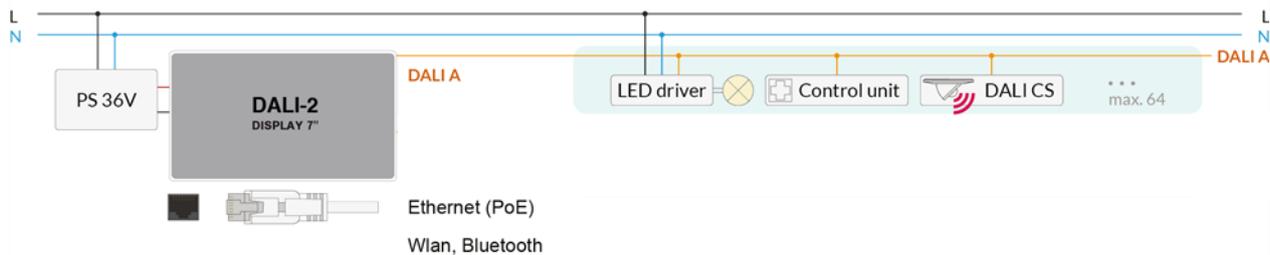


Figure 1 Typical Application

Usage

The DALI display is used for set-up (Version Display 7" plus), configuration and control of a DALI system. The DALI protocol standard IEC62386, is used to control the lighting equipment.

Via the display interface all luminaries, groups, individual addresses can be controlled, and scenes can be recalled.

The user interface can be customized, including background images and colour, function, position, size of control widgets and more.

Typical application

See Figure 1 page 4.

Installation

- The DALI-2 Display can be directly connected to the DALI bus. A DALI bus power supply (e.g. DALI PS) is required.
- The device can be powered over ethernet (POE) or requires an additional 24V supply, which is connected to the corresponding terminals. (suitable power supply unit: PS 24V, 300mA Art.Nr.: 24166012-24HS)

- The connection to the DALI terminals can be made regardless of polarity. The bus input is protected against overvoltage (mains voltage).
- The wiring should be carried out as a permanent installation in a dry and clean environment.
- Installation may only be carried out in a voltage-free state of the system and by qualified specialists.
- National regulations for setting up electrical systems must be followed.
- The DALI wiring can be realised with standard low-voltage installation material. No special cables are required.
- Only 1 wire may be connected to each terminal. When using double wire end ferrules, the connection capacity of the terminal must be considered.

 **Attention:** The DALI-signal is not classified as SELV circuit (Safety Extra Low Voltage). Therefore, the installation regulations for low voltage apply.

 The voltage drop on the DALI line must not exceed 2V at maximum length (300m) and maximum bus load (250mA).

Mounting

The DALI Display 7" can be directly attached to a standard flush-mounted installation box/ electrical socket.

For assembly, the backplate has to be attached to the electrical socket, considering the orientation (connector facing upwards, see Figure 2). Then the display can be put in from above and fixed with the two screws from below

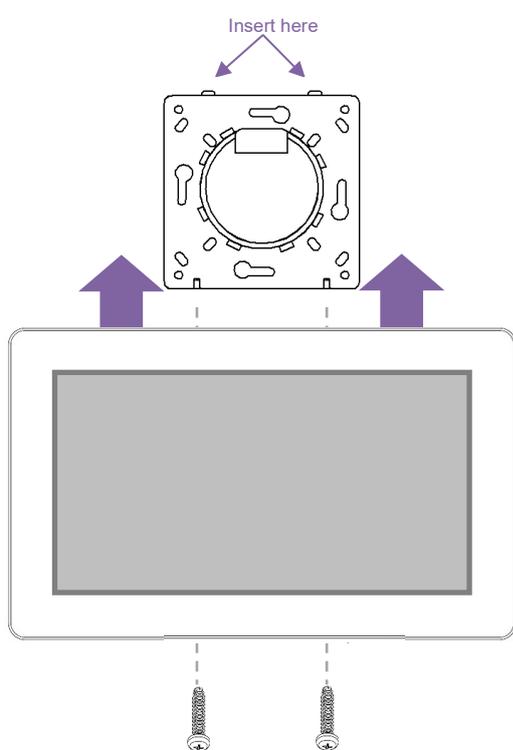


Figure 2 Mounting

Safety instructions

- The device is only suitable for indoor installation.
- Keep the product away from liquids and moisture.
- Cleaning is possible with a dry duster. Please do not use abrasives or solvents. Avoid contact with liquids.
- The housing is made of glass and metal, contact with sharp-edged objects can damage the display.
- If the device is defective, send it to Lunatone Industrielle Elektronik GmbH. Under no circumstances should the display be opened. Dismantling / disassembling the display can lead to damage and / or injuries.

Recycling

This product has been designed and manufactured using high quality materials and components that can be recycled and reused.

The device must be disposed of separately from household waste. Please follow the local regulations for the separate disposal of electronic products. The correct disposal of old devices protects our environment.

Functionality and Features

The DALI-2 Display serves as a universal module for **control** of a DALI system, as well as **set-up and configuration** for version Display 7" plus.

By default, the display shows the **user interface for light control**. The user interface of the DALI display is made up of individual pages (boards) and the operating elements (widgets) on them.

Boards: Any number of boards (pages) can be created, these can be reached by swiping your finger to the right / left or using a link widget. The length of the board is flexible: with an up / down swipe of your finger, you can navigate up and down.

Widgets: Any number of widgets can be created for each board. These can be flexibly arranged on the board.

The user interface can be edited using the pencil symbol at the top right. See section: Editing the user interface on page 9.



Button: edit user interface

The **set-up and configuration menu** can be opened with the menu button at the top right. General settings and DALI device settings can be found there. See section: Set-up and system configuration on page 7.



Menu button

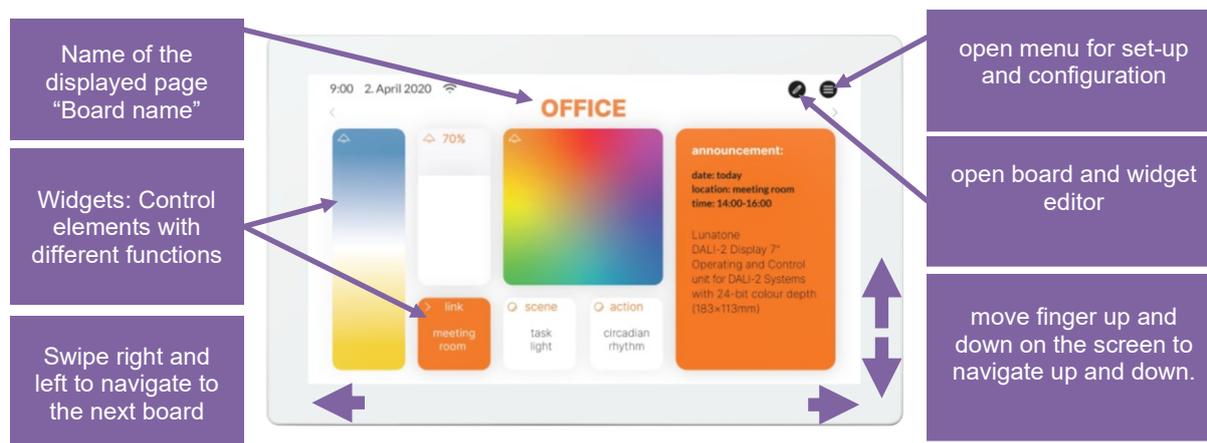


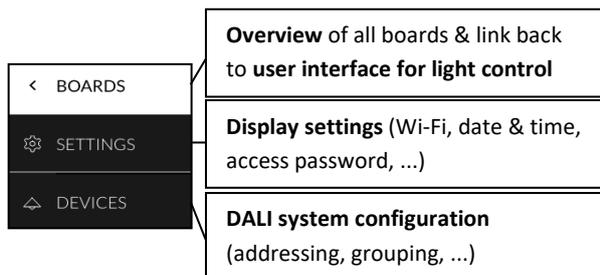
Figure 3 User Interface for Light Control DALI Display 7"

Set-up and configuration Menu

The configuration menu can be reached via the menu button at the top right .

The configuration menu contains settings for boards, general settings, and settings for the DALI system.

Navigation and menu items



Menu item: Boards

This tab provides an overview of the existing boards and their management.

The pen button at the top right enables the configuration options: renaming, reordering, removing and adding of boards. See section: Boards on page 9.

Clicking on the board tab again will open the interface for light control. Alternatively, clicking on one of the boards, will open the corresponding user interface.

Menu item: Display Settings

General settings for the display can be made here:

- Save/Load: saving and loading display settings
- General: Information on firmware version
- Date & Time: setting the time zone, date and time
- Wi-Fi: establishing an internet connection and displaying the IP address

- Access, Display Passwords: with enabling “protect Menu & Board editing” and entering a password, the access to the configuration menu and editing mode is restricted. The restriction takes effect on switching to the user interface. (master password: 1210)

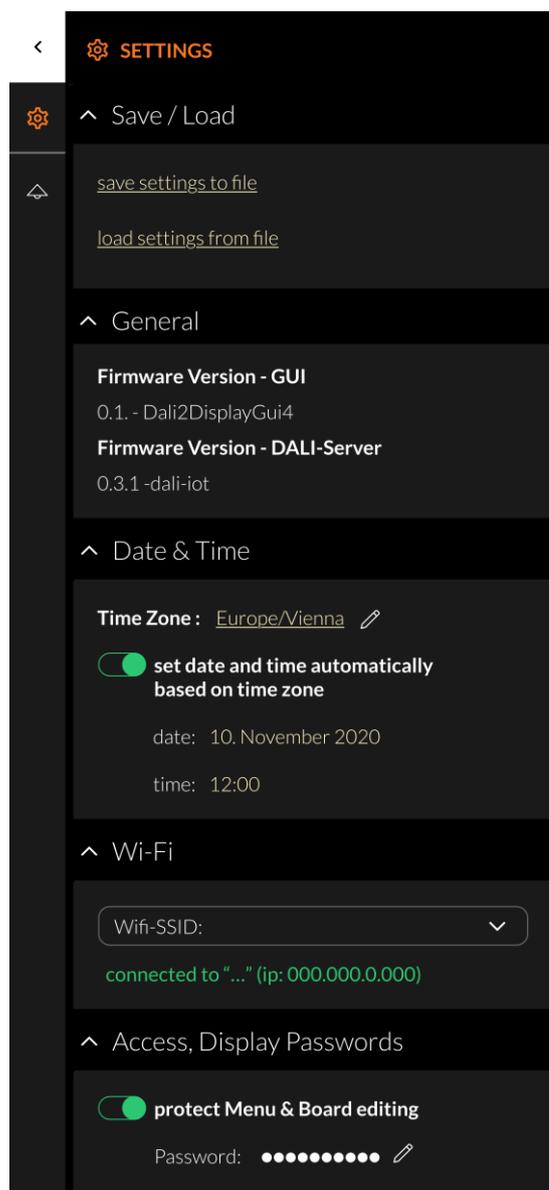


Figure 4 Overview Menu item: Display Settings

Menu item: Devices 

The tab includes set-up and configuration options for the DALI system. Addressed and configured DALI devices of the connected DALI bus are read and listed here.

The DALI Display 7" plus additionally supports addressing/readdressing as well as DALI system extensions.

The devices found can then be grouped.

After the configuration has been completed, the user interface for light control can be created, containing boards and widgets for individual addresses, groups, and scenes.

Addressing devices

Select "addressing - search" at the top right (within the menu item "devices").



A Pop-up appears.

Function test: The on and off button can be used to test whether all DALI devices are connected. If all devices respond properly, addressing can be continued.

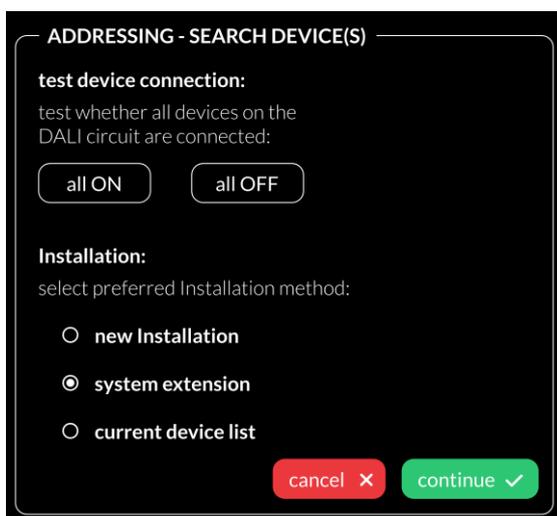


Figure 5 Pop-up addressing, search for devices

Available options:

- current device list: loads already addressed DALI bus

additional options for the Display 7" plus:

- New Installation: for new installations or re-addressing; new addressing of all devices on the DALI bus. (devices that already had an address will also get a new address).
- system extension: if devices were added to an existing system; the existing system keeps its addresses and new addresses will be added.

After read out/addressing, all devices are displayed in the device list.

Assign device name: Click on the respective device name in the device list

Assign groups: Click on the respective group entry ("select") in the device list to add the device to the corresponding groups.

State: click on the state symbol to switch the respective devices on and off (for easy localization).

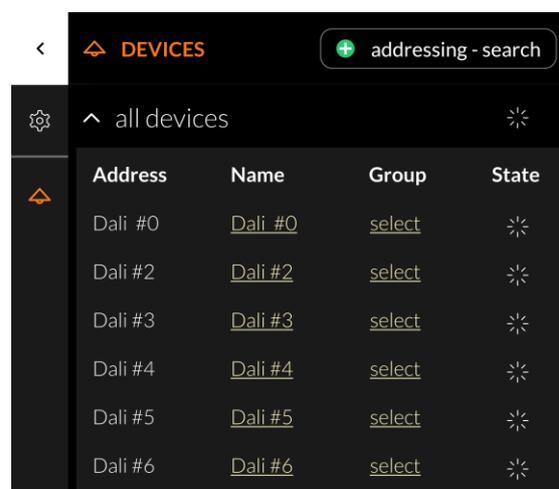


Figure 6 Menu item "Devices"

Edit user interface for light control

The user interface of the DALI Display is made up of individual pages (boards) and the operating elements (widgets) on them.

Boards

To **create, delete, duplicate, or move** a board:

Open Menu for set-up and configuration  click tab Boards :

- Create new boards -> button at the top left "new board".
- Edit board: click the pencil symbol in the board window: rename, duplicate (including or excluding the widgets) or delete.
- Change the order of the pages: select board (blue highlight) move with drag and drop.

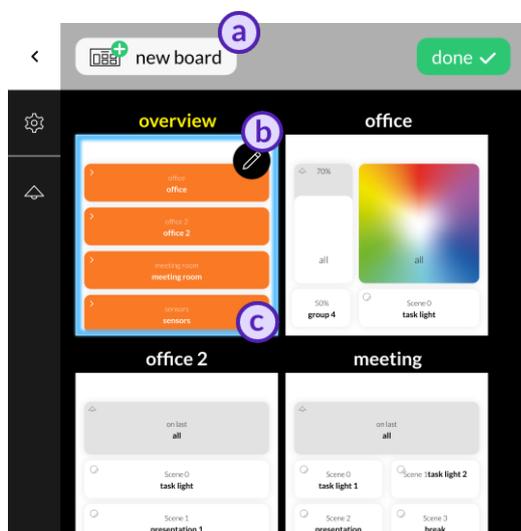


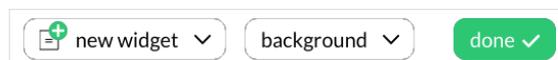
Figure 7 Menu item "Boards"

Editor: Widgets and Background Images

On the user interface: Click on the editor icon:



If the icon is not visible, check the settings in the menu: -> Settings -> Access, Display Passwords -> protect Menu & Board editing.



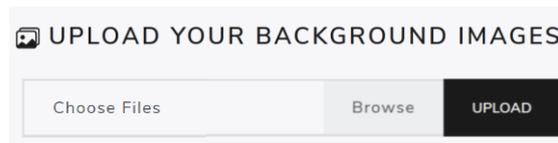
Widgets can be added (first dropdown menu in top menu bar - "new widget") or a background image can be loaded (second dropdown menu in top menu bar - "background")

Load background images

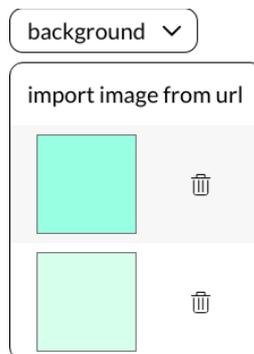
A network connection is necessary, to set up the connection open the menu, tab: Settings -> Ethernet or Settings -> Wi-Fi.

Background images can be transferred to the display by entering the IP address of the DALI Display (displayed under Settings -> Ethernet or Settings -> Wi-Fi) in a browser with internet access in the same network as the DALI Display.

The background image should have the dimensions 1361x1361 and a resolution of 72dpi, RGB.



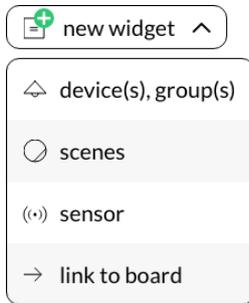
As soon as the image has been uploaded, it can be accessed on the Display by clicking on "background".



An individual background image can be assigned to each board.

Create a widget

In the user interface for light control: Click on the editor icon:  and select "new widget".



The following widget types are available:

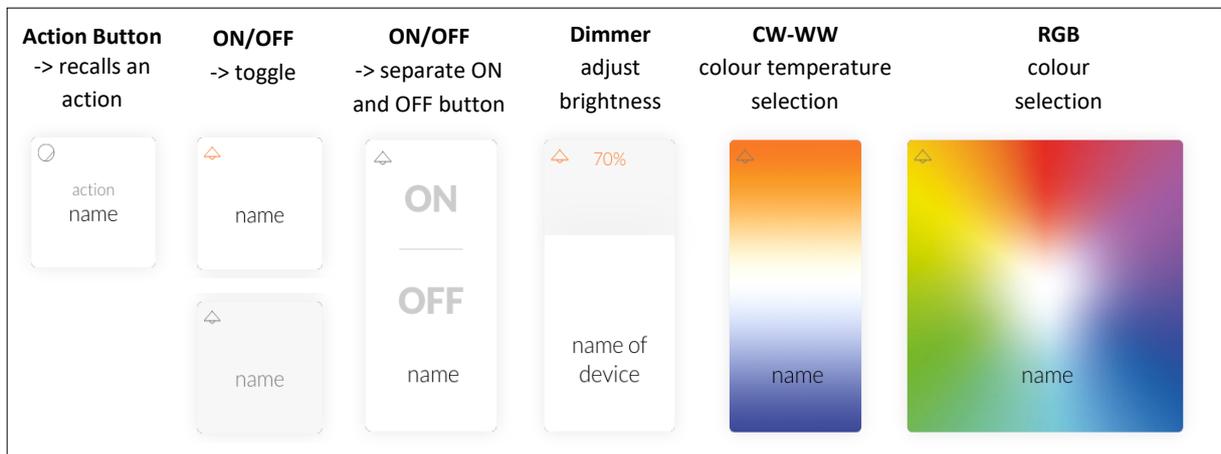


Figure 8 Widgets for devices and groups

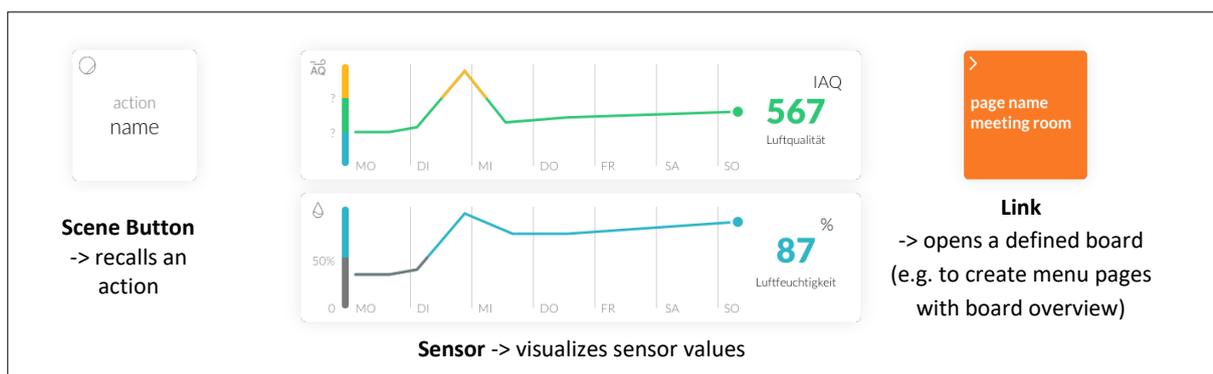


Figure 9 Widgets for scenes, sensors and links

 The appearance of the widgets is configurable, so widgets on your display may look different.

Dialog box “New Widget”

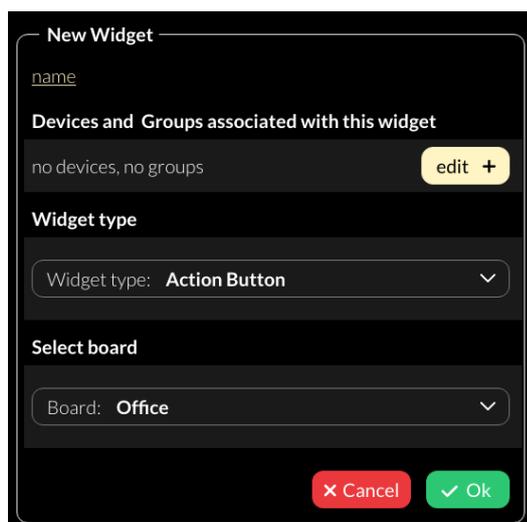


Figure 10 Pop-up “New Widget”

1. Define the name of the widget,
2. Select the devices and groups to be controlled
3. Select / change the widget type,
4. Depending on the widget type, further settings can be made e.g. defining an action.
5. Select the board on which the widget should be displayed

Edit Widget

In the user interface for light control: click on the editor icon  select the widget (highlighted):

Pencil icon:

- edit (opens dialog box: “create widget”)
- duplicate
- delete



Brush icon:

- edit style
- copy style
- assign style
- more (more style related options)

Arrow icon:

- drag the arrow key to change the widget size

Drag and Drop:

- hold and move to change the order of the widgets

Create scenes

The Display supports configuration of scenes: brightness, CW-WW and RGB values.

Scenes are created via the user interface for light control.

- Create a scene widget (with the intended scene number and effective range), see page 10.
- Set up the room lighting as desired for the scene (using for example the widgets on the Display). When set, long press the previously created scene widget -> a window appears to save the scene settings.

Firmware Update

The Display firmware can be updated by entering the IP address of the DALI Display (displayed under Settings -> Ethernet or Settings -> Wi-Fi) in a browser with internet access in the same network as the DALI Display.

In the browser window the configuration file can be uploaded. The update starts with pressing the “upload” button.



Purchase Information

Art.Nr.: 86456840-W

DALI-2 Display 7", white
capacitive touchscreen with 24-bit colour
depth, control unit for 64 DALI addresses,
customisable user interface, white,
178 x 111 x 8mm

Art.Nr.: 86456840-P-W

DALI-2 Display 7" plus, white
capacitive touchscreen with 24-bit colour
depth, control unit for 64 DALI addresses,
customisable user interface, advanced
configuration/control features, white,
178 x 111 x 8mm

On request:**Art.Nr.: 86456840-B**

DALI-2 Display 7", black
capacitive touchscreen with 24-bit colour
depth, control unit for 64 DALI addresses,
customisable user interface, black,
178 x 111 x 8mm

Art.Nr.: 86456840-P-B

DALI-2 Display 7" plus, black
capacitive touchscreen with 24-bit colour
depth, control unit for 64 DALI addresses,
customisable user interface, advanced
configuration/control features, black,
178 x 111 x 8mm

Additional Information and Equipment

DALI Cockpit - free configuration software for
DALI systems

<https://www.lunatone.com/en/product/dali-cockpit/>

Lunatone DALI products

<https://www.lunatone.com/en>

Lunatone Datasheets and Manuals

<https://www.lunatone.com/en/downloads-a-z/>

Contact

Technical Support:

support@lunatone.com

Requests:

sales@lunatone.com

www.lunatone.com



Disclaimer

Subject to change. Information provided without
guarantee. The datasheet refers to the current delivery.

The function in installations with other devices must be
tested for compatibility in advance.