Lunatone

DALI Display 7”

Quick Start Guide

Control Device

DALI Input- and Controldevice with
7” Display and Touchpanel

Version 1.0.6

© 2016, Lunatone Industrielle Elektronik GmbH

Lunatone

DALI Display Control Device

Content

1. DALI Display – Features and Installation 3
   - 1.1 Intended Use 3
   - 1.2 Safety Instructions 3
   - 1.3 Features 3
   - 1.4 Specification 4
   - 1.5 Installation 5
2. Elementary Operating Functions 6
3. Extended Operating Functions 9
4. Configuration and Settings 10
   - 4.1 Design 12
   - 4.2 Screensaver and Pincode Protection 13
   - 4.3 Date and Time 14
   - 4.4 Menu Bar 14
   - 4.5 Site Numbering 14
5. Commissioning 15
   - 5.1 Adressing/Grouping 15
   - 5.2 Scenes and Color Scenes 18
   - 5.3 Sequence (SQ), day-schedules (SDL), week-schedules (SDLL) 23
   - 5.4 Human Centric Lighting – Circadian daylight progression 26
6. Ethernet – Remote Control 27
7. System Update 31
8. Custom design 32
   - 8.1 Photo of room with integrated luminary control 32
   - 8.2 Room overview of a floor with controllable luminaries 32
9. Additional Information and Equipment 34
10. Disclaimer 34
11. Glossary 34

 © 2016, Lunatone Industrielle Elektronik GmbH

1. DALI Display – Features and Installation

1.1 Intended Use

The DALI Display can be used for commissioning and control of DALI lighting systems. DALI is a standardized digital protocol for the control of electronic ballasts for lighting systems according to standard IEC62386. Exclusively ballast with DALI interface may be connected to one of the DALI-lines.

1.2 Safety Instructions

When operating the DALI display the following precautions must be considered:

Each user must carefully read and follow the instructions given in the manual.

The operator must ensure that the wiring instructions and specifications for DALI lines are considered, the installation of the display must be performed by an qualified technician, who can perform the required tasks and recognize potential danger due to professional training, knowledge and experience, in particular the knowledge of pertinent regulations and standards.

Touching the screen with sharp objects can result in damage of the display.

1.3 Features

The DALI Display has connectors for two DALI lines (DALI A, DALI B). This allows installing up to 128 DALI ballasts.

Light control commands are based on DALI Scenes and Groups and are sent to both DALI lines simultaneously. Scene commands are sent broadcast, group commands only to an individual DALI group.

There are 16 Scenes and 16 Groups available for both DALI busses:

Number of DALI short addresses:	128
Number of DALI Groups:	16
Number of DALI Scenes:	16

Multi-Master Capability: Multiple control devices can be used on the DALI-lines.

 © 2016, Lunatone Industrielle Elektronik GmbH

DALI Commands received on DALI line A are mirrored to DALI line B, this means that control devices connected to DALI A can also control ballasts on DALI B.

Commands received on DALI B are not mirrored to DALI A, this allows to install controllers that only affect one of the two DALI busses.

The DALI Display is a commissioning, control and input device for DALI controlled electronic ballasts. Beside scene and group commands, algorithms for commissioning (addressing, grouping and scene configuration) and automatic running processes (sequences, schedules and schedule lists) are provided. Special methods like human centric lighting (circadian daylight trend) and colour control of RGB-Dimmers is supported with the help of DALI Device Type 8 (DT8) standard.

By naming groups, scenes and automatic processes, custom backgrounds and screen saver image, the device can be individually adapted to the application. Furthermore custom designed layouts are offered as a manufacturer service.

The display can be controlled via the 7” touch control panel, but also via remote access through Ethernet and hence can be operated via browser.

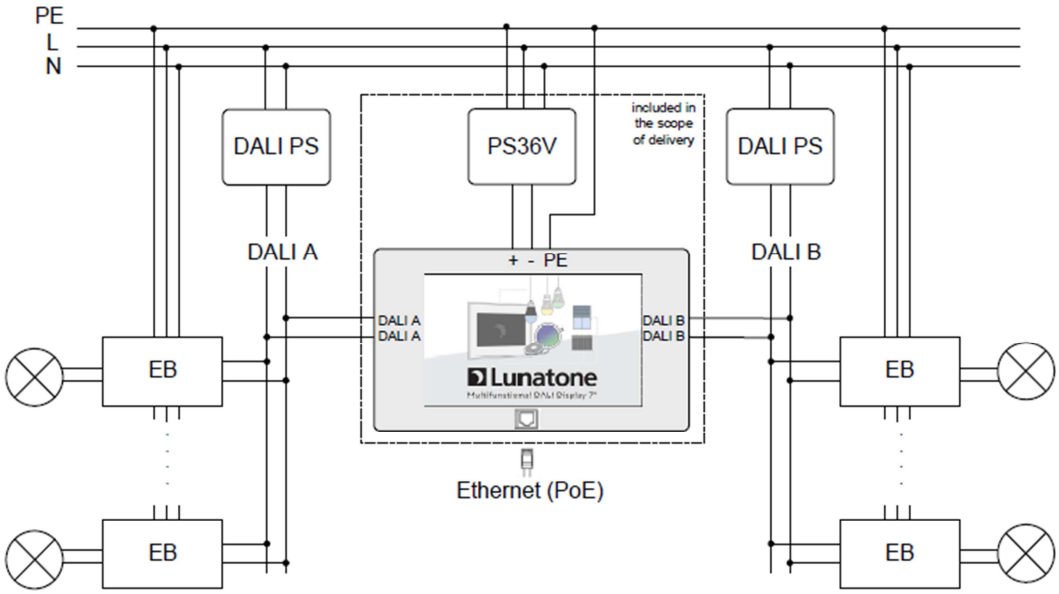
1.4 Specification

type	**DALI Display 7”**
article number	86458626
Rated supply voltage mains adapter (included)	230-240VAC
Mains frequency mains adapter	50/60Hz
Rated supply voltage DALI Display 7”	24-48V DC (power supply) or Power over Ethernet (PoE)
Power consumption	10W
Number of DALI lines	2
Current consumption of each DALI-line	2mA
Ambient temperature	0-50°C
Touchscreen size	7”
Touchscreen pixel	800 x 640
Colours	64k
Interface	2xDALI, USB, Ethernet
Dimensions L x W x H	200 x 150 x 20 mm
Type of protection	IP20
Firmware (last recent version)	V104

 © 2016, Lunatone Industrielle Elektronik GmbH

1.5 Installation

The DALI Display does not provide any power supply for the DALI-lines. Therefore an external DALI power supply (e.g. DALI PS) has to be installed for each DALI-line. The DC power supply (PS36V), which is included in the delivery package, is meant to supply the display only. It is not suitable for the supply of a DALI-Line. Instead of using a PS36V the display can also be powered via POE.



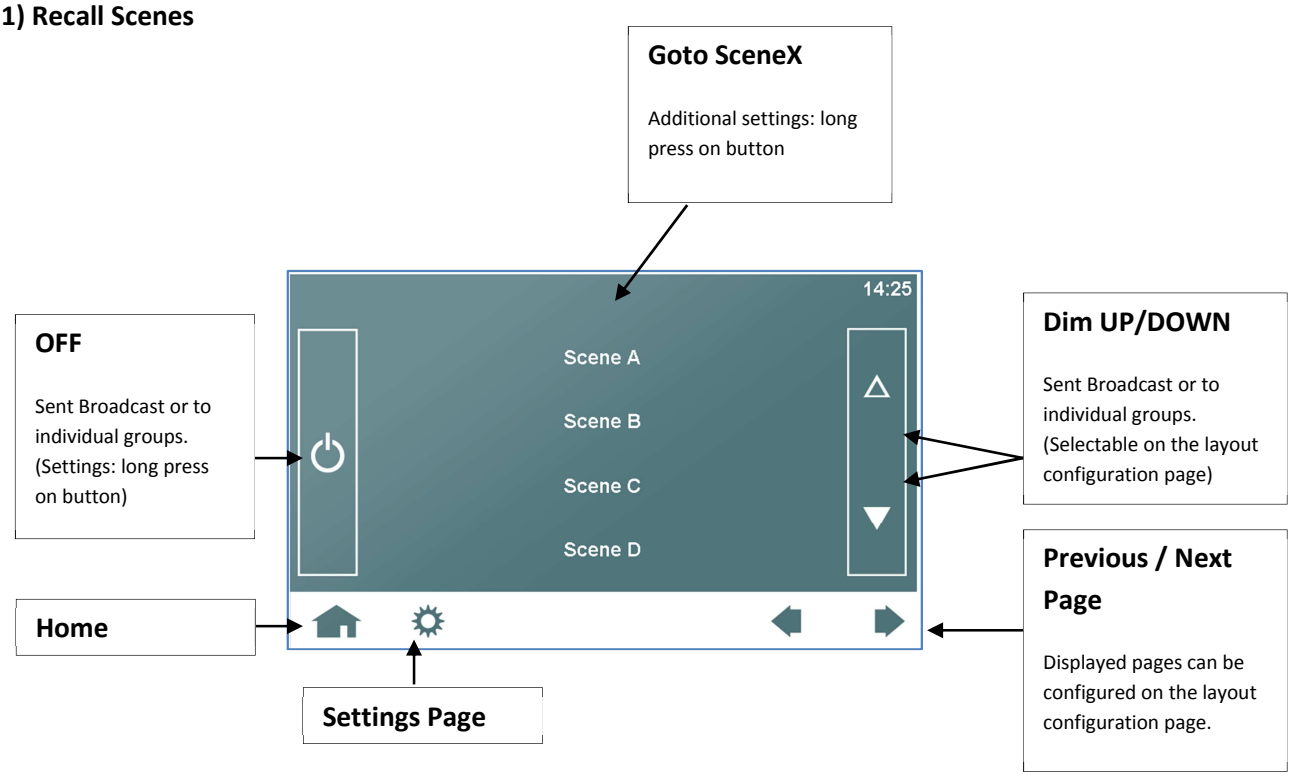
typical installation

 © 2016, Lunatone Industrielle Elektronik GmbH

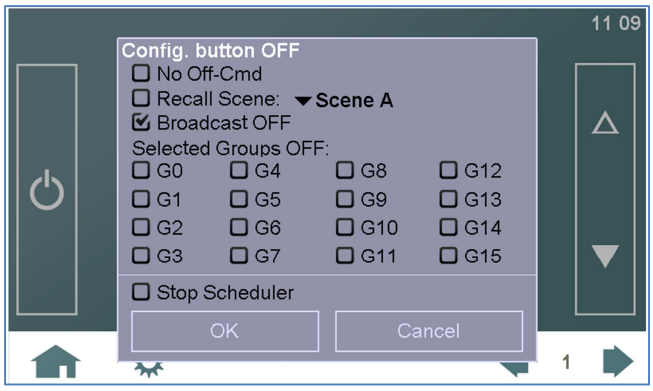
2. Elementary Operating Functions

The control of groups and scenes, using the buttons of predefined pages, is summarized under the term of “elementary operating functions”. There are sites available for recalling scenes as well as for switching and dimming of groups (unused pages can be disabled in the settings).

1) Recall Scenes

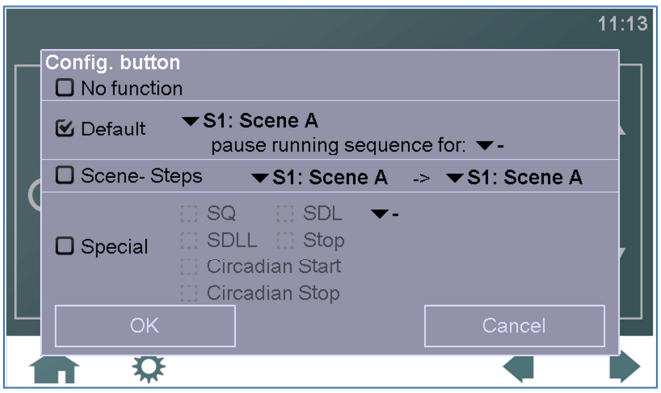


Configuration OFF-Button (Long Press): Selection of effective range for OFF-Cmd (the setting is valid for any OFF-Button and does not depend on active site). Up from V1.0.6 the scheduler function can be selected to be stopped as well as a scene can be recalled by the OFF-Button

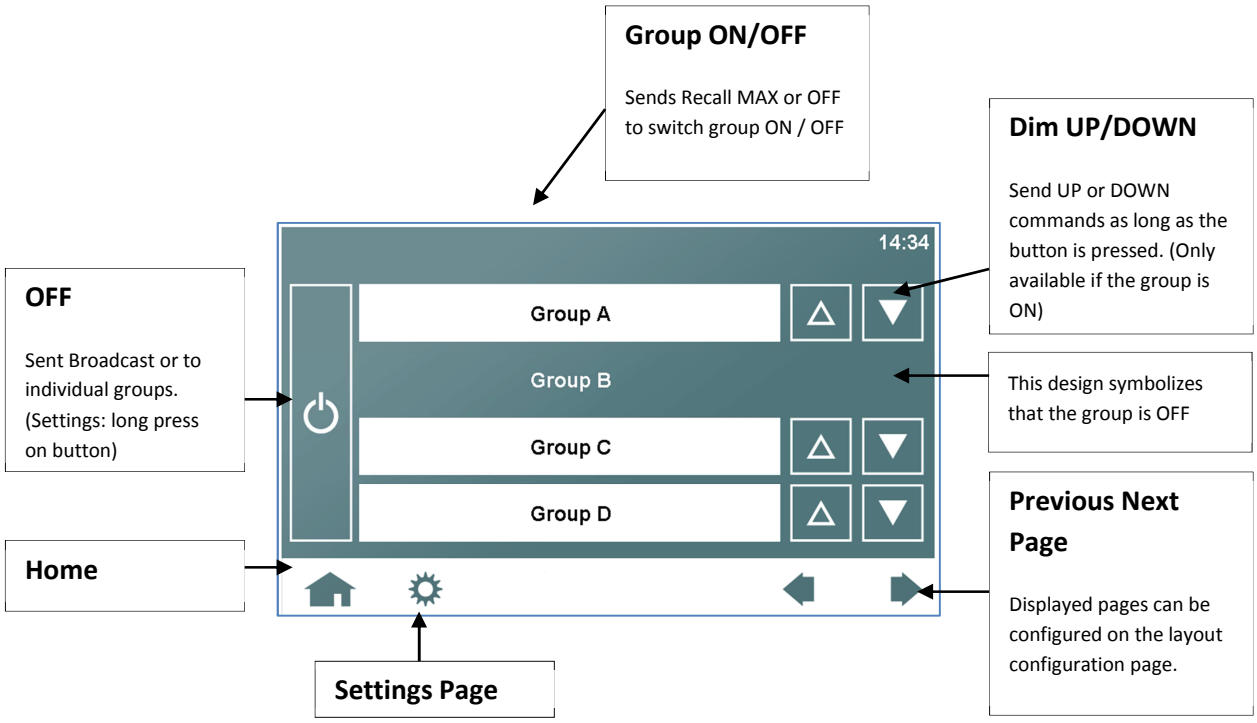


 © 2016, Lunatone Industrielle Elektronik GmbH

Configuration of Scene-Button (Long Press): Selection of Goto Scene, Cyclic Scene Recall, Start of Sequences, Schedules or Schedule List. Up from V106 it is possible to start/stop the circadian function. Due to assigning of special functions to a scene the function can be controlled from another device that recalls the corresponding scene.

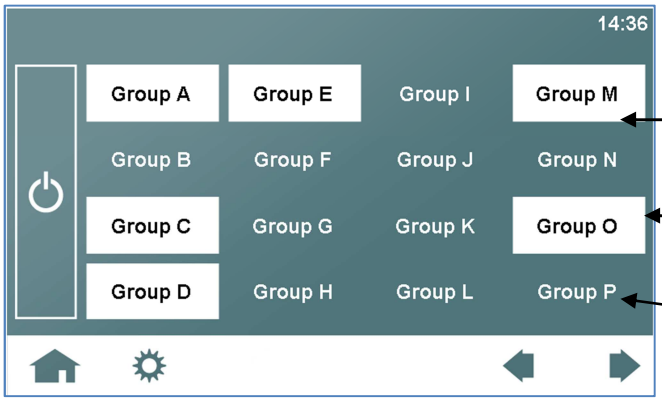


2) Group Control



 © 2016, Lunatone Industrielle Elektronik GmbH

3) 16 Groups - Control and Status Display



Group ON/OFF

Sends Recall MAX or OFF to switch group ON / OFF It is also possible to dim the group by pressing and holding a group button.

This design symbolizes that the group is ON

This design symbolizes that the group is OFF

4) Cleaning Page (Deactivation of Touchscreen)

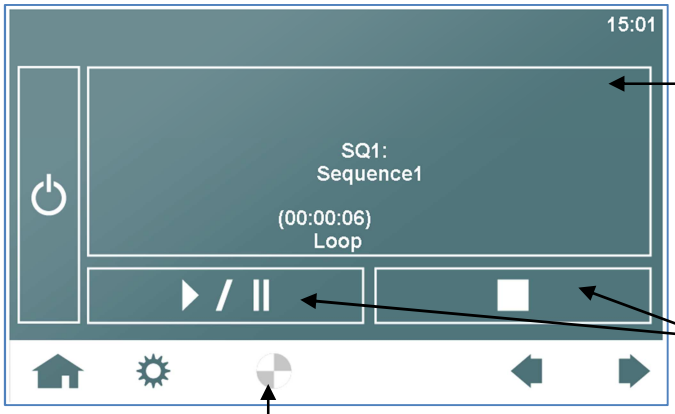
Deactivate the touch panel for 20 seconds to clean the screen.

© 2016, Lunatone Industrielle Elektronik GmbH

3. Extended Operating Functions

Extended operating functions offer additional control methods, which require either a set-up procedure before usage or a control gear with specific DALI device type (DT8).

1) Automatic Processes (sequences, schedules, schedule lists)



Selection of sequence, schedule or schedule list

Hold the button to open the pop-up window to load other processes

Start/Stop/Pause

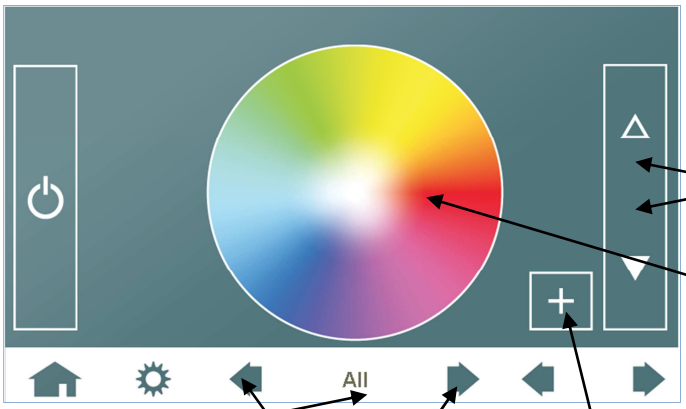
control of the selected process

indicator for running process

This symbol is shown on each site, when process is active

2) Color Control for RGB-devices (DT8-Type: RGBWAF)

On this site a color can be selected and is immediately sent to the selected operating range.



Dim UP/DOWN

Sent Broadcast or to individual groups. (Selectable on the layout configuration page)

Color selection

color information is sent to operating range immediately after tipping on the color

operating range

Short press: ON/OFF operating range

Selection of operating range

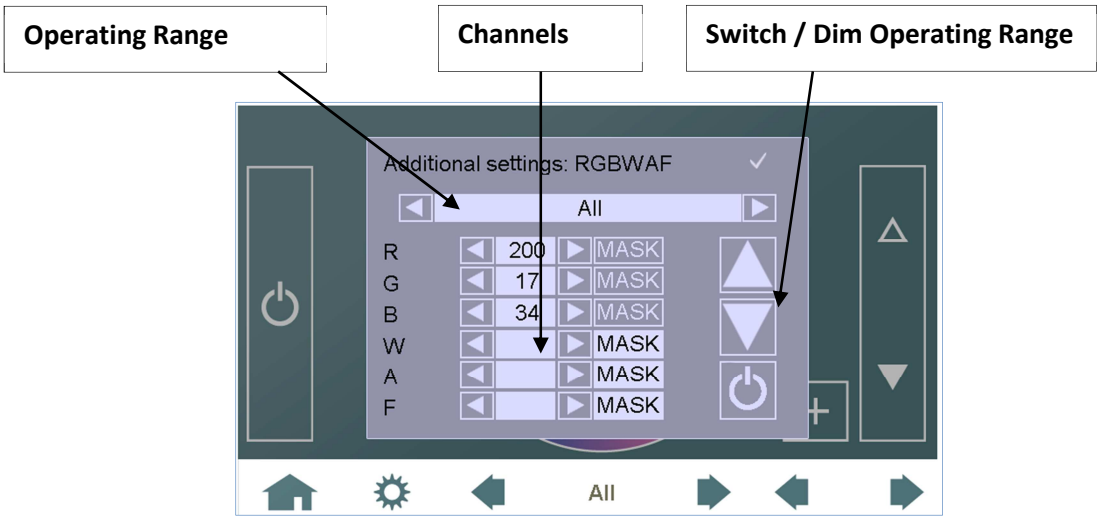
Each group with DT8 (RGB) control gears or Broadcast can be selected.

RGBWAF - Details

Enter PopUp for detailed settings

© 2016, Lunatone Industrielle Elektronik GmbH

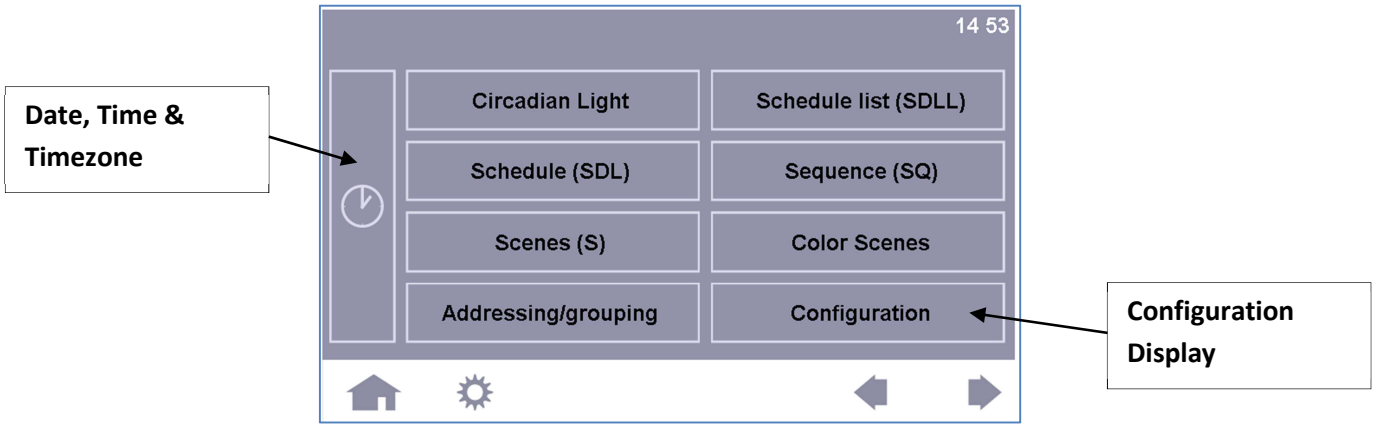
RGBWAF Details:



For each group which has been identified as DALI DT8 color type RGBWAF and for broadcast the channels can be configured in detail [allowed range: 0…254, MASK). Furthermore the operating range can be selected.

4. Configuration and Settings

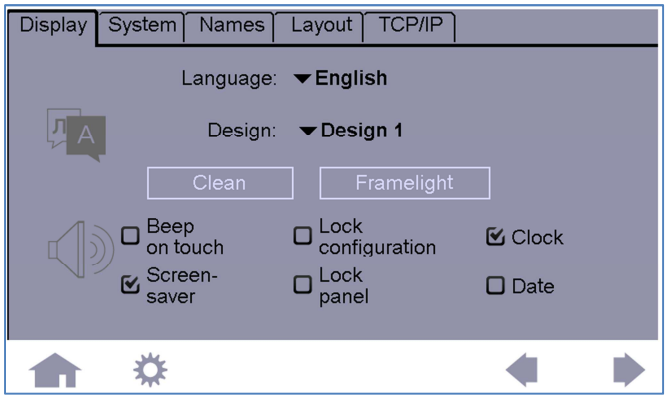
Via the gear wheel button in the menu bar the setting page can be entered.

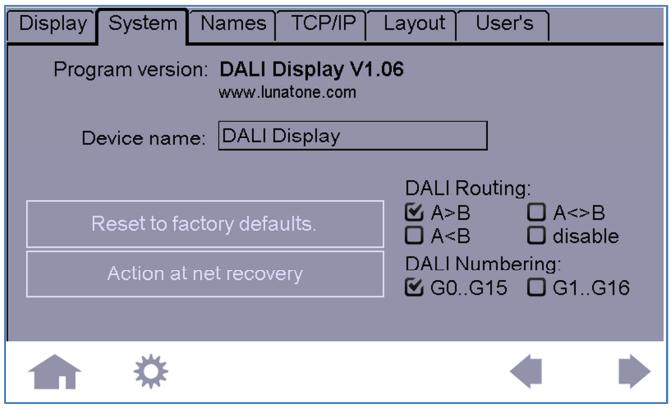


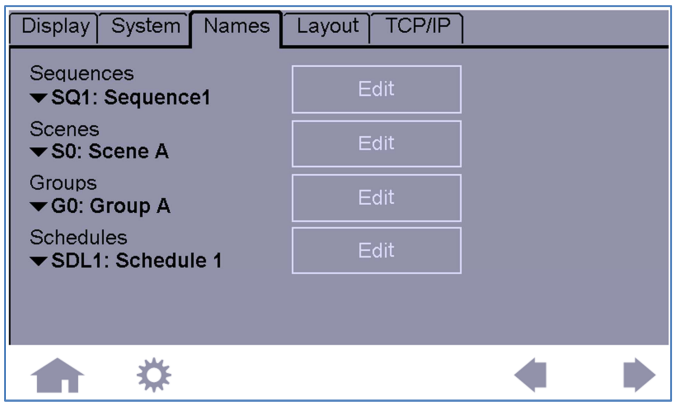
The menu “Configuration” and the button with the clock-symbol refer to display and layout related settings, whereas the other menus are either used for commissioning or for activating functions. Please find a overview of the display-related settings below.

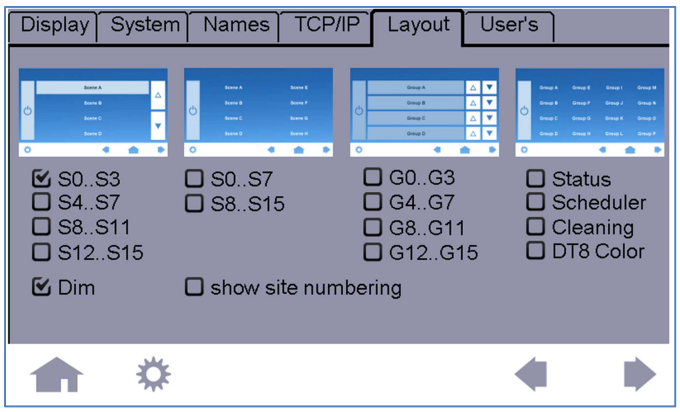
© 2016, Lunatone Industrielle Elektronik GmbH

Configuration:









Settings:

Display:

- Language
- Design
- Framelight
- Audio-Feedback
- Screensaver
- Password for Settings Menu
- Password for the Panel
- Display Clock
- Display Date

System:

- Info firmware version
- Name of Display
- Factory Defaults
- Action at Net Recovery (e.g. autostart of schedule list)
- DALI Numbering
- V106 and higher: DALI Routing (Routing of scene and group commands)

Names:

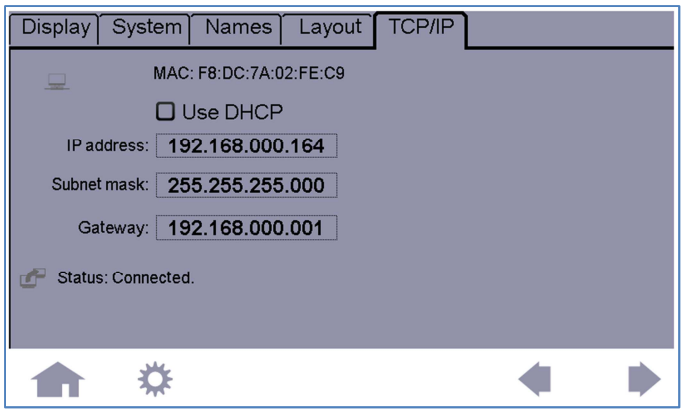
- Names for Sequences
- Names for Scenes
- Names for Groups
- Names for Schedules

Layout:

Activation/Deactivation of preconfigured Sites:

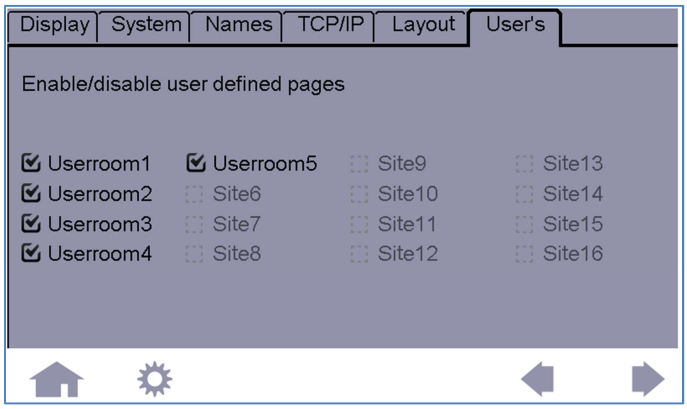
- Scene-Control
- Group-Control
- Status (all groups)
- DT8 Color Control
- Scheduler
- Master ON/OFF (Cleaning)
- Site numbering on/off (V106+)

 © 2016, Lunatone Industrielle Elektronik GmbH



TCP/IP:

- Info MAC-Address
- Network Settings
- Network Status



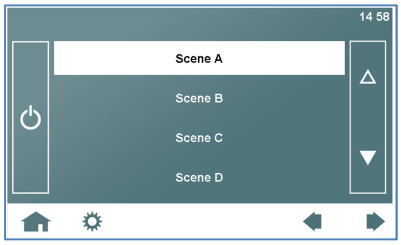
Users: (V106 and higher)

- Activate/Deactivate user defined sites
- The name of the site is defined in the configuration-file of the user defined sites
- This tab is visible only if user defined site are available

In the following chapters the most important display-related settings are explained.

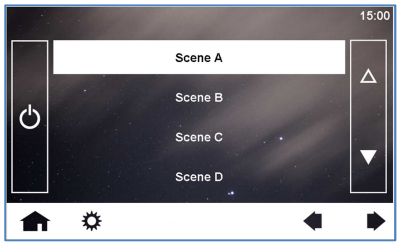
4.1 Design

Three different default backgrounds are available:



Design 1

Design 2



Design 3

User defined Background:

Furthermore a customized background-image can be used. The background image needs to be a 800 x 480 pixel PNG (Portable Network Graphic) file and has to be named **background.png**.

The image can be copied to the DALI Display by using one of the following methods:

USB Stick:

Place the background image in the following folder on the USB stick:

 © 2016, Lunatone Industrielle Elektronik GmbH

/AutoRun/LTUpdate/home/resource/background.png

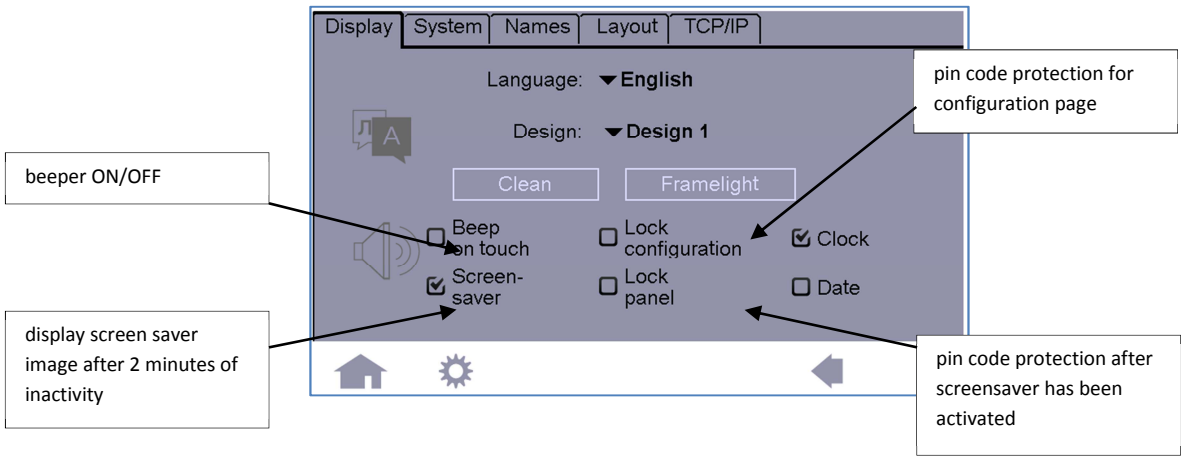
The file system on the DALI Display is case sensitive, so check for correct spelling. Then plug in the USB stick; the file will be copied to the DALI Display.

Ethernet Network:

Please find the details about the upload function in chapter 6: Ethernet – Remote Control.

4.2 Screensaver and Pincode Protection

You can choose if a screen saver image should be displayed after an idle time of about 2 minutes. Furthermore it is possible to add a pincode protection to the screen saver, and/or the configuration page.



Default Pin for Lock Configuration: “1234”
Default Pin for Lock Panel: “5678”
The Master Pin “1220” does always unlock the panel.

The screen saver image needs to be a 800 x 480 pixel PNG (Portable Network Graphic) file and has to be named **screensaver.png**.

The image can be copied to the DALI Display by using one of the following methods:

USB Stick:

Place the background image in the following folder on the USB stick:

 © 2016, Lunatone Industrielle Elektronik GmbH

/AutoRun/LTUpdate/home/resource/screensaver.png

The file system on the DALI Display is case sensitive, so please check for correct spelling. Then plug in the USB stick; the file will be copied to the DALI Display.

Ethernet Network:

Please find the details about the upload function in chapter 6: Ethernet – Remote Control.

4.3 Date and Time

If date and clock are activated in the display-tab, the time and date is shown in the upper right corner on the control pages. The page for setting date, time and timezone can be entered by selection of the button with the clock-symbol on the setting-page.

4.4 Menu Bar

Up from V106 the menu bar can be activated/deactivated by pressing 5 seconds on the left top of a controls-site (embedded and user-defined). If a PIN for settings is enabled, the function is pin-protected.

4.5 Site Numbering

Up form V106 the site numbering can be changed by the customer. Therefore in Settings->Layout „show site numbering“ has to be enabled. Then the site number of each site is shown between the arrows for site switching.

If the site number is pressed for more than 2 seconds it starts flashing. In this state it can be rearranged by using the arrows. By pressing the flashing number for 2 seconds the edit-mode is finished. After arrangement of the sites is finished, displaying the site order can be disabled.

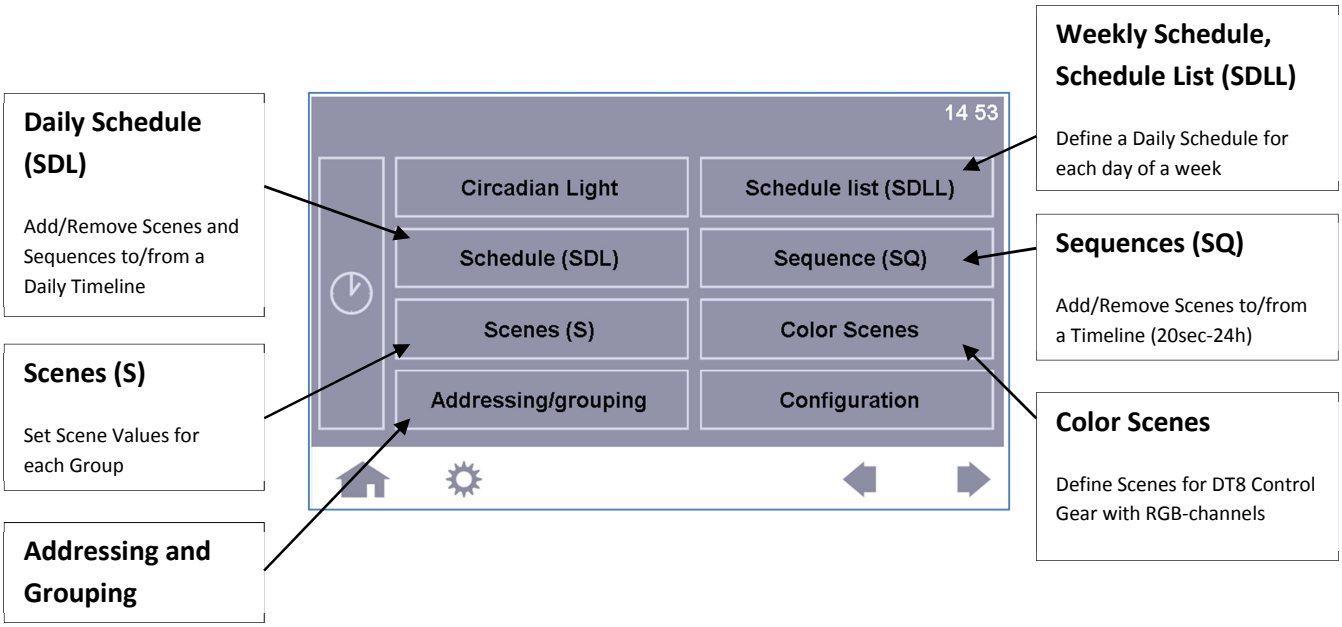
The site which is assigned number 1 is the site that is displayed after power up.

The site numbering function is protected by the pin code for settings as well.

 © 2016, Lunatone Industrielle Elektronik GmbH

5. Commissioning

When talking about commissioning all required tasks to reach the final function are considered. This includes DALI addressing of the electronic ballasts (luminaires) and the definition of groups and scenes (= typical DALI-system commissioning) as well as the generation of automatic running processes, daily and weekly scheduled and so on. Most functions of the settings menu are used for commissioning.



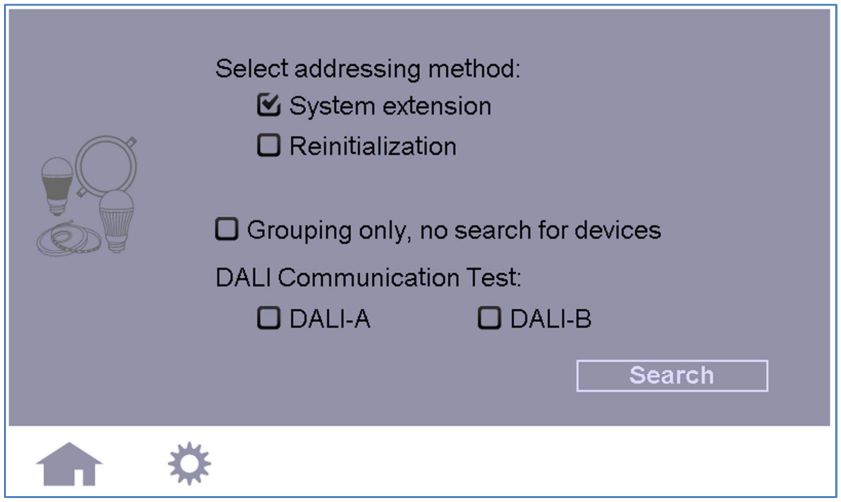
5.1 Adressing/Grouping

After finishing the installation, the next step should be a communication test, to ensure that all devices are connected correctly. Then the addressing of the control gear can be started. In the “Addressing/Grouping” menu several functions are available.

Options:

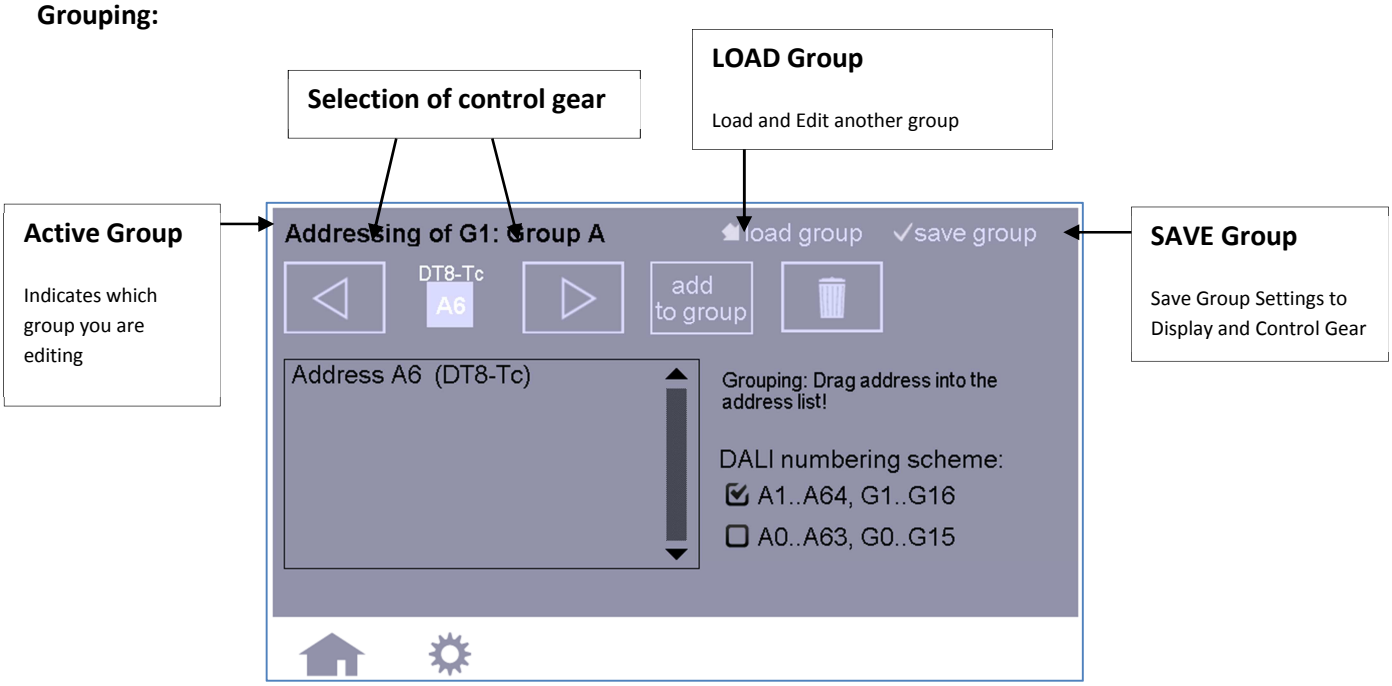
- System extension (search for already installed ballasts on the bus by scanning all available DALI addresses on both DALI buses, additionally the addressing algorithm will be started for DALI ballasts that have no short address)
- Re-initialisation (deletes all DALI addresses, removes all DALI groups and starts a new addressing routine. This will delete and readdress *all* ballasts on the bus)
- Grouping only, no search for devices (existing addresses and group assignments are read out and can be changed)
- Communication Test for DALI-A and DALI-B (all electronic ballasts on the DALI bus are switched on/off in an interval of 1 second)

 © 2016, Lunatone Industrielle Elektronik GmbH



The duration of the addressing procedure depends on the number of the connected DALI devices and can last several minutes. After the addressing procedure has been finished the found ballasts can be added to or removed from the 16 DALI groups.

Grouping:



Note: A control gear (ballast) can be assigned to several groups

Selecting a ballast: A ballast can be “optically selected” with the left/right arrows. The selected ballast will give an optical feedback (switched to DALI MAX-Level)

© 2016, Lunatone Industrielle Elektronik GmbH

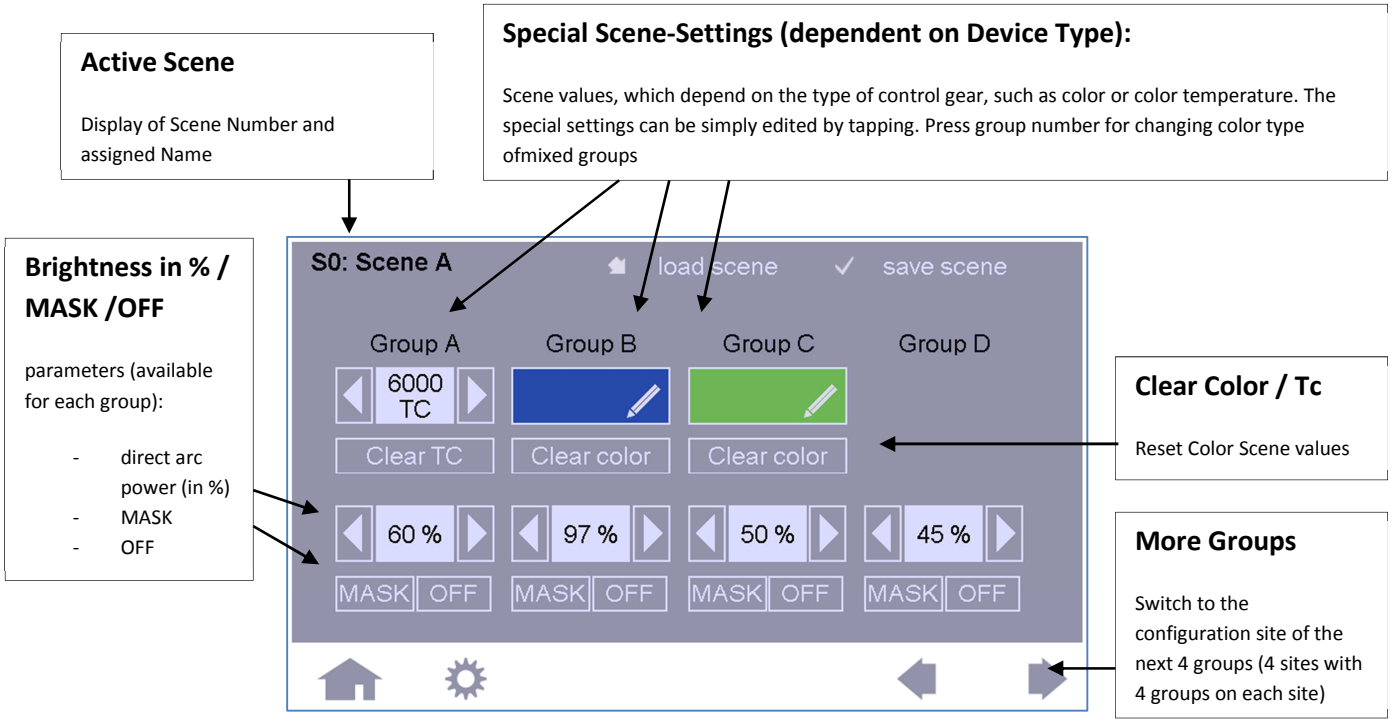
Remove Address:	A ballast can be deleted from a group by selecting the device in the group list box and then "Delete Address". Note that only the group settings of the device will be deleted - not the device address itself.
Add Address:	An address can be added to a group either by drag&drop action or by using the “Add to Group” button
Note	**The group information will be stored into the ballasts on the DALI bus only after the "Save" icon has been pressed.**
	To change the actual group, tap the "load" symbol.
Note	**Addresses on DALI A range from A0…63 (or A1…A64) and Addresses on DALI B range from B0…B63 (or B1…B64)**

© 2016, Lunatone Industrielle Elektronik GmbH

5.2 Scenes and Color Scenes

Scenes(S)

When pressing the „Scenes“-Button you enter the scene-oriented configuration menu, there appropriate values can be assigned to the currently active scene of each group. Always 4 groups are displayed on one page. Other groups can be selected using the arrow-keys in the menubar. Active scene can be changed with “Load Scene” and settings can be stored using “Save Scene”.



The settings in the scene configuration menu are automatically sent to the ballasts. Hence an optical feedback is given before storing a scene.

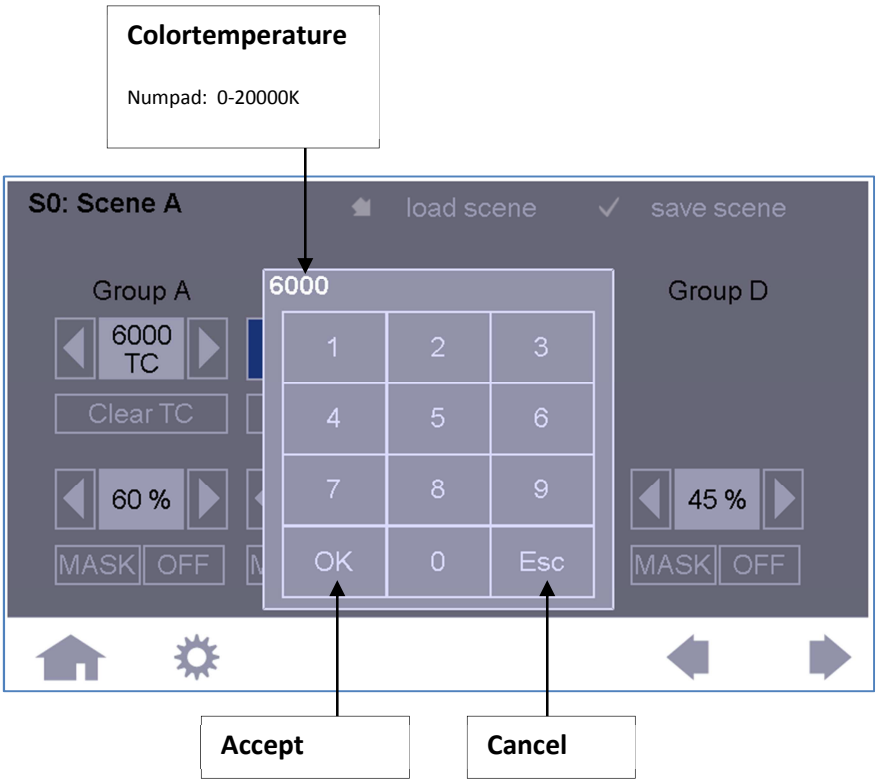
Settings: In each group, a **brightness level** between 0-100% can be assigned to the selected scene. Additional options are: OFF (group off) or MASK (group shall not react and keep current settings when the scene is called). Depending on the device type of the DALI control gear, **further setting options** are available, such as color temperature or RGB-color value (DALI DT8 devices), (these special properties can be edited by tapping the corresponding field). The color temperature can be entered via a keypad, for editing the color of a scene you will be redirected to the “Color Scene” configuration menu.

Hint: **Only DT8-devices which identify themselves as color type Tc or RGBWAF are supported.**

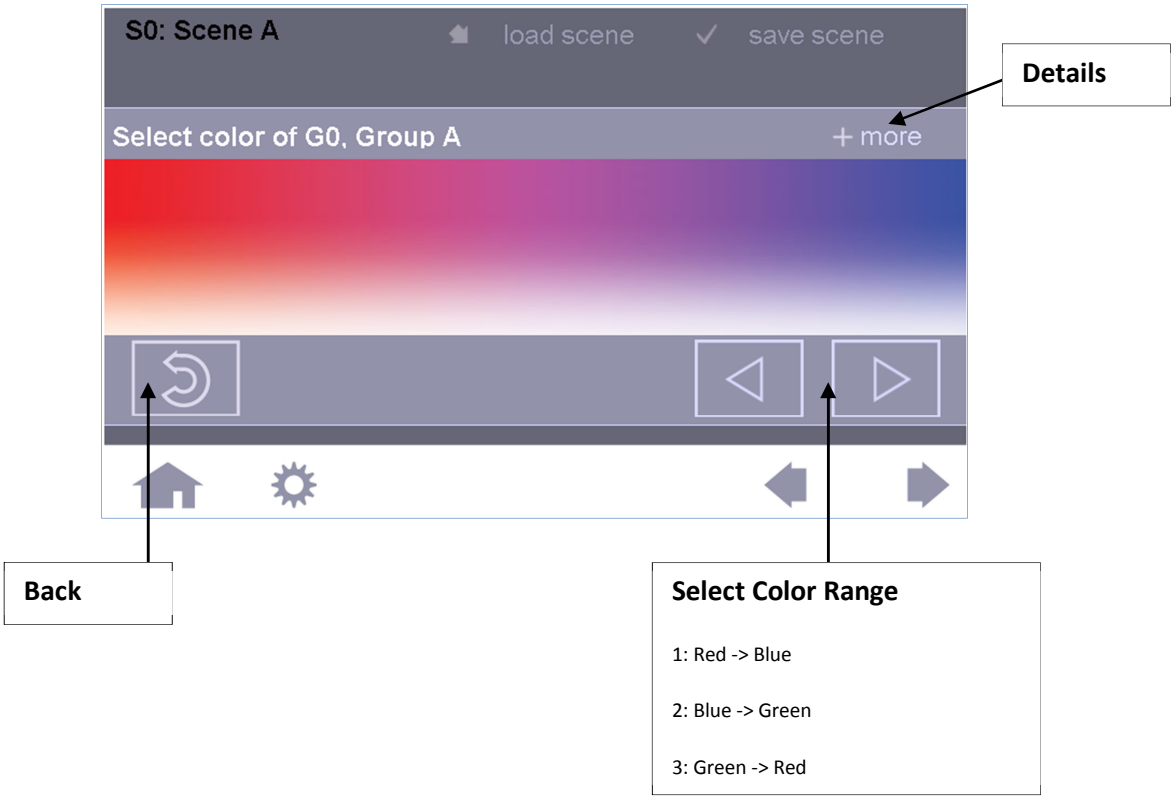
Hint: **In mixed groups (e.g. with Tc and RGBWAF or multitype devices) the scene color type can be selected by clicking the group name.**

 © 2016, Lunatone Industrielle Elektronik GmbH

Enter Color Temperature: Enter K-value via numpad

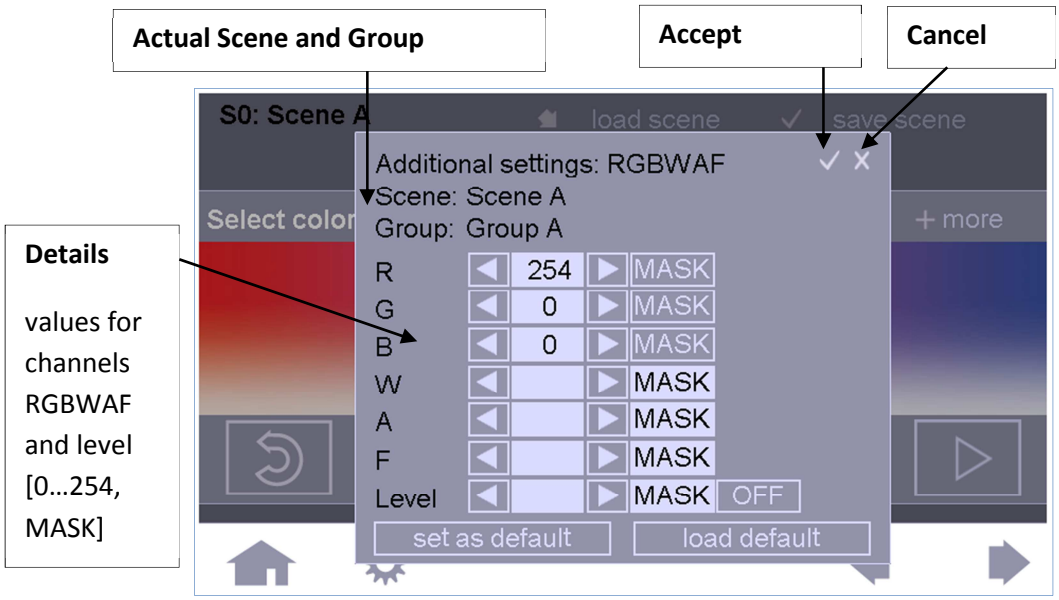


Color Selection for a RGBWAF-Group of a Scene: Select Color (R, G and B) and press back, detailed settings („+more“) allow the definition of exact values and the configuration of additional channels (W, A and F).



© 2016, Lunatone Industrielle Elektronik GmbH

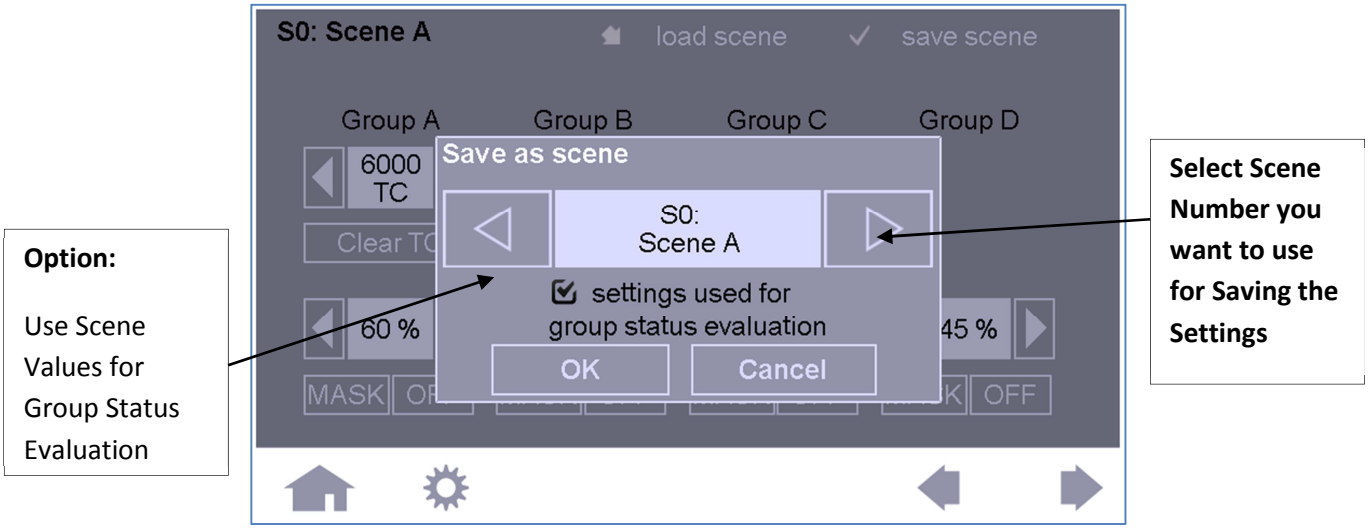
Details Color Selection:



Hint: With the help of storing and saving a default setting the values can be copied easily to another scene.

With the load function a scene for editing can be selected. Furthermore the already stored values are loaded and sent to the ballasts for an optical feedback. When using the save function a dialog box will pop up and ask for the scene number you want to use for saving (“copy function”).

When saving a scene you can decide if the stored scene values should be used to effect the group status evaluation (ON or OFF).



© 2016, Lunatone Industrielle Elektronik GmbH

After pressing “OK” you will be asked for an additional confirmation to store the scene values in the ballasts.

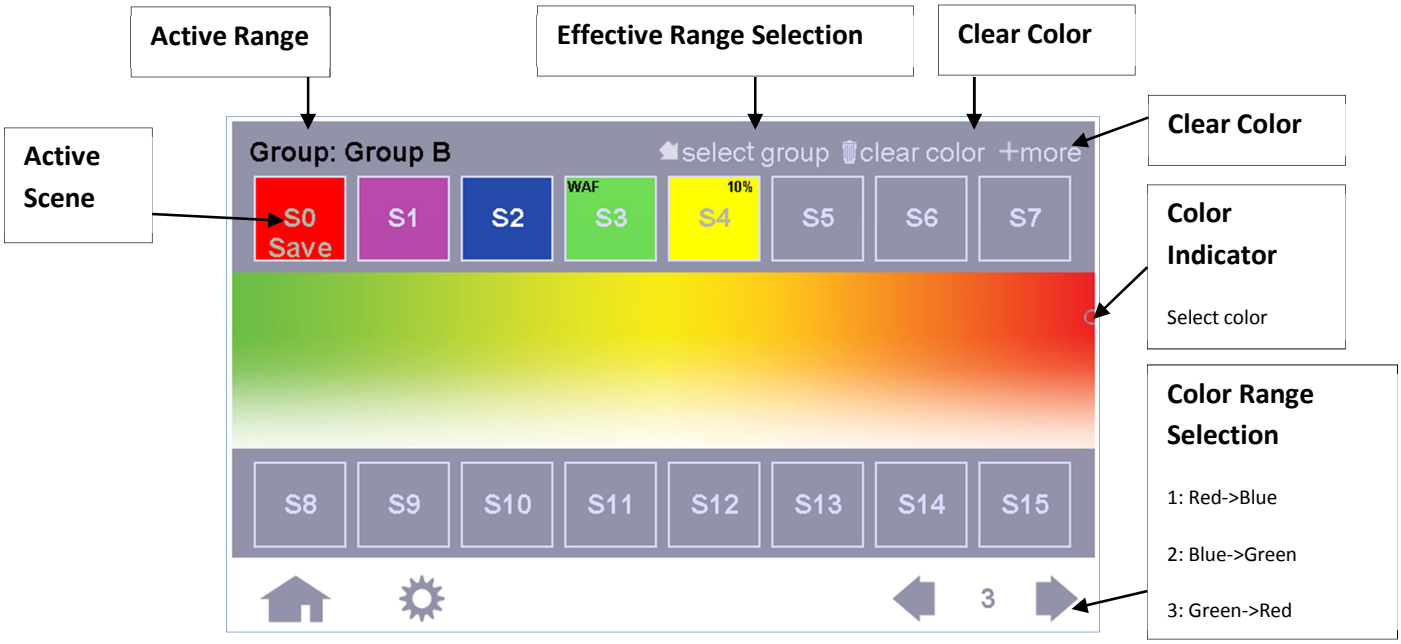
NOTE: **Take care that groups always have the same scene levels, if devices are assigned to multiple groups. Otherwise the scene value with the highest assigned group number is stored in the control gear**

Color Scenes

“Color Scenes” is an additional menu for easy and fast set up of colors of RGB-capable DALI DT8 devices (Type RGBWAF). The color scene settings page can be entered directly by selecting “Color Scenes” in the basic settings menu.

Note: Simple method for storing and recalling colors with the help of “DALI-Scenes”.

The color scenes menu is group oriented in contrast to the scene menu which is scene oriented, that means that the color is “only” set for the selected group. After the effective range has been selected you can edit, set and test all color values for this range.



Color Selection:

For a good color resolution the color palette is divided upon 3 pages. In total the three pages display the complete color range between red, green and blue.

 © 2016, Lunatone Industrielle Elektronik GmbH

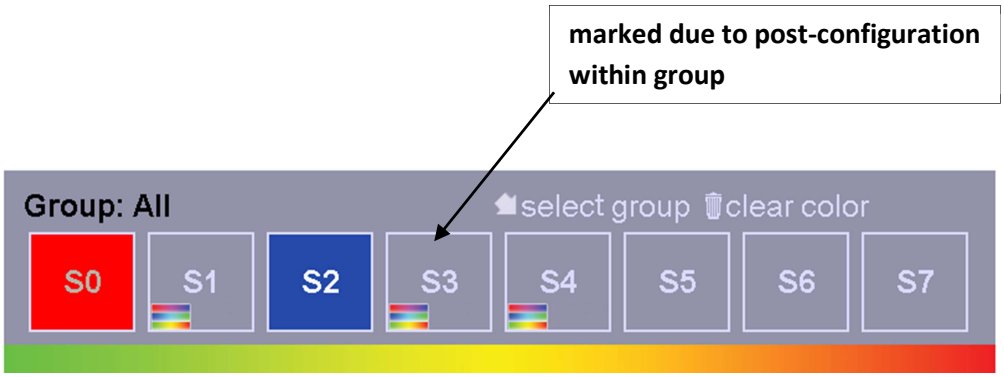
Setting and saving scene colors:

For color verification the selected color is being sent immediately to the luminary.

If a scene button (S0-15) is being pressed, the word “SAVE” starts to blink, the color can now be selected. While it is blinking the color can be changed numerous times, the scene field will display the current color selection. With the “+more”-option the scene can be configured in detail (Values for R,G,B as well as for W,A & F and even level can be defined). If any of these additional settings are defined this will be indicated by the term “WAF” or “xx%” in the field of the corresponding scene (see S3 & S4).

When the word button with blinking “SAVE” is being pressed, the new settings will be saved. All other actions (pressing any other key) result in cancelation of the scene configuration and the original color setting is being restored.

If a scene has been saved for all devices (broadcast, “ALL” is displayed in footer during color selection) and in addition undertaken further editing within a group, the color might not match original settings. Therefore these specific scenes are marked with a multi color pattern symbol on the bottom left of the corresponding field.



Note	**In color scene menu only colors can be configured, the brightness value of the scene is always set to MASK! For adding a a brightness level, the scene menu has to be used.**
Note	**If a color is defined for a scene while „ALL“ is displayed in footer, the color will be the same for all further groups.**
Note	**The display does not retrieve color information from devices. It is assumed, that the DALI Display is the only commissioning device.**

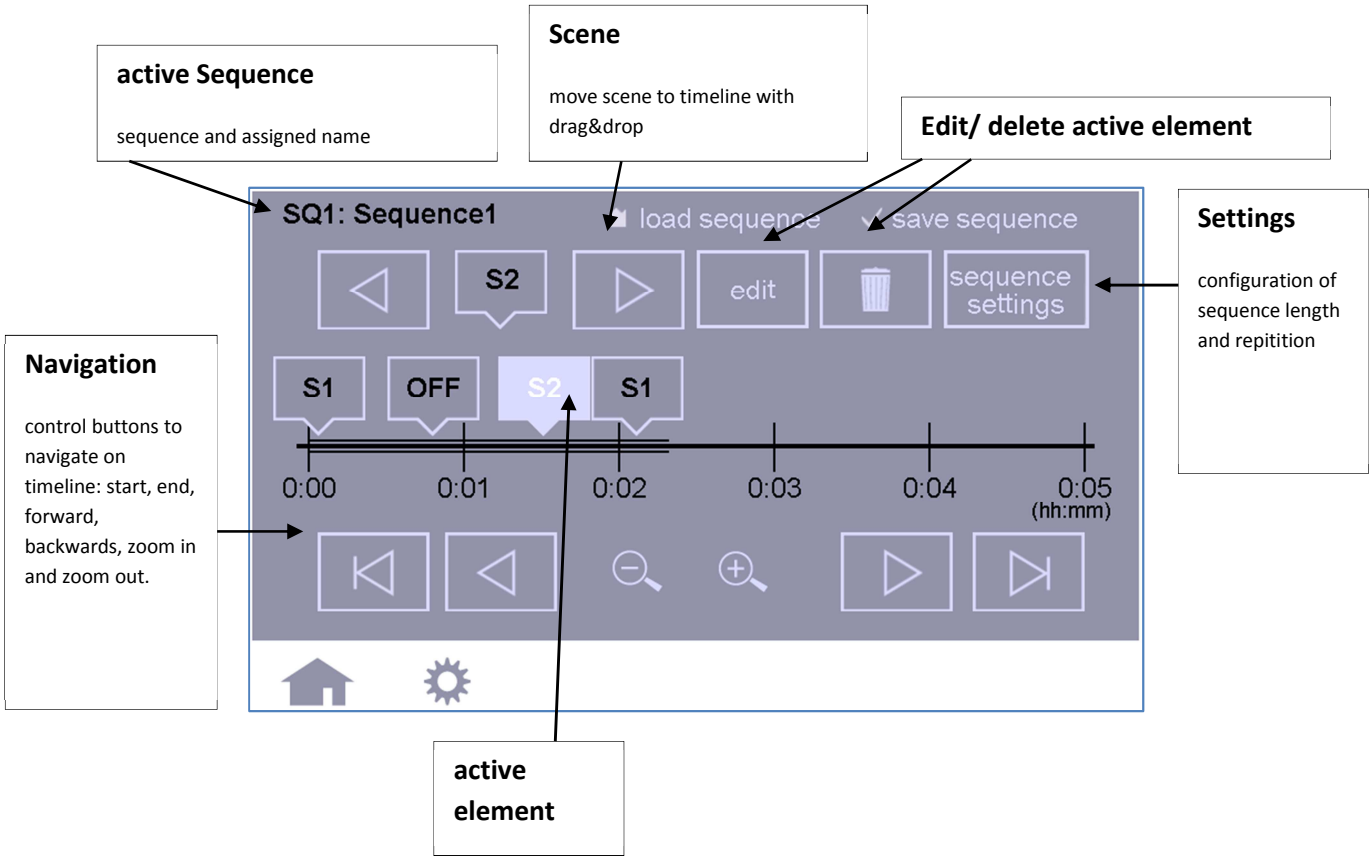
© 2016, Lunatone Industrielle Elektronik GmbH

5.3 Sequence (SQ), day-schedules (SDL), week-schedules (SDLL)

With automatic schedules scenes can be arranged and combined to sequences (SQ), day-schedules (SDL) and week-schedules (SDLL).

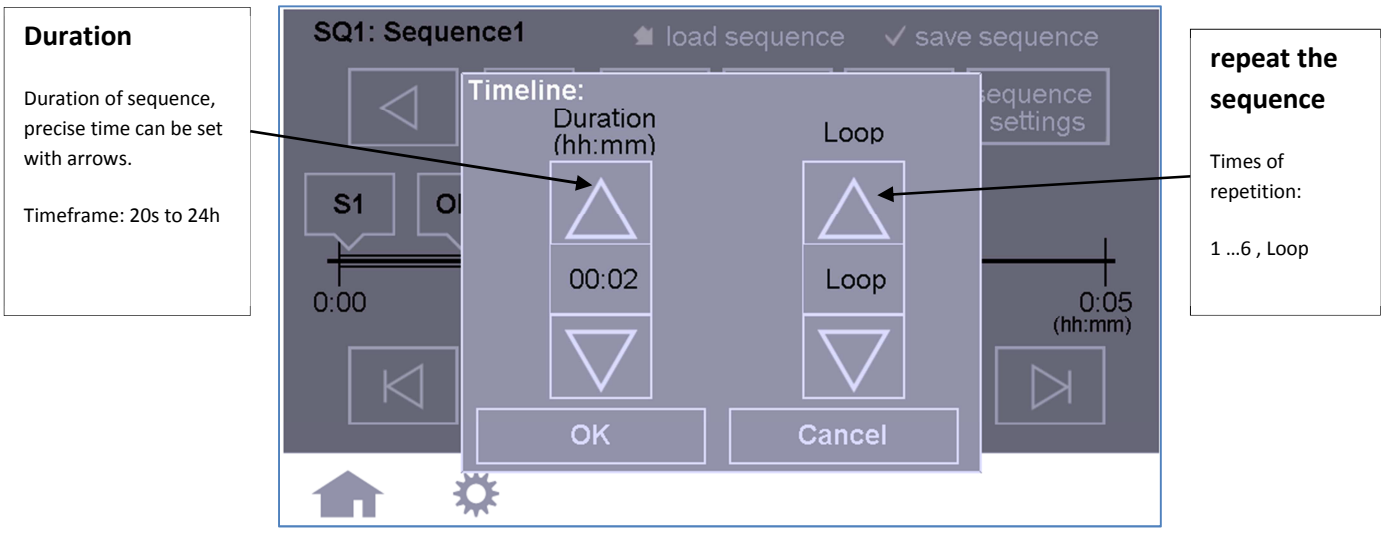
A sequence is a free combination of scene recalls with a minimum length of 20 sec and a maximum length of 24 hours. There is only one active sequence, parallel running sequences are not possible.

The active sequence can again be changed using “load sequence” and stored using “save sequence”.

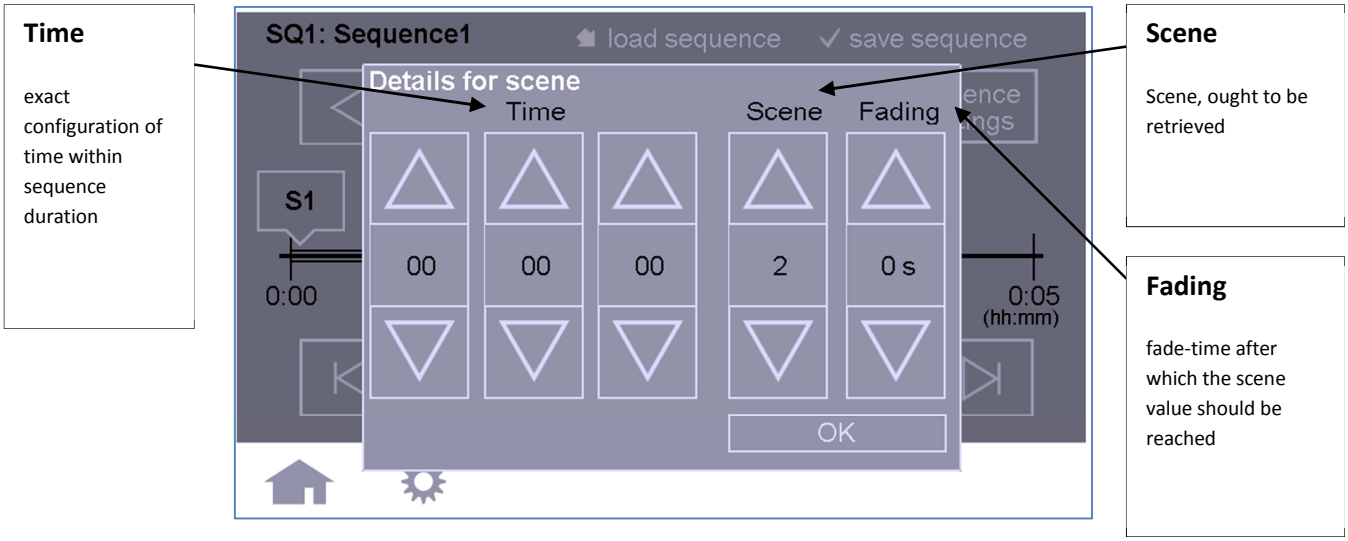


© 2016, Lunatone Industrielle Elektronik GmbH

After selecting a sequence for configuration (via the “load button” in footer) the duration of the sequence can be set (button in footer on the right end). It is also possible to repeat the sequence, between 1 and 6 repetitions can be set or the mode: endless.



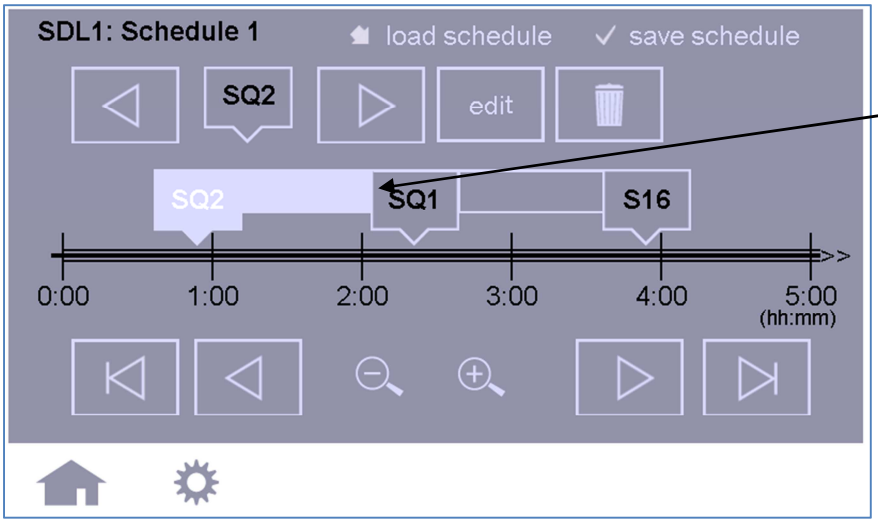
The scenes can be selected with the arrow buttons, left and right of the rhombus shaped field. The rhombus shaped field displays the currently available scene and can be moved to the timeline with drag&drop. The scene can be removed by pressing the scene shortly and additionally pressing the button “delete element”. By holding the scene rhombus on the timeline a pop-up will open for more precise configuration. Here “S1” from previous example:



Day-Schedules, also referred to as Schedules (SDL), can be configured like sequences. One difference, Day-Schedules are limited to 24 hours and their timing is related to the actual time of the day. Sequences can be embedded in schedules, they are being selected like scenes, with the arrows left and right of the rhombus.

© 2016, Lunatone Industrielle Elektronik GmbH

If a scene or sequence is recalled while a different sequence is active, the previously active sequence will stop.

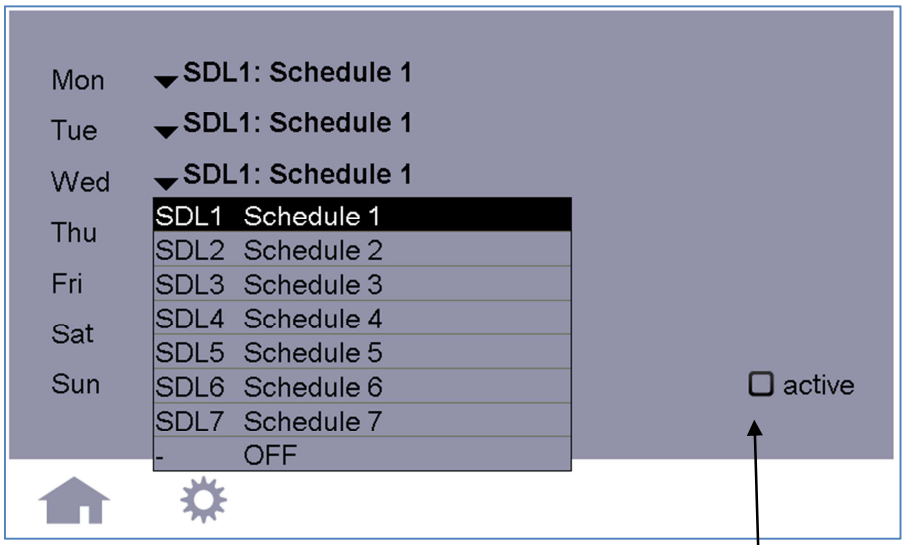


Stopping endless sequence with daytime related sequence

The sequence recall of SQ1 stops SQ2 which was defined as an endless sequence.

Also long time sequences can be stopped in this manner.

In the week-plan, also referred to as Schedule List (SDLL), schedules can be assigned to each day. For each day one Schedule from a list of seven options can be chosen.



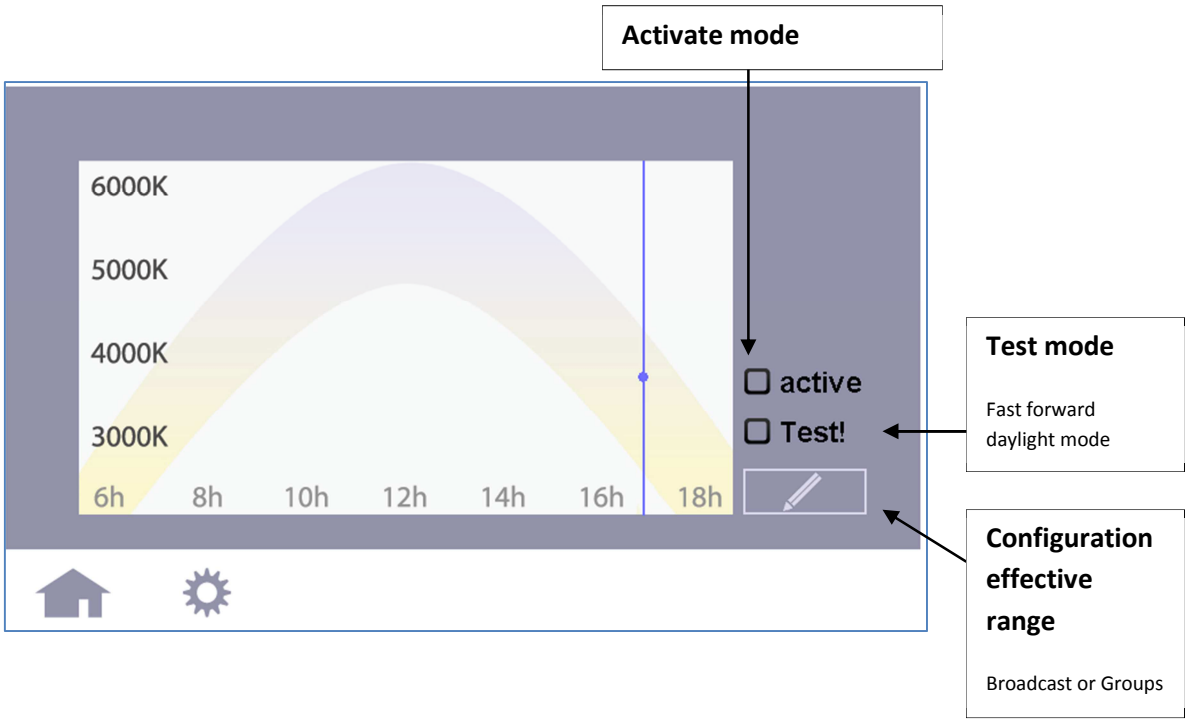
Activate SDLL

© 2016, Lunatone Industrielle Elektronik GmbH

5.4 Human Centric Lighting – Circadian daylight progression

Lighting based on the progression of daylight, offering light color temperature according to daytime. Can be activated in Settings under the category “Daylight“.

The control gears have to support DALI DT8 (Mode Tc) and luminaries have to support various shades of white light.



In this setting mode each minute the color temperature of the according daytime is being broadcasted. All DT8 control gears (mode Tc), that respond to these commands, will adjust their shade of white.

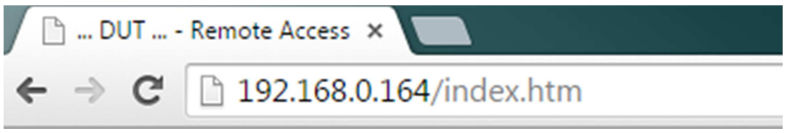
Note	**Whenever this mode is activated, newly started scene commands regarding DT8-luminaries will be overruled after a minute, when new command of white shade is being send.**

 © 2016, Lunatone Industrielle Elektronik GmbH

6. Ethernet – Remote Control

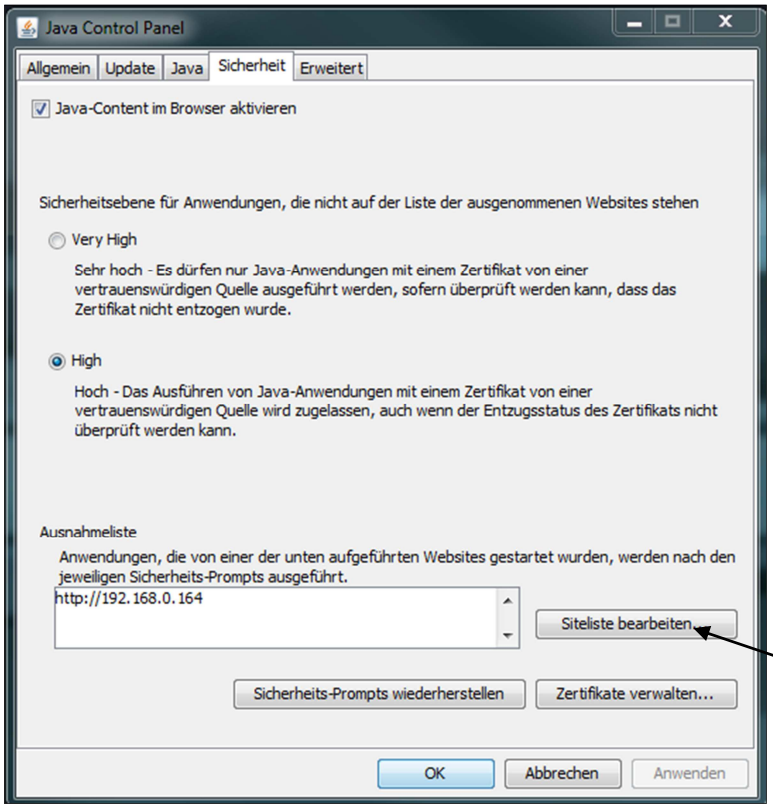
The DALI Display can be remote controlled via Ethernet. Just point your browser to the IP- address of the display:

Type the DALI Display's IP- address in the address field of your browser:



Hint: The remote control is done using a Java Applet[1]. You need to enable Java in your browser and in the Control Panel.

For firmware V103 the IP of the display has to be added to the secure site list:
Control Panel -> Java -> Security -> Sitelist -> Add IP-Adress to list, e.g. “http://192.168.0.164”.
Alternatively you may use a VNC viewer to remote control the DALI display.



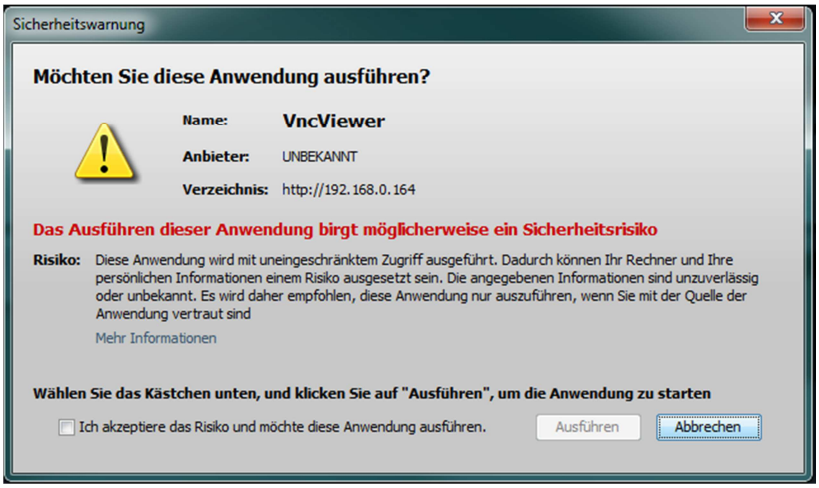
Sitelist

Enter IP-Address of the DALI Display in the sitelist

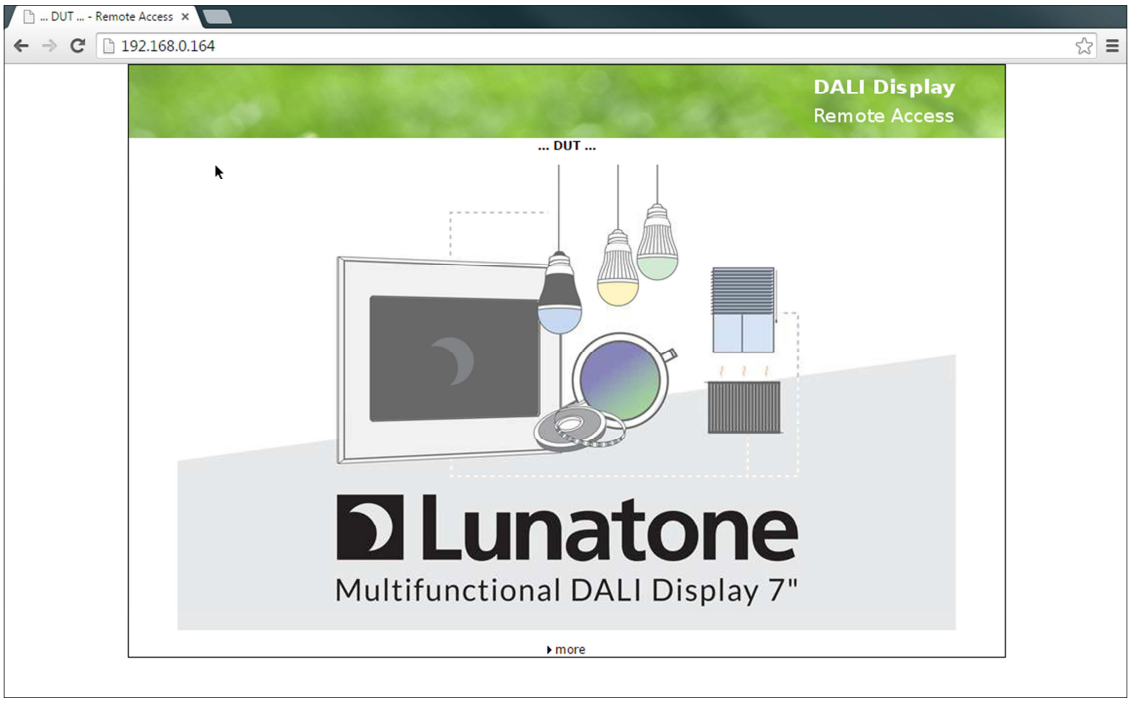
[1] Java applet using VNC-protocol, firmware version V103 is compatible with Java8, V102 is compatible with Java7; Oracle does often change the security settings and security level of Java. If you meet a problem with the remote control after updating java, please downgrade java to the previous version.

 © 2016, Lunatone Industrielle Elektronik GmbH

With newer java versions you also have to agree to run the application (furthermore it may be necessary to empty the browser cache).

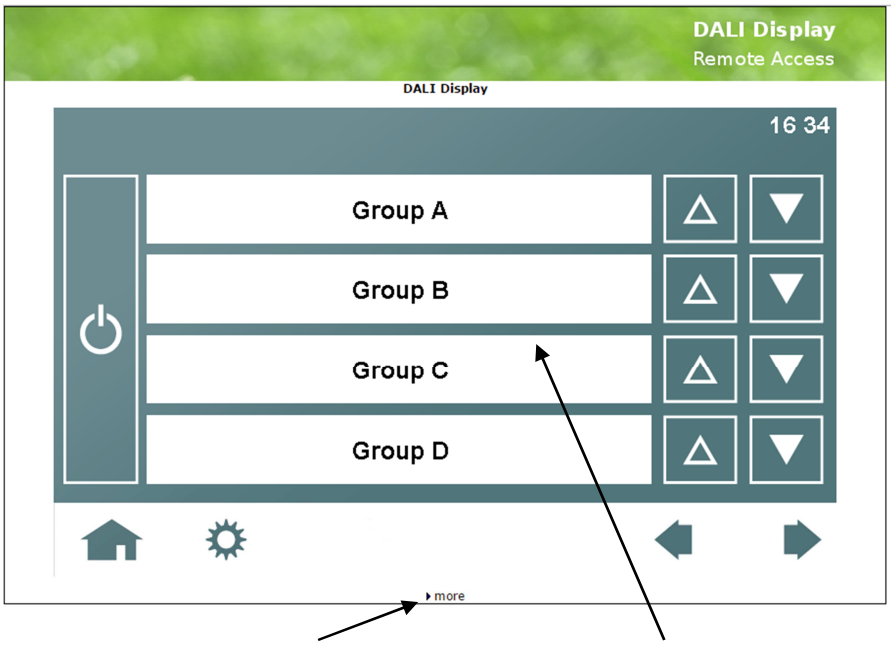


Once you have access, you can remote control the display and navigate freely through all the menus.

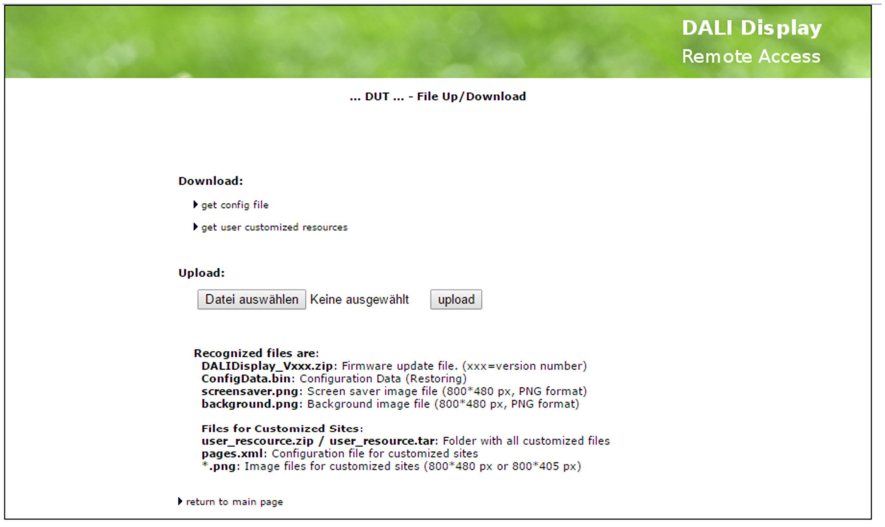


 © 2016, Lunatone Industrielle Elektronik GmbH

Example: Remote Access Group Control Site



With the menu item „>more“ you can open another page. Currently you will find a download and upload tool there. With the help of this tool you can upload customized pics as well as save and restore configuration files and finally update the firmware.



 © 2016, Lunatone Industrielle Elektronik GmbH

Supported files are:

- DALIDisplay_Vxxx.zip	firmware DALI Display (xxx= version number)
- ConfigData.bin	DALI Display configuration file (restore a previous downloaded configuration)
- screensaver.png	customized screensaver (800*480)
- background.png	customized background (800*480)

Furthermore user defined images and configuration files for customized pages can be uploaded. Contact the manufacturer for further details.

As alternative to the browser you can use a VNC-Viewer to remote access the DALI-Display (Note: the download/upload site can be accessed only via browser).

 © 2016, Lunatone Industrielle Elektronik GmbH

7. System Update

For firmware updates a zip file DALIDisplay_Vxxx.zip is provided. xxx is a placeholder for the version number of the update.

There are two possibilities to update the Display:

USB Stick:	Unzip the file DALIDisplay_Vxxx.zip into the root directory of an USB stick. Then plug in the USB stick into the DALI Display and follow the instructions on the screen.
Ethernet:	Just upload the file DALIDisplay_Vxxx.zip on the upload page of the DALI Display web page (details see chapter 6).

 © 2016, Lunatone Industrielle Elektronik GmbH

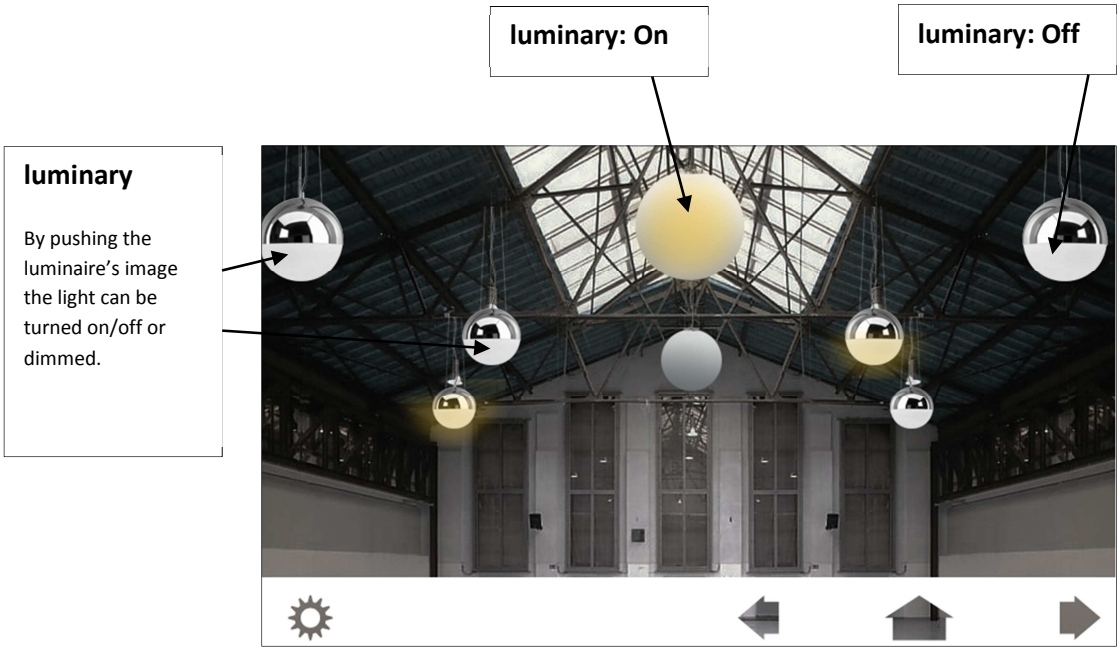
8. Custom design

From Firmware V103 onwards, custom pages can be uploaded to the DALI Display. Individual Designs can be developed for multiple scenarios. Lunatone offers this service upon request.

Two examples of custom designs are shown below:

8.1 Photo of room with integrated luminary control

In this example a photo of a room and all available luminaries are shown on the display. The luminaries can be controlled (on/off/dim) individually, by pressing their image on the display. The current status (on/off) is displayed by the color(yellow) of the luminary.



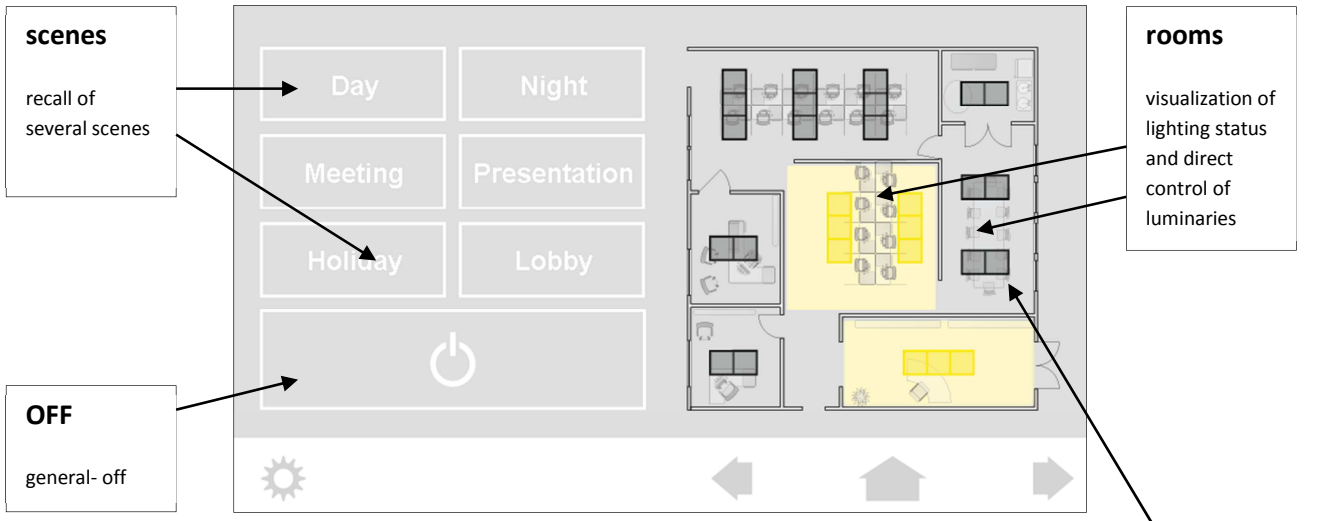
The Feedback on the luminaire's status (on or off) is especially convenient if the Display is placed in a different location.

8.2 Room overview of a floor with controllable luminaries

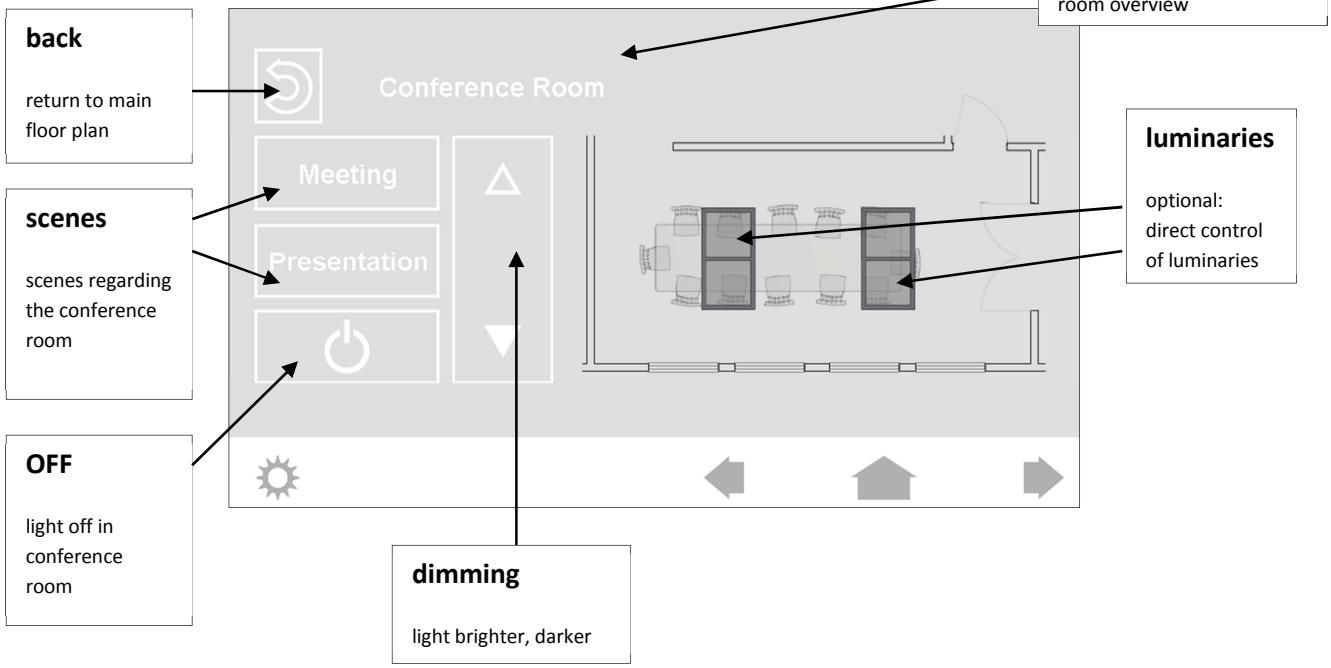
The Display shows the main floor of a building. The light can be turned on/off by pressing the images of luminaries in the various rooms. Alternatively the luminaries can be controlled with scenario buttons located next to the floor plan (day, night, meeting, presentation, ...). The resulting lighting effect of the scenario buttons will also be displayed in the floor plan.

An additional feature: by holding one of the rooms an extra page will be opened, with a more detailed room plan and additional settings. Shown below on the example of the conference room.

 © 2016, Lunatone Industrielle Elektronik GmbH



Conference room, detailed overview:



© 2016, Lunatone Industrielle Elektronik GmbH

9. Additional Information and Equipment

DALI Display datasheet
http://lunatone.at/en/downloads/Lunatone_Art86458626_DALI_Display_Datasheet_EN.pdf

DALI-Manual English http://www.dali- ag.org/c/manual_gb.pdf

DALI PS – power supply for a DALI line

http://lunatone.at/en/downloads/Lunatone_ Art24033444_DALI_PS_Datasheet_EN.pdf

Technical Support: support@lunatone.com

Requests: sales@lunatone.com

www.lunatone.com

10. Disclaimer

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

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

11. Glossary

term	description
control gear	Electronic ballast for lighting purposes
Broadcast	According to DALI: Effective range = all operating units
Color Scene	Using a DALI scene for storing color information only without brightness level (level="MASK")
DALI	Digital Addressable Lighting Interface, standard for lighting control (IEC 62386).
Device Type 8	DALI standard for colour control (short DT8), all device requirements regarding colour control via DALI are combined in the norm IEC 62386-209.
individual device address	Each DALI-device is equipped with an individual address, with this address the device can be identified and addressed.
group	a combination of several control gear
group address	According to DALI: Control gear added to a group can be controlled simultaneous via the group address.
MASK	Special DALI value (0xFF). If this value is send as brightness value, than the control gear will not change its current brightness value. If this value is saved as a scene value, the recall of this scene will not effect the current lighting status. Currently active fades will be stopped if MASK is received.
Schedule (SDL)	Daytime related schedule, starts at 00:00 and ends at 24:00, can be started, paused and

 © 2016, Lunatone Industrielle Elektronik GmbH

	stopped any time.
Schedule List (SDLL)	Week schedule with a 7 day plan. For each day a time related schedule can be set.
Sequence (SQ)	Time related process, can be started, paused and stopped any time.
Scene (S)	Lighting scenario

© 2016, Lunatone Industrielle Elektronik GmbH