



DALI-2 Touchpanel Cockpit Configuration Files



Multifunctional DALI-2 control
module with flexible button layout

Custom Touchpanel Layout

All standard Layout Cockpit configuration files can be downloaded:

<https://www.lunatone.com/wp-content/uploads/2021/03/TouchpanelLayoutKonfigFiles.zip>

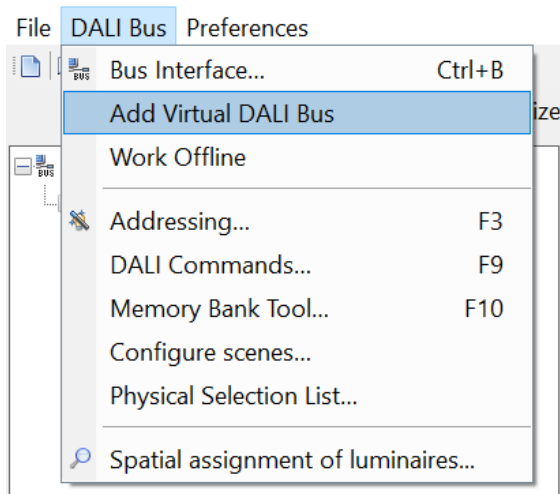
In this document the configuration of the cockpit files is explained – for the layout design guide see:

https://www.lunatone.com/wp-content/uploads/2020/11/DALI-2_Touchpanel_Manual_EN_M0021.pdf

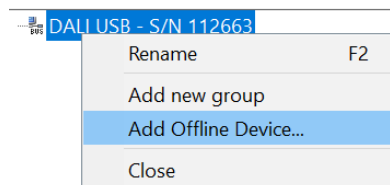
Cockpit Configuration File

To create a cockpit configuration File start the DALI Cockpit.

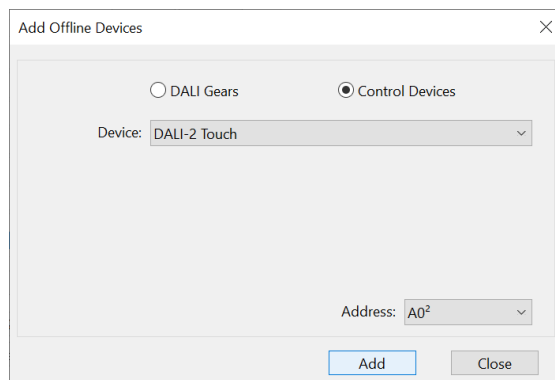
If no DALI Interface and Touchpanel device is yet available (USB, SCI, DALI4Net etc.) add a Virtual DALI Bus:



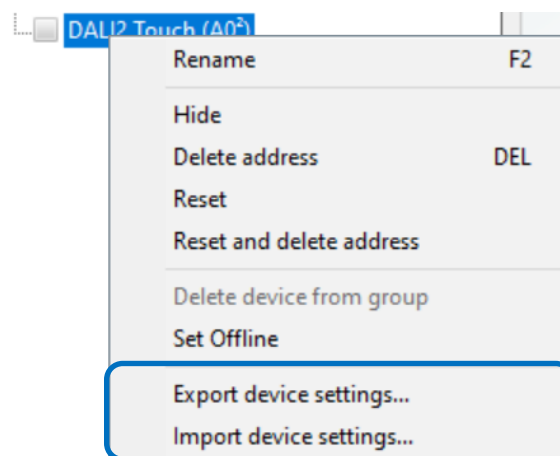
Right Click the DALI Bus and add an Offline Device



Select the section Control Devices and choose the Device: DALI-2 Touch



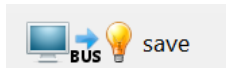
In the DALI Cockpit device overview existing configurations can be saved or loaded by right-clicking on the device.



import or export device settings

This way existing files can be loaded and settings can be adjusted to fit the application e.g. number of buttons, button functions, effective range, etc on the device page - Tab "Application" – see details to all available settings on the following pages.

After configuration: press the save button



Apply your changes with "Save" in all cases- when writing to a device and also in offline configuration mode.

After saving it is possible to export the file using "Export device settings".

Cockpit Application Overview

The screenshot shows the configuration interface for a DALI2 Touch device. It includes a 'Device Info' section with fields for Name, Manufacturer, Device Type, DALI Ver, Article Number, Serial Number, GTIN, and FW. Below this is a 'General' tab with 'Application' selected, showing a grid of 9 buttons (1-9) and an 'Add new button' button. A 'Destination Addresses' section has four rows with dropdown menus. A 'Function' section has a dropdown menu and a checkbox. A 'Command X' section has a dropdown menu and a 'Fade time' dropdown menu. Callouts point to various elements: 'preview: layout picture, button positions, touch area' points to the button grid; 'settings for each button (max. 16 buttons)' points to the 'Add new button' button; 'button positions' points to the button grid; 'effective range' points to the 'Destination Addresses' section; 'button function' points to the 'Function' dropdown; 'DALI command/function' points to the 'Command X' dropdown; 'show/hide the layout picture / touch area in the preview (top left)' points to the 'Show buttons' and 'Show touch area' checkboxes; and 'load a layout image for reference (preview on the top left)' points to the 'Add picture' button.

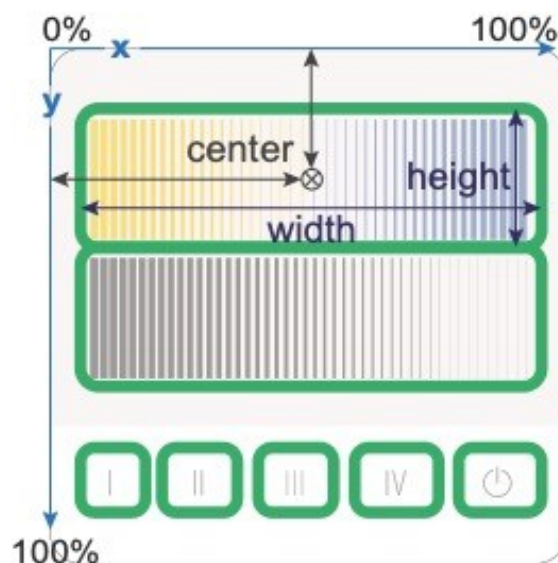
Application: Application Controller

Button position

To adjust the button positions, a reference picture can be added to the preview on the top left corner of the Cockpit Window "Add picture". Supported image formats: bmp, jpg, png, gif, tif, tiff, emf.

The positions of the buttons are defined by 4 parameters:

- Button Centre X in % Button Width X in %
- Button Centre Y in % Button Height Y in %



Button positions (indicated in green)

Destination address / effective range

In the section "destination addresses" it is possible to define which devices are affected by the button function. Possible destination addresses:

- Broadcast (an alle)
- DALI group (0 - 15)
- DALI single address (0 - 63)

Up to 4 different target addresses can be defined for each button. When the button is pressed the target addresses 1 to 4 will be processed sequentially (see Fig. 10)

Destination Addresses

1: Group ▾ Gruppe 1 (G1) ▾

2: Group ▾ Gruppe 11 (G11) ▾

3: Single Address ▾ (A21) ▾

4: Single Address ▾ (A45) ▾

Function: BF1 - Pushbutton: sends CmdX

sending ON AND STEP UP as Start-Cmd

Command X

OFF ▾

➔

Address	Command	Time
G1	OFF	12:54:04.695
G2	OFF	12:54:04.723
A21	OFF	12:54:04.749
A45	OFF	12:54:04.777

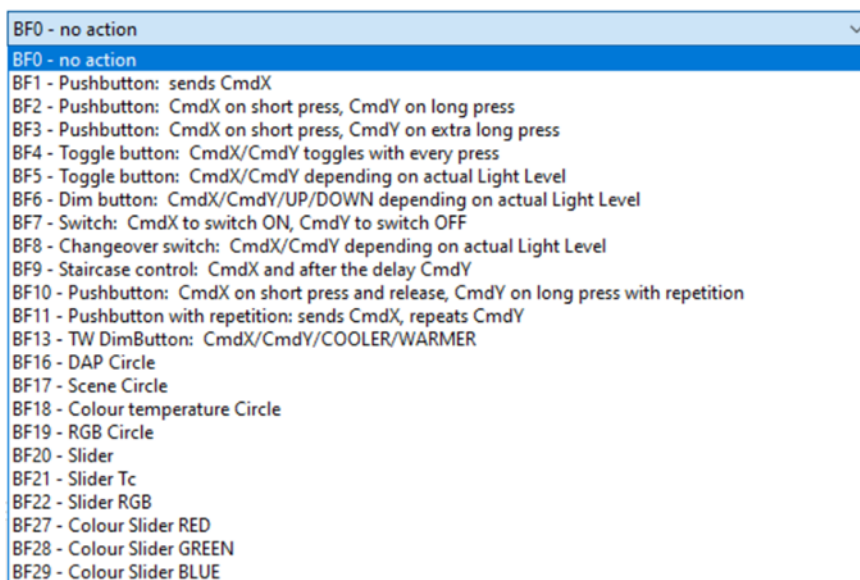
Fig.10 Example: Addressing Inputs 1-4 – sequentially processed

Button Function (BF)

Various "Button Functions" (BF) can be assigned to the individual buttons. The "Button Function" defines the behaviour of a button. A short or long press of the button can trigger different DALI commands.

A toggle function (switching between on and off) is also possible.

For the DALI-2 Touchpanel following "Button Functions" are available, Figure below



DALI-2 Touchpanel button functions

Key presses (short / long) are queried according to the following timing diagram and translated into internal signals (**key events**):

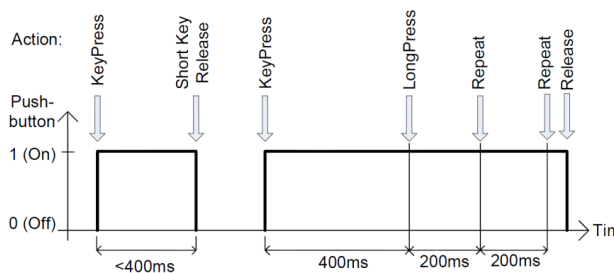


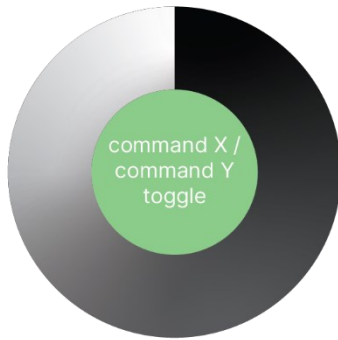
Fig.12 Key Events

The following table shows how the selected "Button Function" (lines 0 to 13) sends the commands **CmdX** and **CmdY** in connection with the "Key Events" (see Fig. 12). CmdX and CmdY refer to DALI commands.

Note: The DALI commands are transmitted to all assigned target addresses.

button function number	event: press	event: short press	event: long press	event: extra-long press	event: repeat	function	typical application
0	-	-	-	-	-	-	-
1	CmdX	-	-	-	-	sends CmdX on key press	master off
2	CmdX	-	CmdY	-	-	sends CmdX on key press sends CmdY on long key press	switch to 2 different levels
3	-	CmdX	-	CmdY	-	sends CmdX on key press sends CmdY on extra-long key press	store level as scene
4	CmdX / CmdY toggle	-	-	-	-	sends alternating CmdX and CmdY on key press	toggle push button
5	CmdX / CmdY toggle	-	-	-	-	sends CmdX or CmdY on key press (depending on bus status)	changeover button
6	-	CmdX / CmdY toggle	ON AND STEPUP	-	UP / DOWN	sends CmdX or CmdY on short key press (depending on bus status) sends ON and STEPUP, if bus state is OFF before UP sends alternating UP or DOWN on repeat	push and dim
7	CmdX (CmdY on release)	-	-	-	-	sends CmdX on key press sends CmdY on key release	switch
8	CmdX / CmdY toggle (CmdY / CmdX toggle on release)	-	-	-	-	sends CmdX or CmdY on key press (depending on bus status) sends CmdY or CmdX on key release (depending on bus status)	changeover switch
9	CmdX (CmdY on delay)	-	-	-	-	sends CmdX on key press sends CmdY after a programmable delay	staircase control
10	-	CmdX	CmdY	-	CmdY	sends CmdX on short key press sends CmdY on long key press sends CmdY on repeat	push and dim
11	CmdX	-	-	-	CmdY	sends CmdX on key press sends CmdY on repeat	push and dim
13	-	CmdX / CmdY toggle	-	-	WARMER / COOLER	sends CmdX or CmdY on short key press (depending on bus status) sends alternating WARMER or COOLER on repeat	tunable white dim

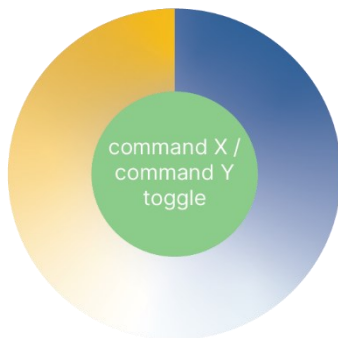
BF 16 – DAP Circle



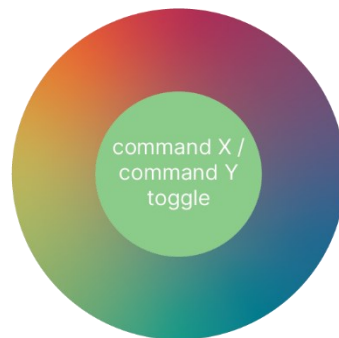
BF17 Scene Circle



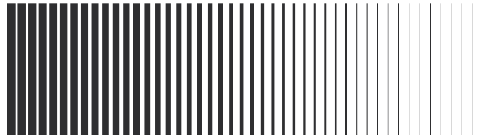
BF18 Colour temperature Circle



BF19 RGB Circle



BF20 Slider

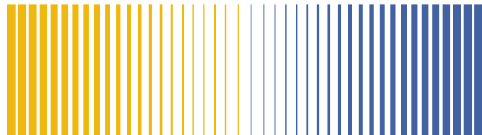


BF20 - Slider

Vertical Horizontal

Min ← → Max Max ← → Min

BF21 Slider Tc



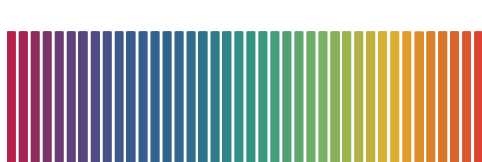
BF21 - Slider Tc

Vertical Horizontal

Min ← → Max Max ← → Min

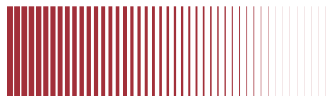
Min Value: K Max Value: K

BF22 Slider RGB

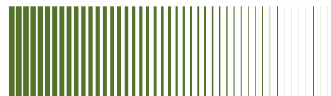


BF22 - Slider RGB

BF27 Colour Slider RED



BF28 Colour Slider GREEN



BF29 Colour Slider BLUE



Vertical Horizontal

Min ← → Max Max ← → Min

Commands:

The actual action (which function is triggered when pressing a button) is determined by the button function and command assigned to the button.

In most cases, an X command (CmdX) and also a Y command (CmdY) can be selected.

The following options are available:

Command number	Command name	action / function
no Nr.	DIRECT ARC POWER	direct arc power Level in %
0	OFF	off
1	UP	dim up (using fade rate)
2	DOWN	dim down (using fade rate)
3	STEP UP	increases light level by one increment
4	STEP DOWN	decreases light level by one increment
5	RECALL MAX	recalls MAX value
6	RECALL MIN	recalls MIN value
7	STEP DOWN AND OFF	decreases light level by one increment, if value at MIN switch off
8	ON AND STEP UP	increases light level by one increment, if OFF switch on
10	GOTO LAST ACTIVE LEVEL (DALI 2)	DALI-2-Cmd for switching on to the last active level (Memory-Function) (Firmware 2.0 and up)
16-31	GO TO SCENE	go to scene 0-15

Tab. 2

Depending on the selected command, additional input fields might appear for further settings:



Fig. 13

Predefined macros:

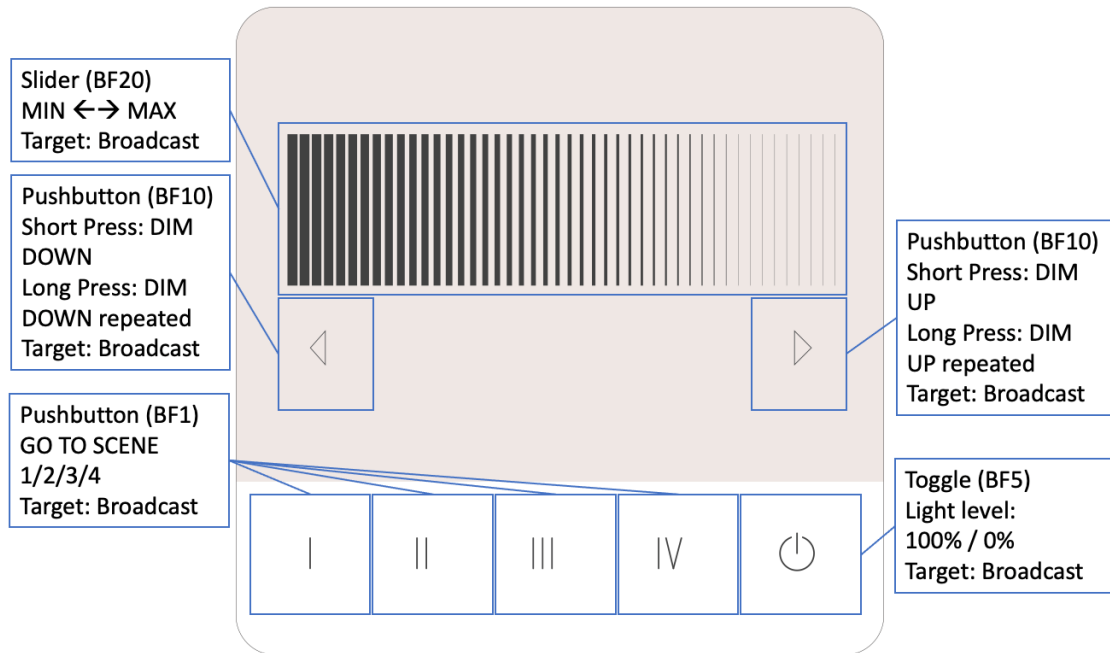
Macros are predefined/ user defined command sequences that can be triggered by a single command.

The following macros are available:

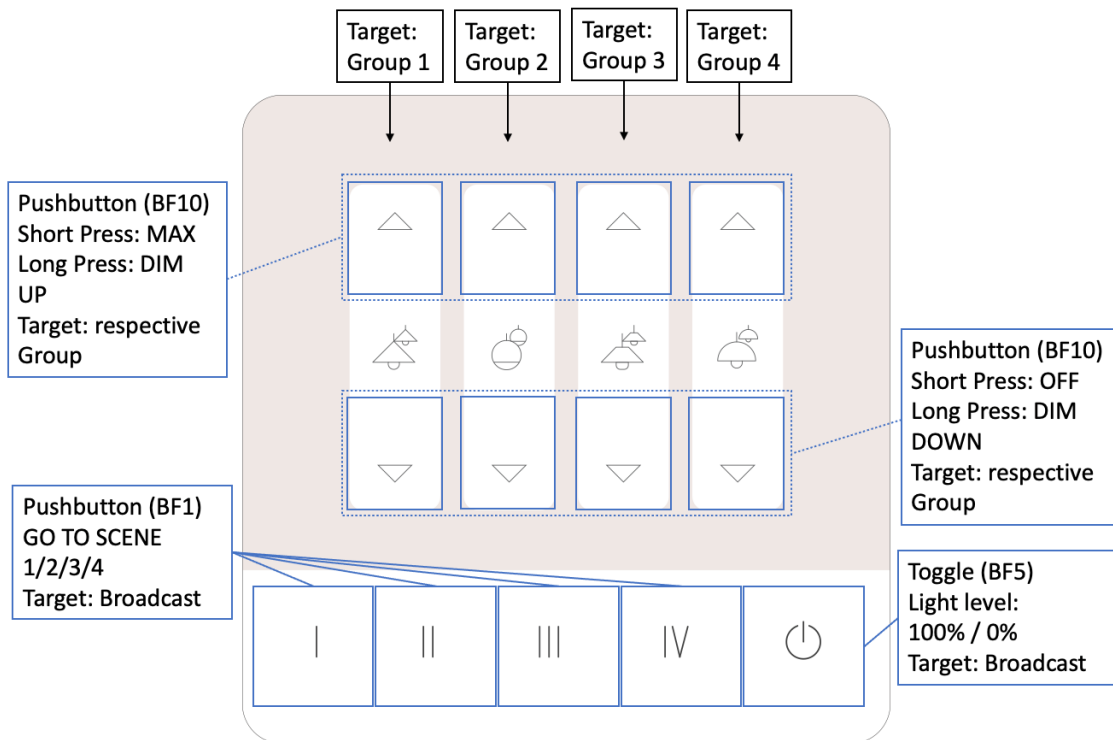
Nr	Macro	Function
M1	Go Home	Light dims down to DAP 0 with predefined fade time, then fade time is set back to a programmable value
M2	Sequential Scenes	A list of the scenes can be defined; the scene is switched with each button press.
M3	Dynamic Scenes	A dynamic sequence of up to 16 scenes can be defined, including custom fade times and delays.
M4	Save actual light level as scene	When triggered the current level is saved in a scene (options: light level, RGB colour value, WAF colour value or colour temperature).
M5	User Defined Cmd-List	A user-defined macro script with up to 19 commands is executed.
M6	TC cooler	Activates the DT8 mode and sends the command "COOLER" 3 times.
M7	TC warmer	Activates the DT8 mode and sends the command "WARMER" 3 times.
M8	Send RGB +	Activates the DT8 mode and sends an ascending RGB colour table value.
M9	Send RGB -	Activates the DT8 mode and sends a descending RGB colour table value.
M10	Delayed Off	Sends a DAP level and after a delay the OFF command. DAP level and delay are user defined.

Tab. 3

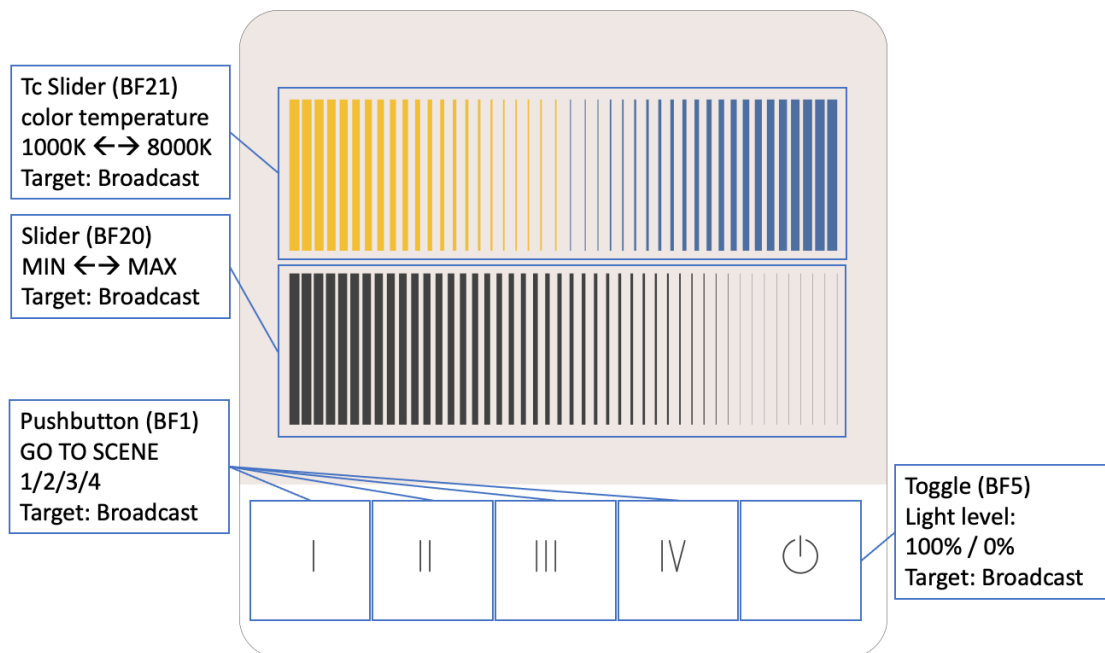
Standard Layouts – Factory Settings



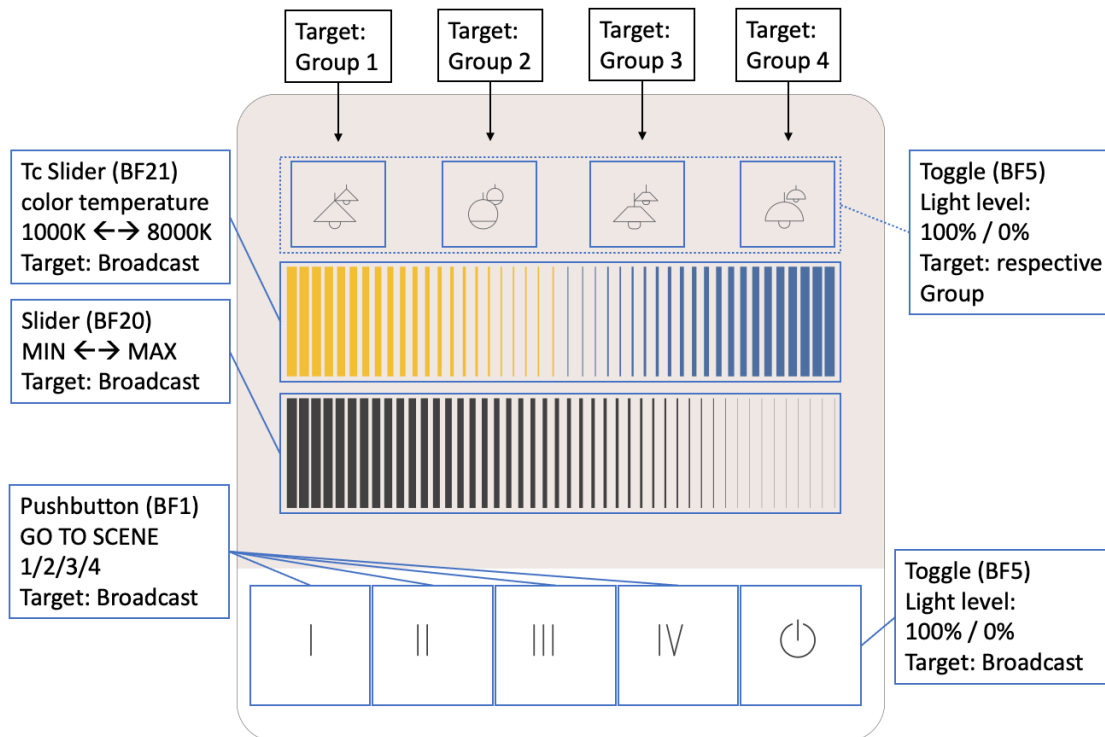
Layout Art. Nr.: G01A brightness slider & arrows for fine adjustment



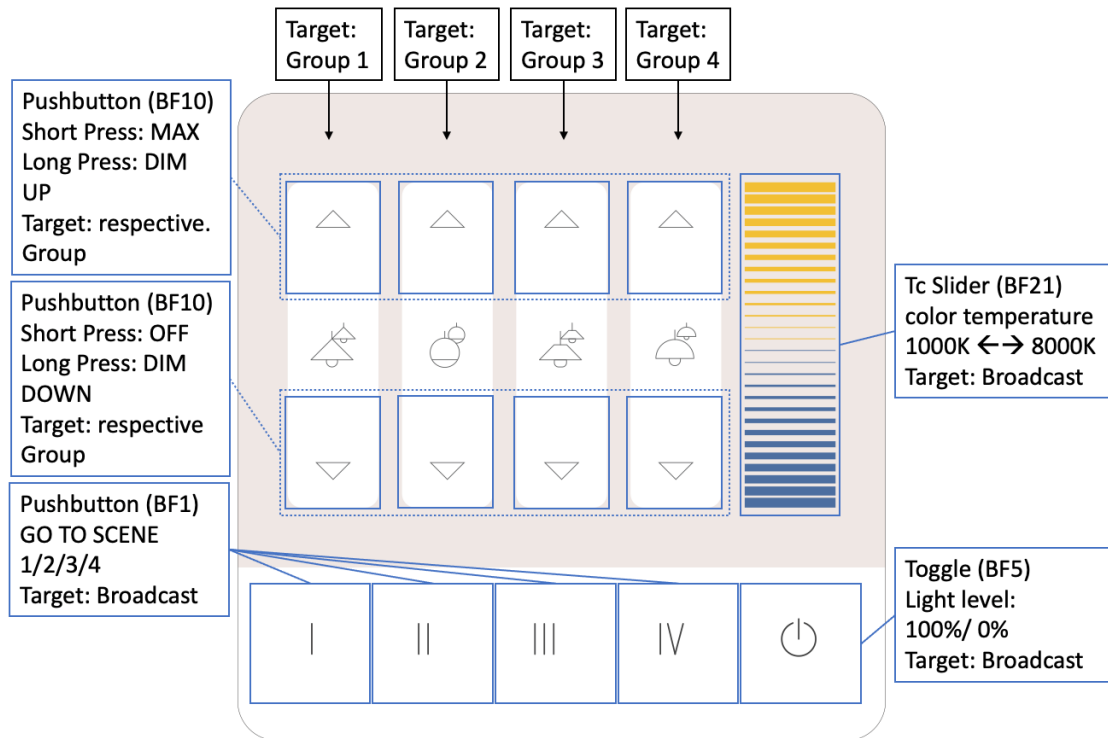
Layout Art. Nr.: G02A 4 groups separately dimmable with arrows



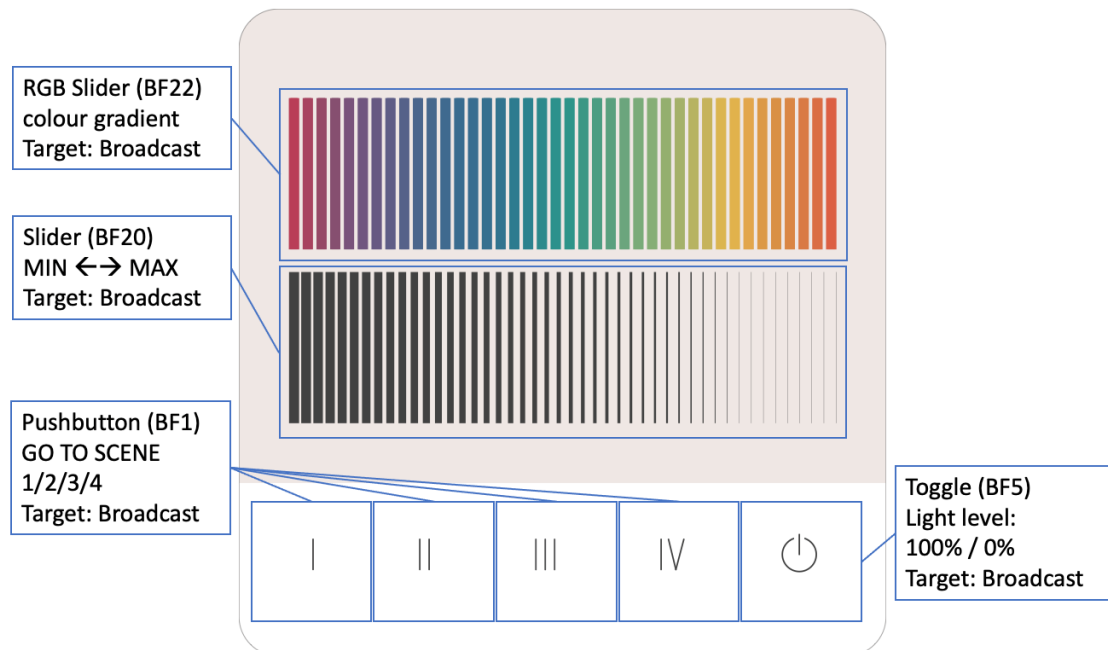
Layout Art. Nr.: G03A brightness slider & tunable white slider



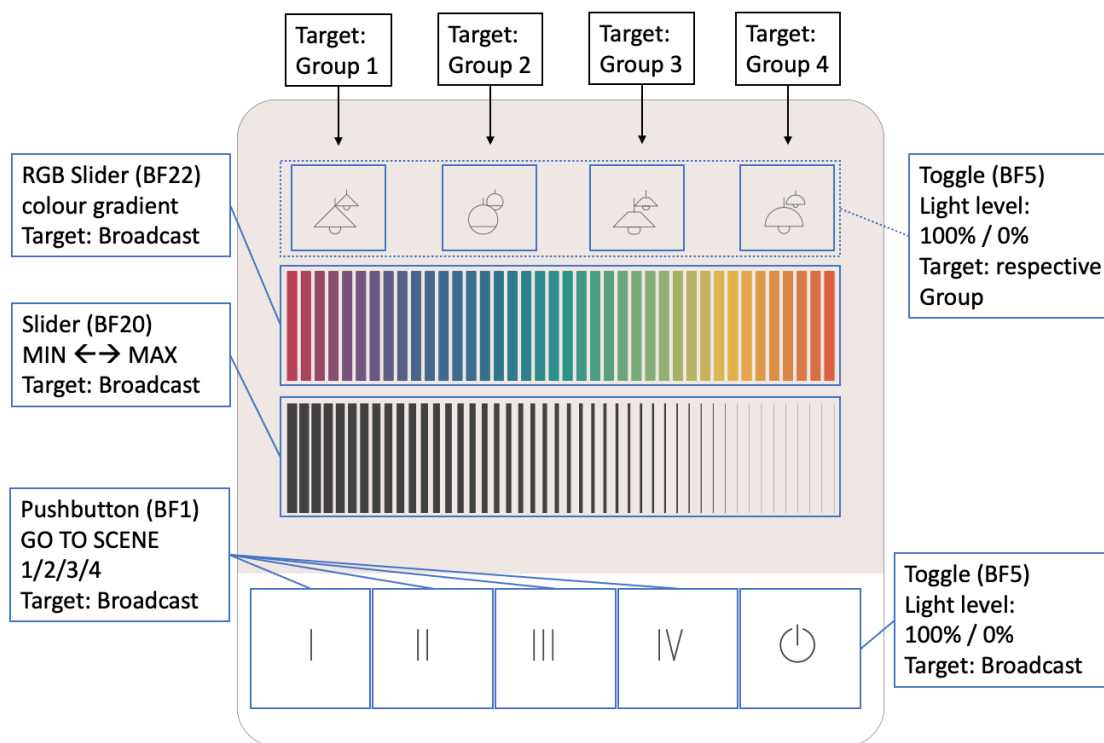
Layout Art. Nr.: G04A 4 groups on/off, brightness slider, tunable white slider



Layout Art. Nr.: G05A 4 groups separately dimmable with arrows & tunable white slider



Layout Art. Nr.: G06A brightness Slider & RGB slider



Layout Art. Nr.: G07A 4 groups on/off, brightness slider, RGB slider

Additional Information and Equipment

Touchpanel Layout configuration files for the DALI cockpit

https://www.lunatone.com/wp-content/uploads/2021/03/TouchpanelLayout_KonfigFiles.zip

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/>

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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.