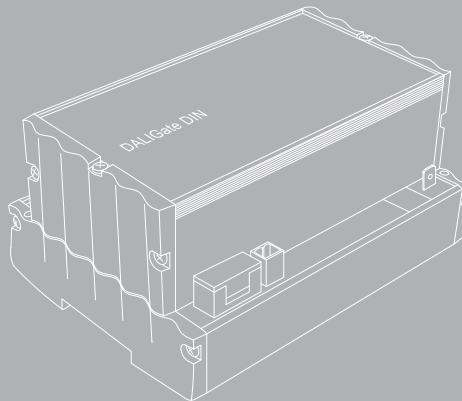


Version 1.11  
March 22, 2018

# User manual

# DALIGate DIN

DGD-1-DE2DALI, DGD-1-DE4DALI



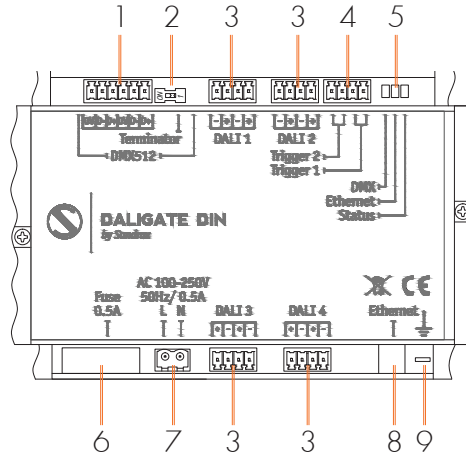
**UNDRAX**  
electronics



# Table of contents

1	Visual appearance
1	Specifications
2	Safe operation
2	General information
3	Installation
3	Web interface
4	• ArtNet settings
5	• DALI control
6	• Network settings
7	Operation
7	Technical maintenance
8	Connection scheme

# Visual appearance



Pic.1 DALIGate DIN device appearance

1	DMX 512 input	4	Trigger inputs	7	Power input
2	DMX512 terminator	5	LED indicators	8	Ethernet port
3	DALI outputs	6	Fuse	9	Ground terminal

# Specifications

Supported protocols:	ArtNet, sACN, DMX512, RDM, DALI
Data refresh rate:	44 Hz
DMX ports:	1 isolated
DMX connectors:	Terminal blocks 15EDGVC
Controllable output lines:	2 or 4 DALI
Ethernet port:	10/100 Base-TX
Power supply:	~90-250 VAC, 50/60 Hz or  15V
Mains Fuse:	0.5 A
Operating Temperature:	-40...+70°C
IP Rating:	IP 20
Dimensions, mm:	142(D) x 105(H) x 75(W)

## Safe operation



### WARNING!

The device uses hazardous voltage AC 230 V

In installation, operation, preventive maintenance and repairs of the device, the requirements of the safety rules must be followed.

To ensure safe and reliable operation of the devices, please observe the following requirements:

- Use the device only for its intended purpose;
- Do not use devices that shows signs of malfunctioning;
- Avoid strong physical impacts on the device;
- Protect devices and cables from contact with moisture or other corrosive liquids;
- Prevent any improper disconnection of the Ethernet cable from the device being disconnected.

Whenever a fault is detected in the device, please contact the manufacturer.

## General information

DALIGate DIN is DIN rail mounted converter that converts ArtNET/sACN/DMX signal into DALI protocol to include DALI lighting fixtures into controllable lighting network.

With DIN rail mounting hassle-free installation and ArtNET/sACN/DMX input, DALIGate DIN is ideal as indoor solution for mixed lighting control purposes in theatres, small venues, architectural installations, industrial, warehouse, and agricultural lighting.

### Key features

- 2 DALI interfaces
- No external power supply for DALI is needed
- Simple web interface
- Selectable ArtNET/sACN or DMX512 control

# Installation

Before mounting and power up, it is necessary to verify protective earthing and cable connections.

1. Ensure the device has no damage due to transportation.
2. Mount device on DIN rail.
3. Connect Ethernet cable.
4. Connect DMX line input (if necessary) and DALI lines outputs.
5. Connect the power cable.
6. After few seconds, port status LEDs will indicate the state. Open device's web-interface on the computer connected to the same network as the DALIGate device.
7. Open the Network Settings tab.
8. STATIC IP ADDRESS field will display the address of the device, SUBNET MASK field will display the network mask. If necessary, fill the IP and Subnet fields for the required network settings (by default, device has IP 2.0.0.100 and Subnet 255.0.0.0). Click "Save settings" so that the new settings take effect.

# Web interface

DALIGate DIN devices support configuring most of their parameters through the Web-interface using HTTP protocol (TCP port 80).

## ArtNet settings

To access the settings page enter the IP address of the device to the browser. ArtNet settings page will be displayed.

### Art-Net/DMX to DALI Converter

Pic.2 ArtNet settings

- Device name – edit device name;
- Device description – editable device description;
- Input data protocol – switching input data source: ArtNet, sACN, DMX512.

Channel 1 and Channel 2 configuration:

Subnet * 16 + Universe	Art-Net subnet number (0-15), Art-Net universe number (0-15); or sACN universe number (1-65279)
Start Address	DMX start address for the channel
Mode	Conversion mode: BROADCAST, GROUP, INDIVIDUAL

- To save the changes in ArtNet settings, click "Save settings".

## DALI control

To edit the settings of one of DALI interfaces, click on the link "DALI1 CONTROL" or "DALI2 CONTROL".

### Art-Net/DMX to DALI Converter

The screenshot shows a web interface for an Art-Net/DMX to DALI Converter. On the left is a blue sidebar with navigation links: ART-NET SETTINGS, DALI1 CONTROL, DALI2 CONTROL, NETWORK SETTINGS, FIRMWARE UPDATING, and ABOUT. The main content area is titled 'CURRENT DALI2 NETWORK' and contains a table with the following data:

SHORT ADDRESS	DEVICE TYPE	GROUP	CHECK
0	0	7	<input type="checkbox"/>
1	0	12	<input type="checkbox"/>

Below the table are four buttons: Search, Refresh, All devices on, and All devices off. At the bottom, there are two dropdown menus for 'ADDR 0' and 'GROUP 0', followed by 'Add to group' and 'Remove from group' buttons.

Pic.3 DALI control settings

- Current DALI Network- shows the devices found on DALI line.

Short Address	Individual address of DALI device (0-63)
Device Type	Code of type, returning by device
Group	Current group number (0-15)
Check	Checkbox for switching device individually on and off

- Search – searching connected devices.
- Refresh – refresh list of detected devices.
- All devices ON – switch on all devices.
- All devices OFF – switch off all devices.

ADDR N, GROUP M, Add to group, Remove from group- adding/removing device N to/from group M.

## Network settings

To edit the network settings of the device, click on the link "Network Settings".

### Art-Net/DMX to DALI Converter

NETWORK SETTINGS	
STATIC IP ADDRESS	<input type="text" value="2.0.0.100"/>
SUBNET MASK	<input type="text" value="255.0.0.0"/>
DEFAULT GATEWAY	<input type="text" value="2.0.0.1"/>
PRIMARY DNS SERVER	<input type="text" value="0.0.0.0"/>
SECONDARY DNS SERVER	<input type="text" value="0.0.0.0"/>

Pic.4 Network settings

- Static IP address – main network address of the device;
- Subnet mask – the mask of the IP subnet;
- Default Gateway – network address of the gateway (if ability to operate via the Internet is required);
- To save the changes in Network settings, click "Save settings".



# Operation

DALIGate devices start their normal operation in a few seconds after they have been powered up. Device always operates based on last saved settings. Viewing DALIGate settings does not affect normal operation until any of the settings have been saved. When changes are saved, the device applies the new settings immediately, without having to power it down.

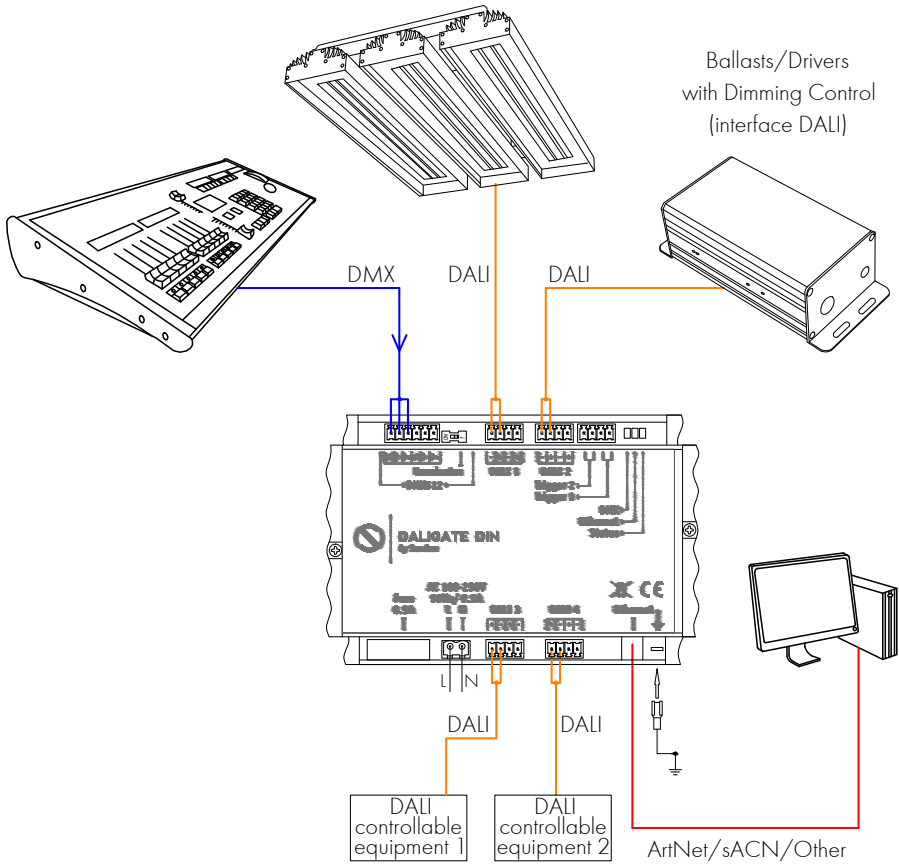
Actual control of DALI devices is performed based on DALI interface conversion mode. If BROADCAST mode selected, value of START ADDRESS in ArtNet/sACN or DMX universe controls all devices on DALI line. If GROUP mode selected, 16 values beginning from START ADDRESS control the groups 0-15. If INDIVIDUAL mode selected, 64 values beginning from START ADDRESS control DALI devices 0-63.

Individual addresses of DALI devices are assigned during search procedure. After all devices found, they may be individually checked by clicking checkbox. Group number may be assigned to DALI device, to enable group conversion mode.

# Technical maintenance

Maintenance the device, search and troubleshooting should be performed by service personnel. The device should be free from dirt, dents, connecting cables and wires must be intact and securely fastened.

# Connection Scheme



Please send all your warranty-related questions to  
[support@sundrax.com](mailto:support@sundrax.com)  
*All Sundrax products are covered by a 36 months warranty.*



Sundrax Electronics,  
6008, First Central 200  
2 Lakeside Drive, Park Royal, London  
NW10 7FQ United Kingdom  
+ 44 (0) 208 991 33 19  
office@sundrax.com  
www.sundrax.com