Lunatone

# DALI-2 Touchpanel

## Cockpit Configuration Files

Multifunctional DALI-2 control module with flexible button layout

## Custom Touchpanel Layout

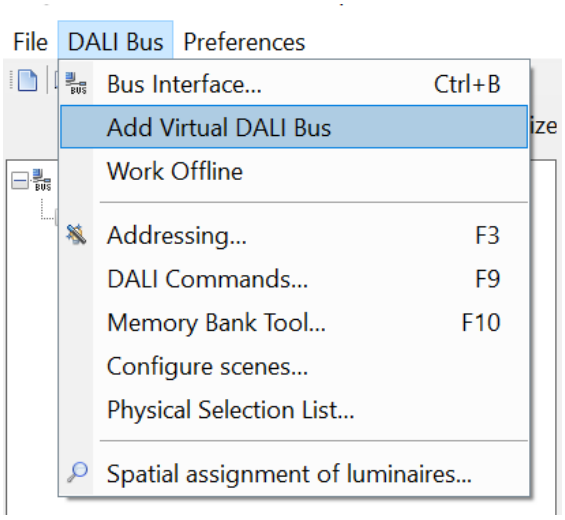
All standard Layout Cockpit configuration files can be downloaded: https://www.lunatone.com/wp-content/uploads/2021/03/TouchpanelLayout_KonfigFiles.zip

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

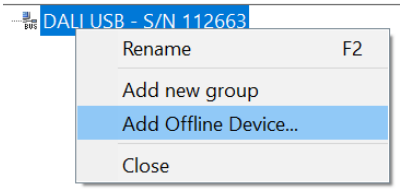
## Cockpit Configuration File

To create a cockpit configuration File start the DALI Cockpit.

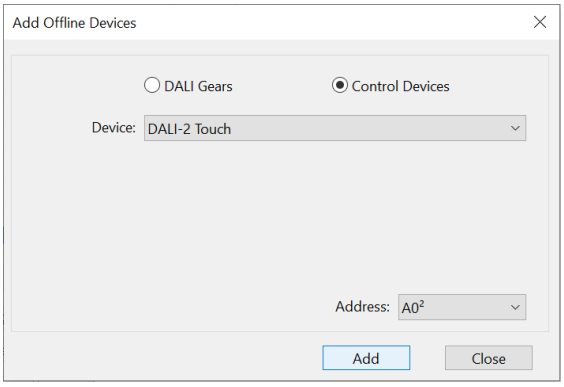
If no DALI Interface and Touchpanel device is yet available (USB, SCI, DALI4Net etc.) add a Virtual DALI Bus:




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 loaded or saved by right-clicking on the device and selecting “Import device settings” or “ Export device settings…” respectively. See Figure 1.

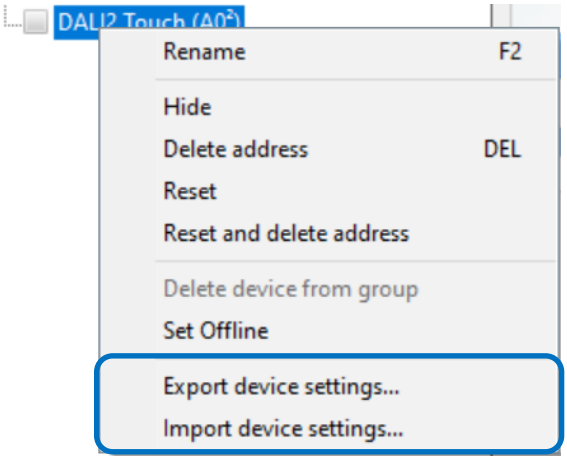
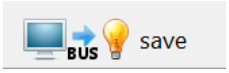



*Figure 1. import or export device settings*

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 but also in offline configuration mode.
For easier configuration, start by loading a configuration file from the Lunatone Downloads with a similar button layout.

All available configurations in the DALI Cockpit are described below - all settings can be changed at any time.

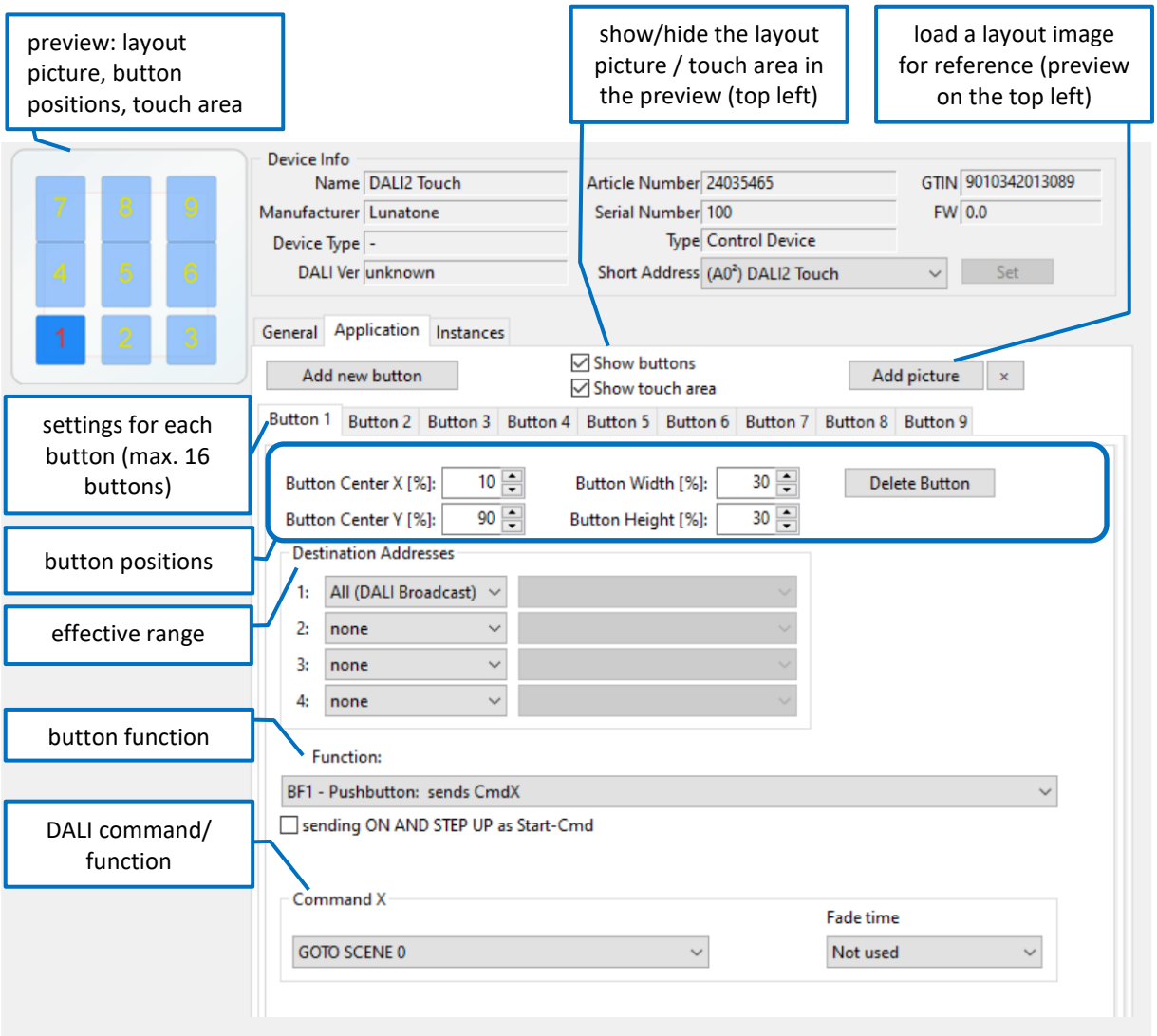
## Exporting the Configuration File

After saving the configuration it is possible to export the file by right clicking on the device in the treeview and selecting "Export device settings…”. Shown also in Figure 1.

This way it is possible to share the .configuration throughout different devices or upload it to the Lunatone touchpanel configurator.

https://configurator.lunatone.com/touchpanel

## Cockpit Application Overview



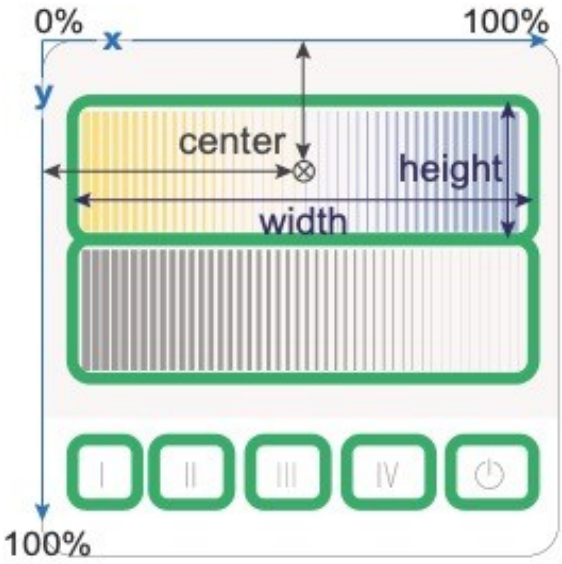

*Application: Application Controller*

**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)

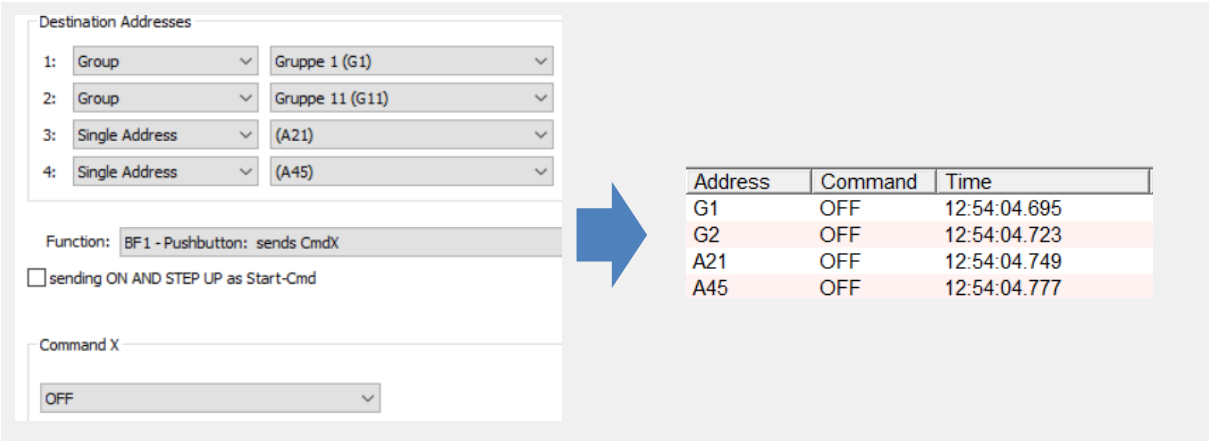


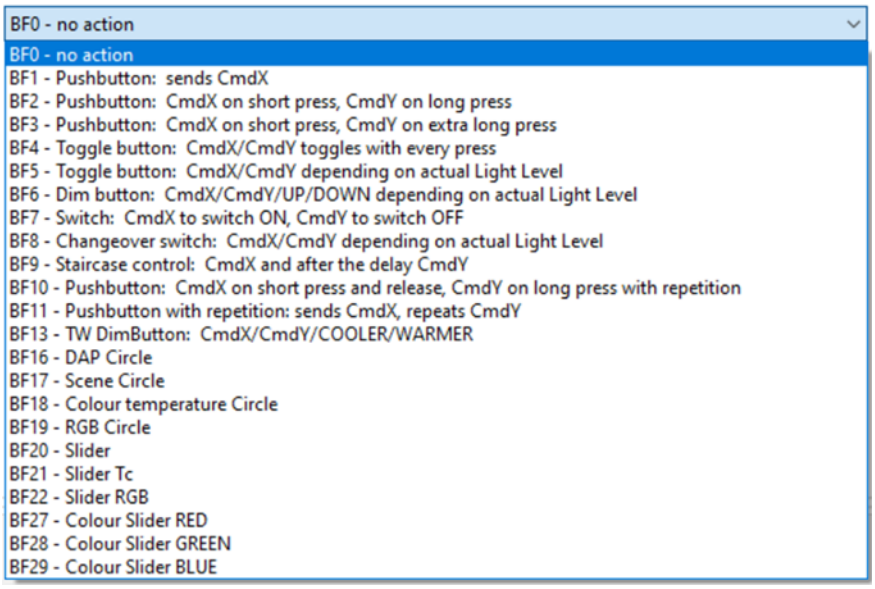

*Fig.10* Example: Addressing Inputs 1-4 – sequentially processed

**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**):

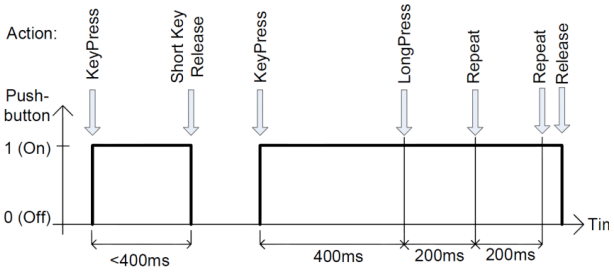


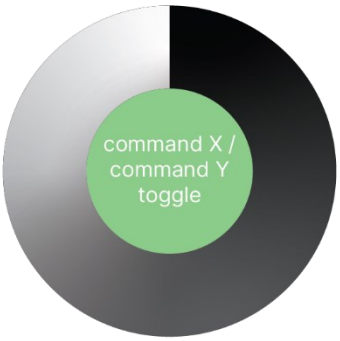

*Fig.12 Key Events*

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.

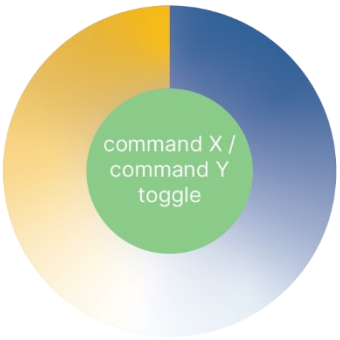
| **button function number** | **event: press** | **event: short press** | **event: long press** | **event: extra-long press** | **event: repeat** | **function** | **typical application** |
|---|---|---|---|---|---|---|---|
| 0 | - | - | - | - | - | - | - |
| 1 | CmdX | - | - | - | - | sends CmdX on key press | master off |
| 2 | CmdX | - | CmdY | - | - | sends CmdX on key press<br>sends CmdY on long key press | switch to 2 different levels |
| 3 | - | CmdX | - | CmdY | - | sends CmdX on key press<br>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)**<br>sends ON and STEPUP, if bus state is OFF before UP<br>sends alternating UP or DOWN on repeat | push and dim |
| 7 | CmdX **(CmdY on release)** | - | - | - | - | sends CmdX on key press<br>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)**<br>sends CmdY or CmdX on key release **(depending on bus status)** | changeover switch |
| 9 | CmdX **(CmdY on delay)** | - | - | - | - | sends CmdX on key press<br>sends CmdY after a programmable delay | staircase control |
| 10 | - | CmdX | CmdY | - | CmdY | sends CmdX on short key press<br>sends CmdY on long key press<br>sends CmdY on repeat | push and dim |
| 11 | CmdX | - | - | - | CmdY | sends CmdX on key press<br>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)**<br>sends alternating WARMER or COOLER on repeat | tunable white dim |

*BF 16 – DAP Circle*

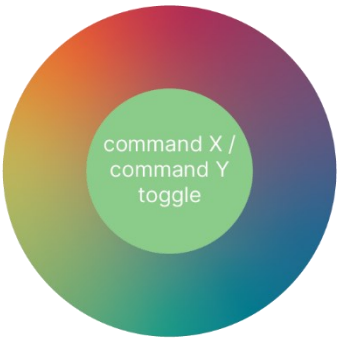



*BF17 Scene Circle*

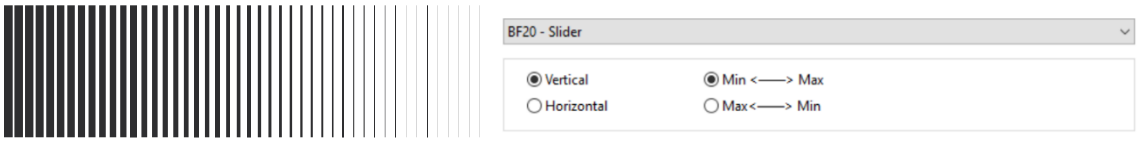

*BF18 Colour temperature Circle*



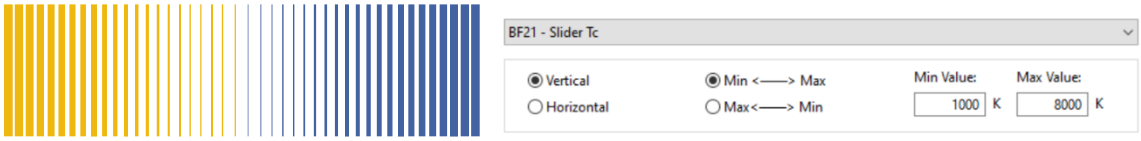

*BF19 RGB Circle*




BF20 Slider



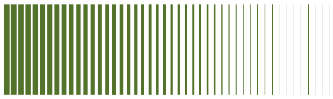

BF21 Slider Tc



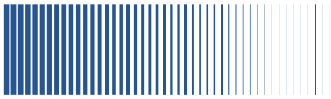

BF22 Slider RGB


BF27 Colour Slider RED

BF28 Colour Slider GREEN



BF29 Colour Slider BLUE



**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

## 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/

## 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.