

DALI-2 Audio Interface



Datasheet DALI Audio Interface

DALI gear for playback of
internet radio stations
or audio files
via the DALI bus

Art. Nr.: 89943721

DALI-2 Audio Interface control gear

Overview

- DALI device for playback of internet radio stations or audio files
- Simple linking of speakers / intercom systems (speakers) via speaker cable connection
- Speed dial up to 16 radio stations via scenes
- Control of radio stations and volume via DALI
- Preinstalled ringtones for doorbells or alarm signals
- WLAN interface for integration into the local network, connection and playback of web radio stations
- Simple configuration using the Lunatone software DALI Cockpit
- Suitable for remote ceiling installation or integration in luminaires

Specification, Characteristics

type	DALI-2 Audio Interface
article number	89943721
GTIN	9010342013966
input: L, N	
input type	supply, mains- voltage
marking terminals	L, N
input voltage range	110Vac ... 240Vac
max. input supply current	31mA (@110Vac), 21mA (@240Vac)
input supply frequency	50Hz / 60Hz
power consumption	max. 4W
start-up time	< 1s
output: DA+, DA-	
output type	DALI
marking terminals	DA, DA
open circuit proof	yes
short circuit proof	yes
insulation data:	
impulse voltage category	II
pollution degree	2
rated insulation voltage	250V
insulation DALI (DA+, DA-) / supply (L, N)	reinforced isolation
insulation test voltage DALI-output/mains	3000Vac
environmental conditions:	
storing and transportation temperature	-20°C ... +75°C
operational ambient temperature	-20°C ... +60°C
rel. humidity, none condensing	15% ... 90%

general data:

dimensions (l x w x h)	159mm x 42mm x 22mm
mounting	remote ceiling, integration in class II devices
rated max. temperature tc	70°C
expected lifetime @tc	50.000 h
protection class	II in intended use
protection degree housing	IP40
protection degree terminals	IP20

terminals:

connection type	spring terminal connector
wire size solid core	0,5 ... 1,5 mm ² (AWG20 ... AWG16)
wire size fine wired	0,5 ... 1,5 mm ² (AWG20 ... AWG16)
wire size using wire end ferrule	0,25 ... 1 mm ²
stripping length	8,5 ... 9,5mm / 0,33 ... 0,37inch
release of wire	push button

standards:

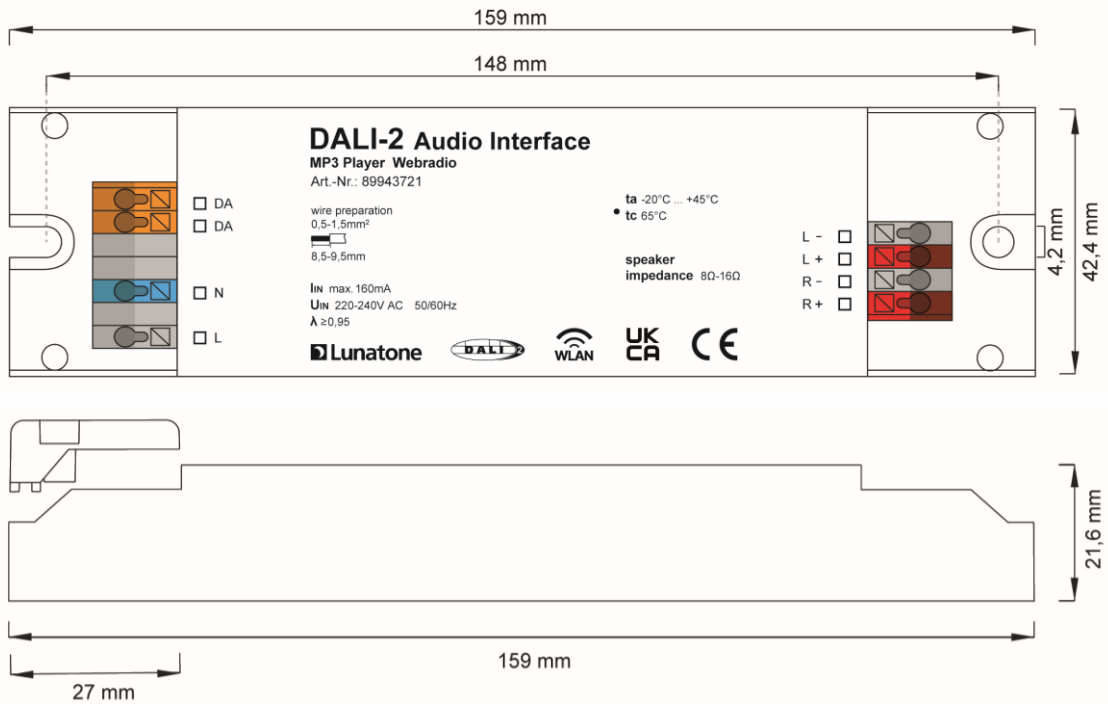
DALI	EN 62386-101
EMV	EN 61547 EN 50015 / IEC CISPR15
Safety	EN 61347-2-11 EN 61347-1
markings	DALI-2, CE, UKCA

Factory Default Settings

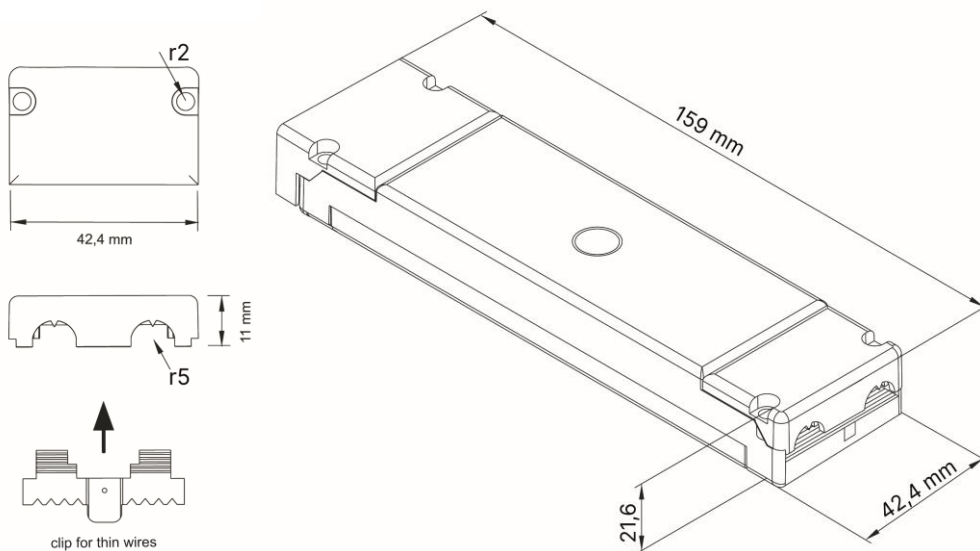
	Factory Default Settings	DALI Standard																																																			
Min Level	0.1%	0.1%																																																			
Max Level	100%	100%																																																			
PowerOn Level	MASK (letzter Wert)	100%																																																			
System Failure Level	0%	100%																																																			
Fade Time	1s	none																																																			
Fade Rate	89.4 steps/s	44.7 steps/s																																																			
groups	none	None																																																			
Scene presets:	<table border="1"> <thead> <tr> <th>Scene</th> <th>Mode</th> <th>Volume</th> </tr> </thead> <tbody> <tr><td>0</td><td>Radio OE3</td><td>MASK</td></tr> <tr><td>1</td><td>Radio OE1</td><td>MASK</td></tr> <tr><td>2</td><td>Radio FM4</td><td>MASK</td></tr> <tr><td>3</td><td>Radio 88.6</td><td>MASK</td></tr> <tr><td>4</td><td>Radio Paradise</td><td>MASK</td></tr> <tr><td>5</td><td>Mp3 Doorbell 1</td><td>100%</td></tr> <tr><td>6</td><td>Mp3 Doorbell 2</td><td>100%</td></tr> <tr><td>7</td><td>Mp3 Doorbell 1 and OFF</td><td>100%</td></tr> <tr><td>8</td><td>MASK</td><td>MASK</td></tr> <tr><td>9</td><td>MASK</td><td>MASK</td></tr> <tr><td>10</td><td>MASK</td><td>MASK</td></tr> <tr><td>11</td><td>MASK</td><td>MASK</td></tr> <tr><td>12</td><td>MASK</td><td>MASK</td></tr> <tr><td>13</td><td>MASK</td><td>MASK</td></tr> <tr><td>14</td><td>MASK</td><td>MASK</td></tr> <tr><td>15</td><td>MASK</td><td>MASK</td></tr> </tbody> </table>	Scene	Mode	Volume	0	Radio OE3	MASK	1	Radio OE1	MASK	2	Radio FM4	MASK	3	Radio 88.6	MASK	4	Radio Paradise	MASK	5	Mp3 Doorbell 1	100%	6	Mp3 Doorbell 2	100%	7	Mp3 Doorbell 1 and OFF	100%	8	MASK	MASK	9	MASK	MASK	10	MASK	MASK	11	MASK	MASK	12	MASK	MASK	13	MASK	MASK	14	MASK	MASK	15	MASK	MASK	all scenes: MASK
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Behaviour on DALI RESET command	reset to delivery default settings	n.a. (remains unchanged)																																																			

- | | |
|-----------------------------|------------------------------|
| <input type="checkbox"/> DA | <input type="checkbox"/> L - |
| <input type="checkbox"/> DA | <input type="checkbox"/> L + |
| <input type="checkbox"/> N | <input type="checkbox"/> R - |
| <input type="checkbox"/> L | <input type="checkbox"/> R + |

connection plan DALI-2 Audio Interface



dimensions DALI-2 Audio Interface



Standard strain relief cover for 159x42x22mm

Installation

- The DALI-2 Audio Interface is intended for remote installation in a ceiling or in an enclosure, ensure proper cable relief for installation in protection class II devices.
- An external DALI bus power supply is required.
- 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.
- connect power supply terminals L and N to mains voltage according to the labelling.
- The connection to the DALI terminals can be made regardless of the polarity.
- The DALI line may be routed together with the mains voltage (in one cable or as single wires in a tube).
- The DALI-line must not be connected to the mains or extra low voltage (SELV) systems.
- Only 1 wire may be connected to each terminal. When using double wire end ferrules, the connection capacity of the terminal must be considered.
- The DALI wiring can be realised with standard low-voltage installation material. No special cables are required.
- Wiring topology of the DALI-line: Line, Tree, Star.
- For positioning the device, the structural conditions need to be considered, to not shield or weaken the WLAN signal.



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).

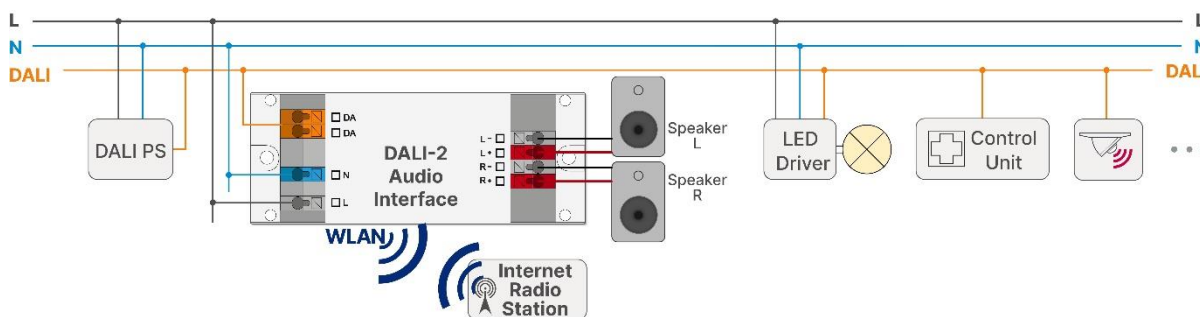


Fig. 1 Installation DALI Audio Interface – typical application

Commissioning and Function

After connection, the DALI-2 Audio Interface is ready for use. The DALI-2 Audio Interface can be controlled in the same way as a DALI dimmer, however instead of the brightness, the volume is controlled.

To use the internet functionality of the DALI-2 Audio Interface, the network connection must be configured via the software tool DALI Cockpit.

To play the existing mp3 audio files "Doorbell", no network connection is needed.

The device can be addressed and necessary changes to the settings can be made via the DALI Cockpit (Windows PC software).

To use the DALI Cockpit software (), the PC must be connected to the DALI bus via a suitable interface module (DALI USB, DALI 4Net, DALI SCI RS232, DALI-2 Display, DALI-2 IoT or DALI-2 WLAN).

The DALI-2 Audio Interface is automatically recognized by the DALI Cockpit during the addressing process and listed in the device overview. All desired changes to the device settings can then be applied on the device page.

After entering the network settings (SSID and password), the device can connect to the various internet radio stations. The desired internet radio stations can be set via the scenes.

For configuration of the device, see section "Application - DALI Cockpit"

DALI Cockpit

The following settings can be made on the tab "Device Parameters":

Default DALI settings

The standard DALI settings correspond to those of a DALI dimmer, but with the DALI radio device they refer to the volume instead of the brightness.

Scene settings: various radio stations or pre-installed mp3 files (doorbells) and the scene volume can be set via the 16 scenes (see also Fig. 2). The following modes are available as scene settings:

- **Web Radio MP3:** allows entering a link to an mp3 radio station. Links to Internet radio stations can be found, for example, at: <https://www.radio-browser.info/> by entering the desired radio station in the search bar.
- **audio file (mp3):** by selection of the option "Web-Radio MP3" and entering a link to a mp3 file located on a file location accessible via the configured network.
- **Web Radio AAC:** allows entering a link to an AAC radio station
- **Doorbell:** play a pre-installed mp3 file, then the default radio station is played.
- **Doorbell and OFF:** play a preinstalled mp3 file, then the radio is switched off.
Info: for the 2 doorbell operating modes the set fade time is not taken into account

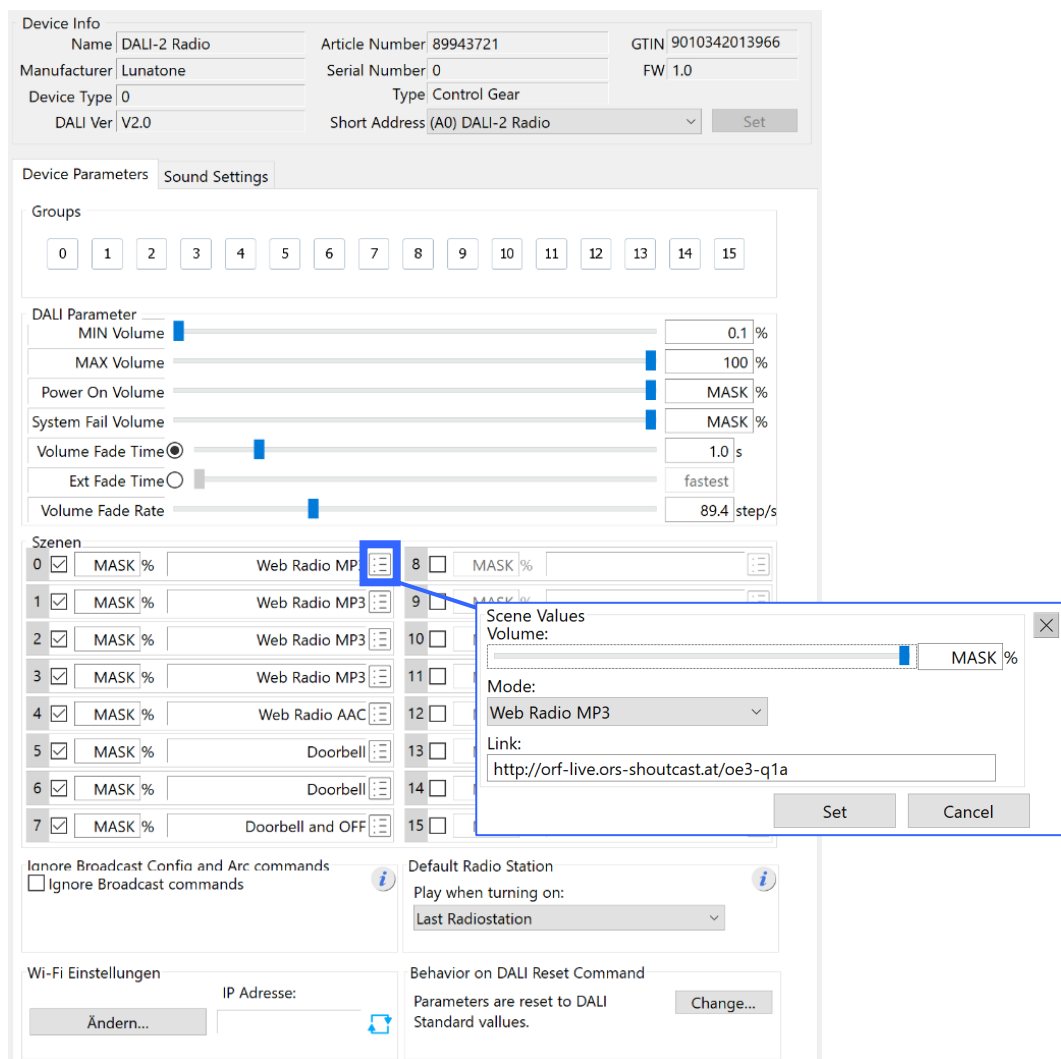


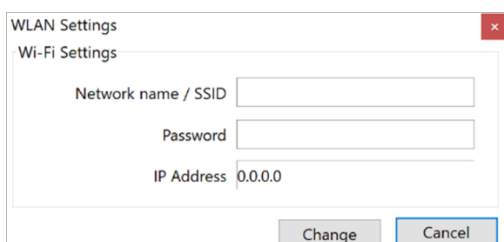
Fig. 2 DALI Cockpit Tan: "Device Parameters"

Ignore Broadcast for Arc Power and Config commands

If this option is selected, the DALI-2 Audio Interface no longer listens to DAP (volume level) and configuration commands that are sent broadcast on the DALI bus.

Wi-Fi Settings

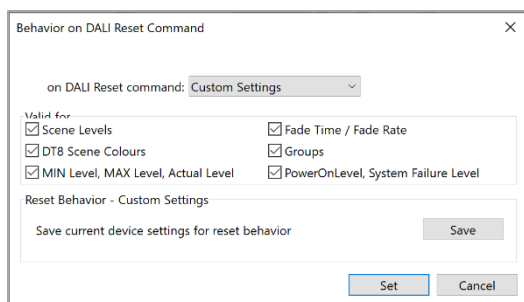
At "Wi-Fi Settings" the network connection can be set and checked



Configurable RESET Behaviour

The behaviour to a DALI reset command can be configured. The following options are available:

- *Ignore command:* the DALI reset command will be ignored and does not trigger any changes to the device settings
- *Custom settings:* For the selected options (scene levels, fade time,...) the values are reset with a DALI reset command. The values to which they will be reset can be defined with the option: "save current device settings for reset behavior" underneath. If not overwritten, the values of the delivery default are stored as reset values

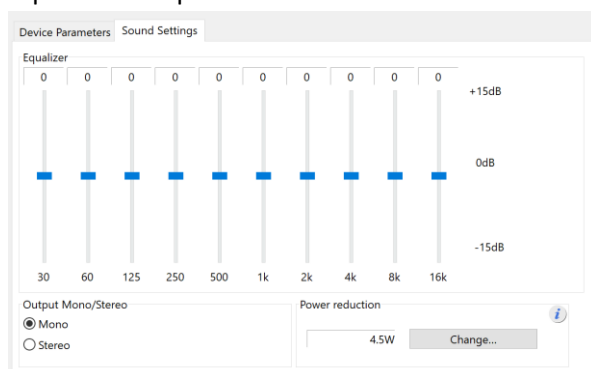


Default Radio Station

The default radio station can be used to set which station is played at power on. The 16 scenes and “the last active scene” are available for selection.

Sound Settings

On the tab "Sound Settings", mono/stereo, equalizer and power reduction can be set.



Power reduction (peak value)

The adjustable range for the peak power value is 5-20W, on delivery set to 5W, weaker or more powerful loudspeakers require an appropriate adjustment.

Purchase Information

Art.Nr. 89943721: DALI-2 Audio Interface, DALI control gear for playing internet radio stations and audio files, remote ceiling installation

Additional Information and Equipment

Lunatone datasheets, manuals and software <http://www.lunatone.com/downloads-a-z/>

Lunatone DALI products <http://www.lunatone.com>

DALI-Cockpit – DALI system configuration tool, free when using a Lunatone interface device <https://www.lunatone.com/en/product/dali-cockpit/>

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