User Manual

DALIGate DIN

DGD-1-DE2DALI, DGD-1-DE4DALI

Version 1.04
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Contents

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)

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.

Safe operation

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.

Warning!
The device uses hazardous voltage AC 90-250V

Advantages

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

Warning!

Before mounting and turning
on the power,you need to make
sure protective ground cable
connections and places of their
connection

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.

Web interface settings

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.
Main settings page of the DALIGate DIN device will be displayed.

Pic.1
ArtNet settings

Device name	edit device name
Input data protocol	editable device description
Off	switching input data source: ArtNet, sACN, DMX512

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 main settings, click **«Save settings»**.
To restore default values of main settings, click **«Set default»**.
To reset to the current saved values of main settings, click **«Reset»**.

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

	CURRENT DALI2 NETWORK		
SHORT ADDRESS	DEVICE TYPE	GROUP	CHECK
0	0	7	☐
1	0	12	☐

ART-NET SETTINGS

DALI1 CONTROL

DALI2 CONTROL

NETWORK SETTINGS

FIRMWARE UPDATING

ABOUT

Pic.2
DALI control settings

Search   Refresh   All devices on   All devices off

ADDR 0 ▾   GROUP 0 ▾   Add to group   Remove from group

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

ART-NET SETTINGS

DALI1 CONTROL

DALI2 CONTROL

NETWORK SETTINGS

FIRMWARE UPDATING

ABOUT

Pic.3
Network settings

NETWORK SETTINGS

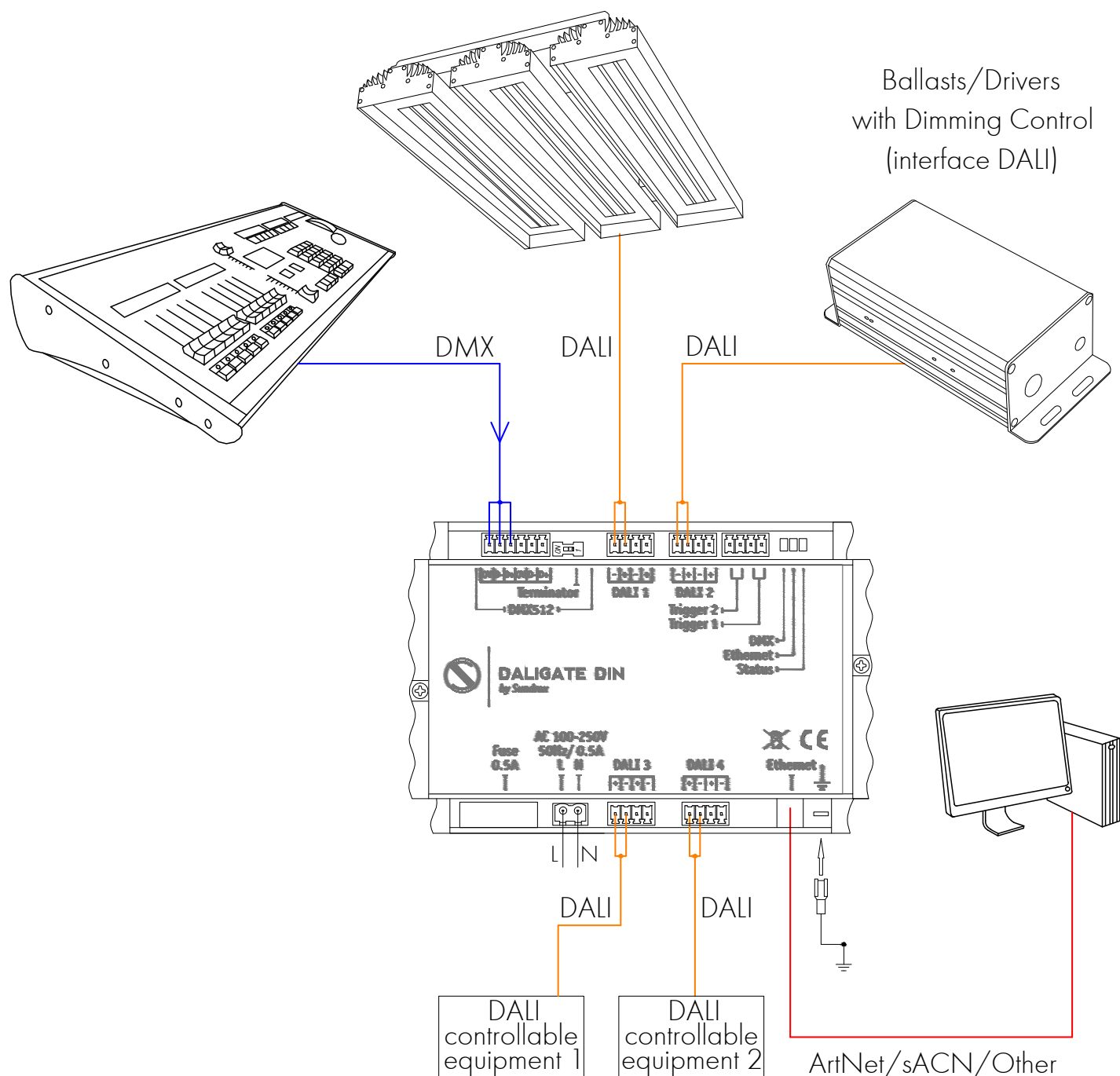|	
STATIC IP ADDRESS	2.0.0.100
SUBNET MASK	255.0.0.0
DEFAULT GATEWAY	2.0.0.1
PRIMARY DNS SERVER	0.0.0.0
SECONDARY DNS SERVER	0.0.0.0

Save settings

MAC address	hardware address and secondary (permanent) IP address of the device
Main IP	set the main network address of the device
Subnetwork mask	set the mask of the IP subnet
Gateway IP address	set the network address of the gateway (if ability to operate via the Internet is required)
Art-Net UDP port	set the UDP port for ArtNet protocol

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».**

Connection scheme

Ballasts/Drivers
with Dimming Control
(interface DALI)

DMX   DALI   DALI

DALI   DALI

DALI
controllable
equipment 1

DALI
controllable
equipment 2

ArtNet/sACN/Other

Technical maintenance

Maintenance, 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.

Notes