Liteputer

User Manual

DP-DL02D

EDX/DMX to DALI Interface

INDEX

1. Introduction

1.1 Features

1. Convert EDX signal to DALI signal

2. Convert DMX-512 to DALI

3. Control up to 64 x 2 DALI ballasts/drivers (DALI universe x 2)

1.2 Specifications

1. Power Input: AC 100 – 240V

2. Protocol:DALI, EDX, DMX-512

3. Dimension:108(W)*90(H)*62(D)mm

4. Weight: 350g

1.3 I/O

1. AC Input

2. DALI Output #1
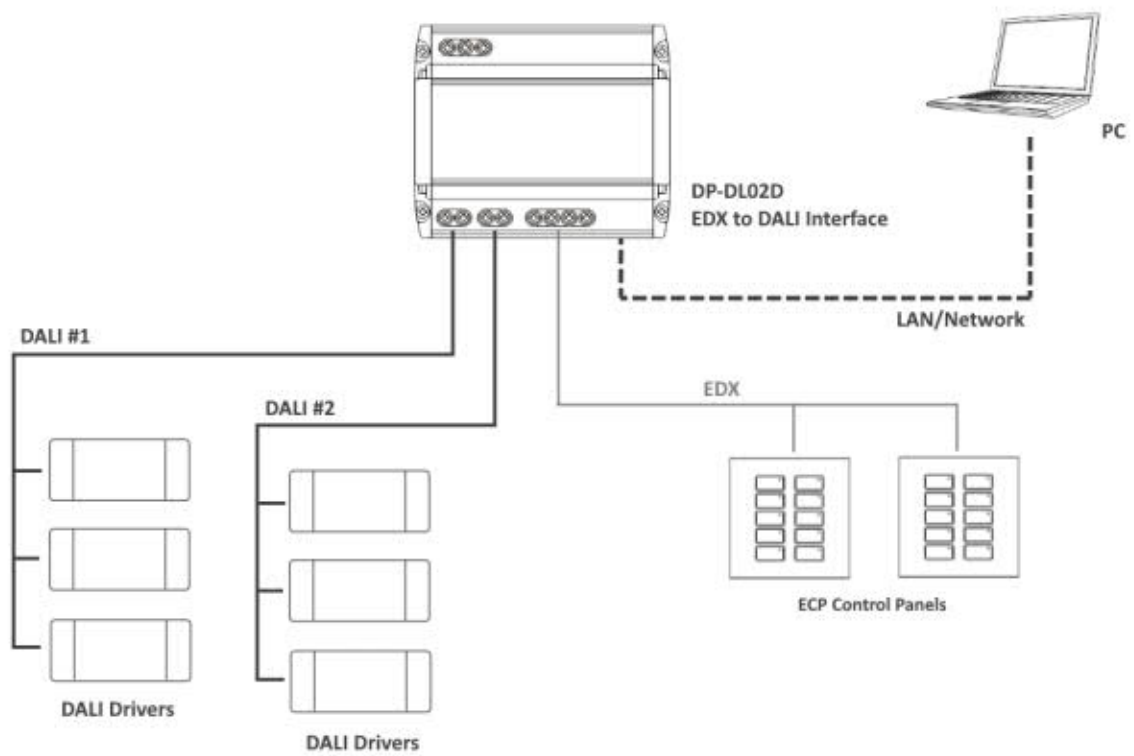
3. DALI Output #2

4. EDX Port

5. LAN

6. DIP Switch
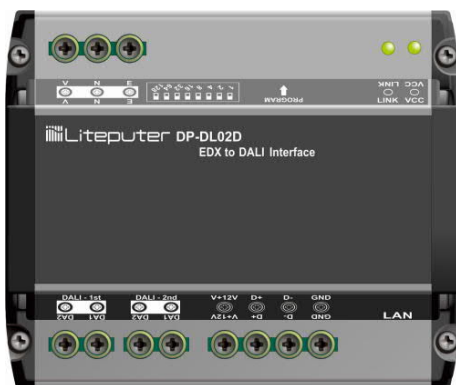
1.4 About EDX/DMX-512 Wiring

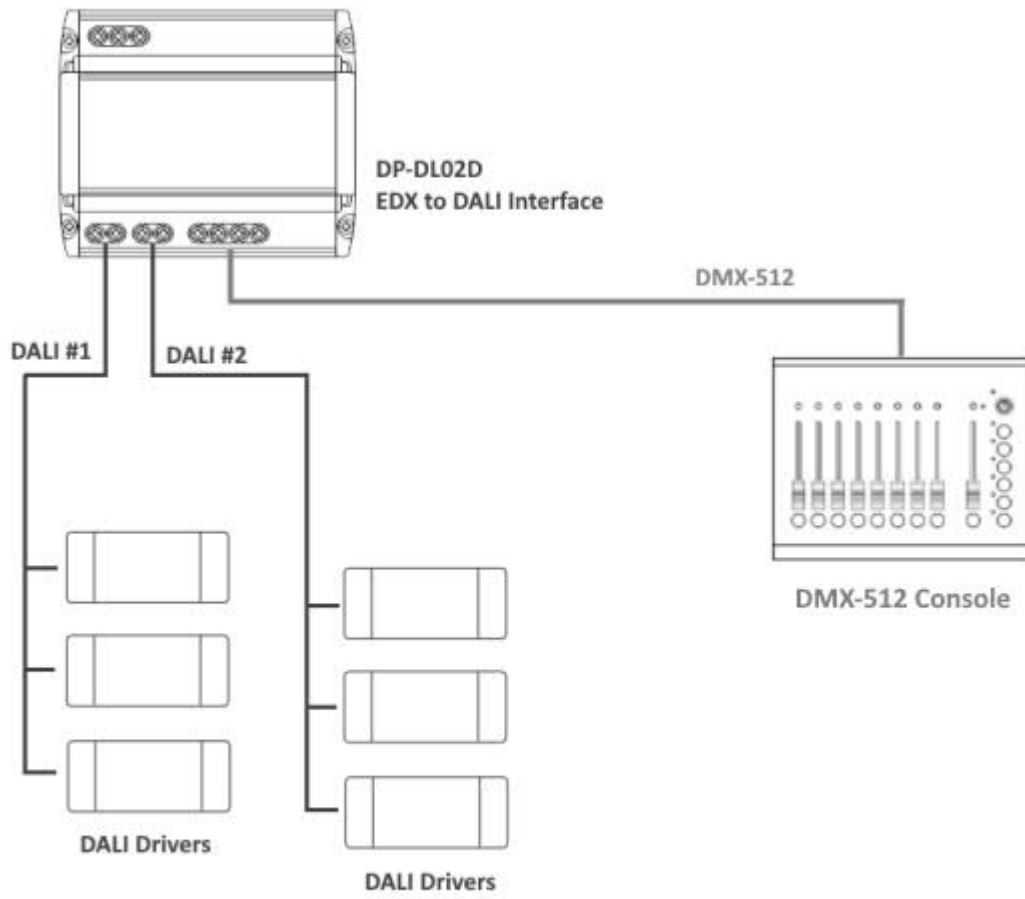The digital signal wiring is basically the same as RS-485 wiring. If you are not familiar with RS-485 wiring,please

check EDX/DMX-512 wiring guide on Lite-Puter's website: http://www.liteputer.com.tw/tech_guide.asp

1.5 System Diagram

1.5.1 EDX to DALI System

1.5.2 DMX-512 to DALI System

DP-DL02D
EDX to DALI Interface

DMX-512

DALI #1   DALI #2

DMX-512 Console

DALI Drivers

DALI Drivers

2 Operation

2-1 DMX-512 to DALI Broadcasting

You can convert a channel level of DMX-512 to DALI broadcasting. To enable broadcasting, please turn DIP-8 to ON.
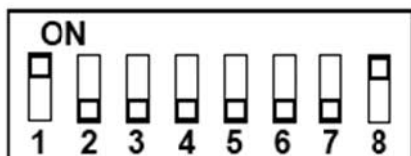

By enabling DMX-512 to DALI broadcasting feature, the DMX channel number which convert to DALI command is determined by DIP 1-7. The number configuration is based on BCD code.

Each switch on DIP switch represents as following figure.
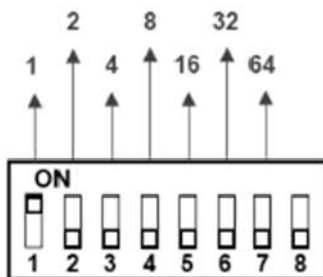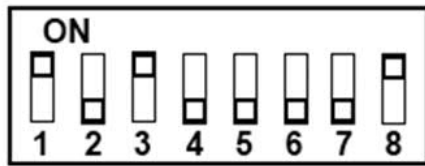

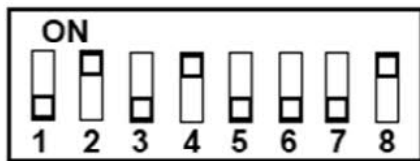For example, if you want to convert the level of DMX channel 1 to DALI broadcasting:

For example, if you want to convert the level of DMX channel 5 to DALI broadcasting:

1+ 4 = 5

For example, if you want to convert the level of DMX channel 10 to DALI broadcasting:

2 + 8 = 10

Please note that DMX-to-DALI patch is invalid if DALI broadcasting feature is enabled.

3 EDX to DALI GUI (EDX-2-DALI)

"EDX-2-DALI" is an application to configure DP-DL02D.

Please download EDX-2-DALI app on Liteputer's website:

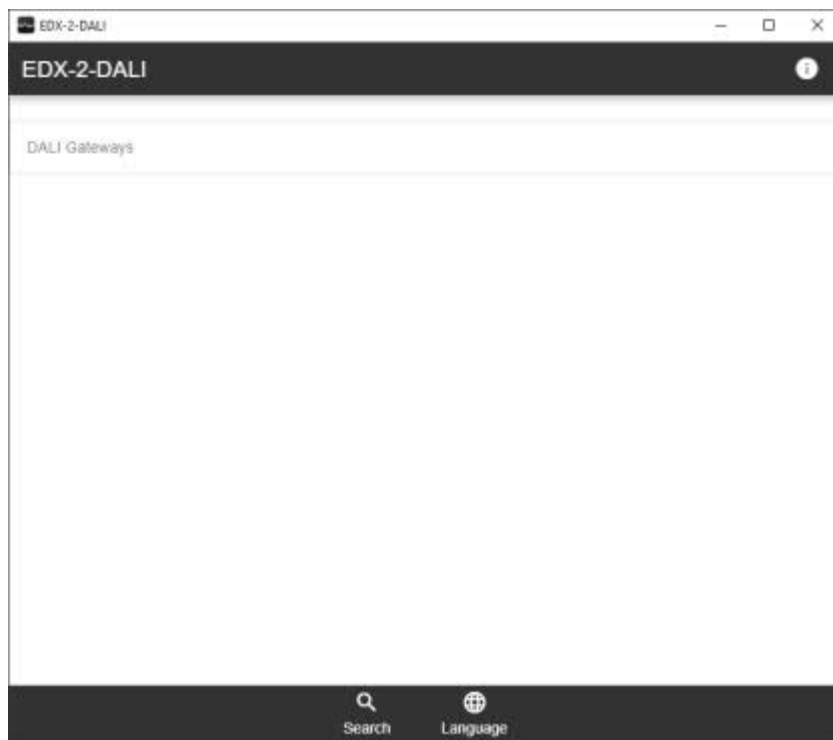*https://www.liteputer.com.tw/download-app-en/*

3.1 Install EDX-2-DALI

Install "EDX-2-DALI" application in Windows

3.2 Connect to EDX to Ethernet Interface

Run the application

Click "Search" to search the device on the network.
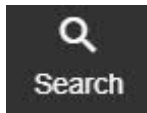
If DP-DL02D is on the network, it will show in the list. Click "Add" to add it.

If the IP address of DP-DL02D is not valid (for example, your local IP are 192.168.0.xxx, but IP address of DP-DL02D is 192.168.3.xxx), you might click "config" button to change the IP. Otherwise, you cannot connect to DP-DL02D even though you are able to see it in the list.

Once DP-DL02D is in the gateway list, click it to connect to DP-DL02D

EDX-2-DALI   ⓘ
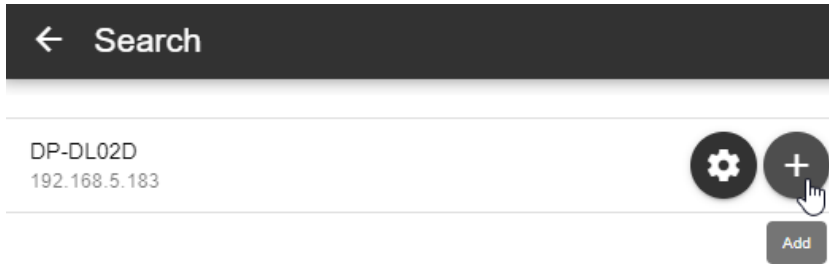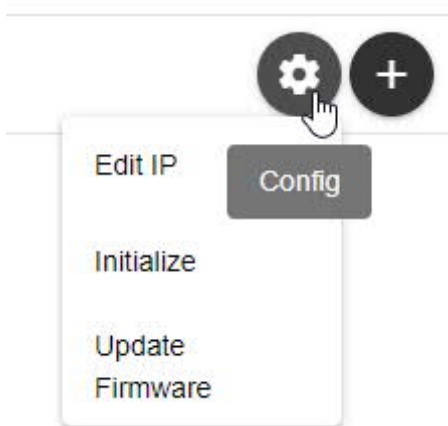
DALI Gateways

DP-DL02D
192.168.5.183 (0x10)   >
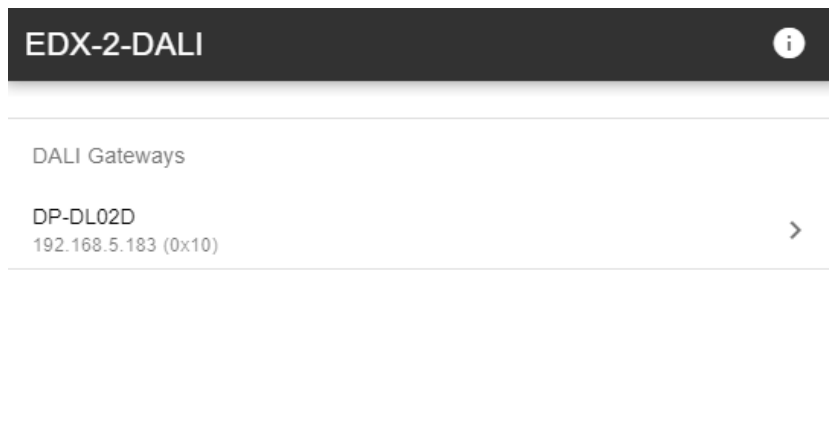
If DP-DL02D is connected, the main menu shows:

← **DP-DL02D**

DALI Address Setting	>
DALI Command	>
DALI Device Setting	>
DALI Scene	>
DALI Scene - Advanced	>
DMX-to-DALI Patch	>
EDX-to-DALI Patch	>
EDX Command	>

![Liteputer logo]
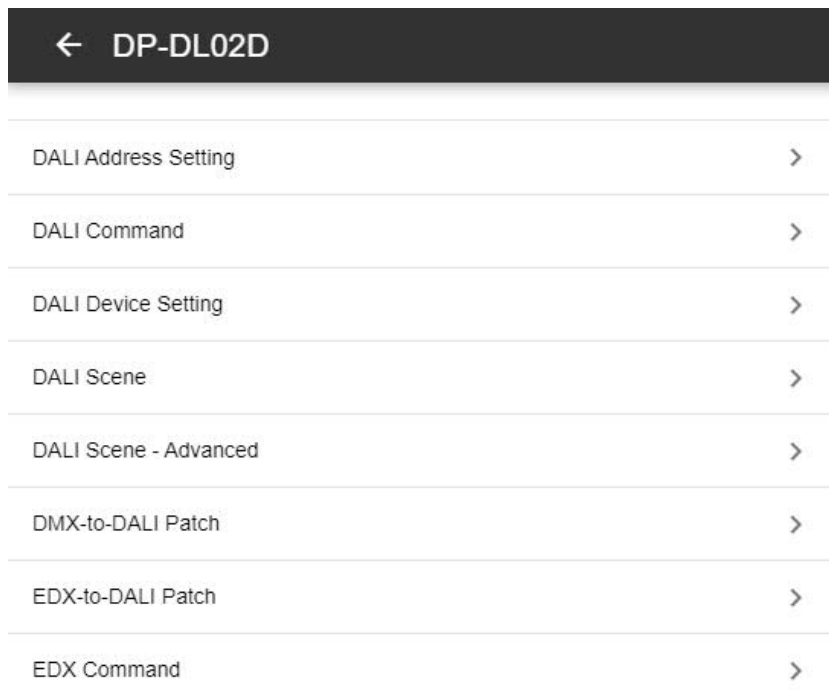
3.3 DALI Address Setting

Click "DALI Address Setting" in the main menu to enter

In DALI Address Setting, you're able to search all DALI devices on DALI bus

---

Search Mode

New Installation: All short address of DALI devices will be cleared.

Expansion: If the DALI device already have a short address before, the short address will keep the same.

If some DALI devices are previously addressed and some DALI devices are not addressed yet, please select "Expansion" and then click "Search".

The newly installed devices will be addressed and the previous devices addresses will keep the same.

Select the DALI port and the search mode, and then click "START" to start searching.

The searching process will take longer time if there are more DALI devices on the DALI bus.

Once searching process is done, you are able to see all DALI devices in the list below:

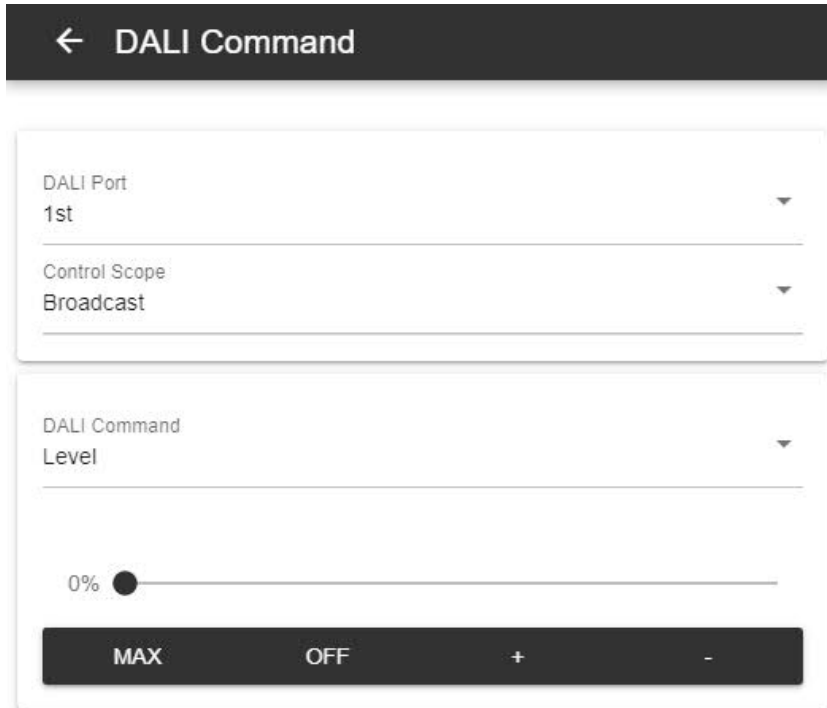| DALI Port	Physical Address	Short Address	Device Type	ON/OFF	Test	Config
1st	4F - 59 - 9E	0	6	OFF ON	TEST	CONFIG
1st	62 - F3 - B3	1	6	OFF ON	TEST	CONFIG

You can click "ON/OFF" to turn ON/OFF the DALI device.

Or click "TEST" to keep turning on/off of a DALI device.

Click "CONFIG" to change the short address of the DALI device.

3.4 DALI Command

Click "DALI Command" in the main menu to enter

You're able to send DALI dimming commands directly to the DALI bus

3.5 DALI Device Setting

Click "DALI Device Setting" in the main menu to enter

It is possible to configure the parameters of a DALI device here.

Click "READ" to read the parameters.

Click "Save" icon to save to the corresponding parameter.

Max Level: the maximum output level

Min Level: the minimum output level

Power-On Level: the output level when power is supplied

System Failure Level: the output level when system fails

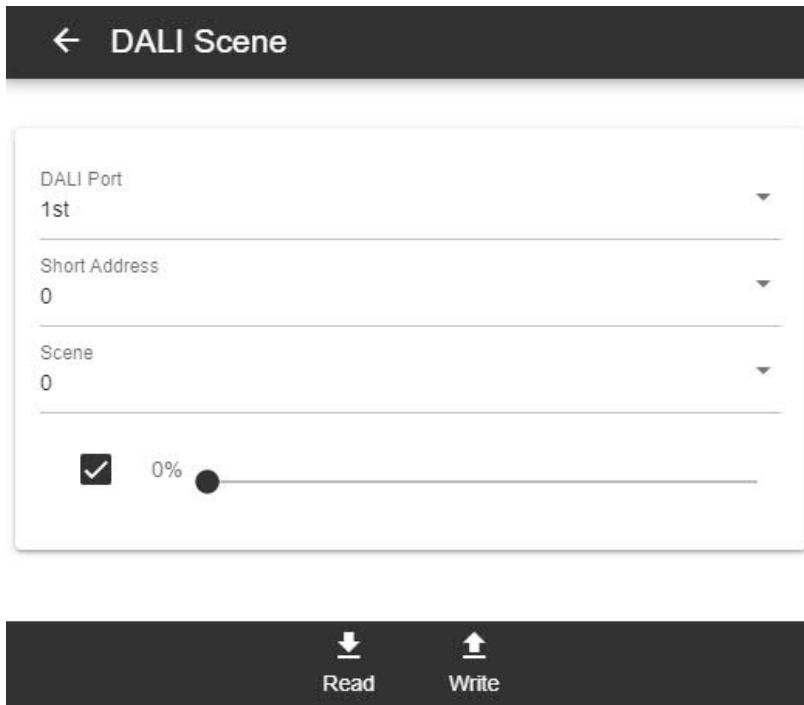Fade Time: the time to change from current output level to requested output level.

Please refer the table below for real fade time.

n	Fade Time
1	0,707 s
2	1.000 s
3	1,414 s
4	2.000 s
5	2,828 s
6	4.000 s
7	5,657 s
8	8.000 s
9	11,314 s
10	16.000 s
11	22,627 s
12	32.000 s
13	45,255 s
14	64.000 s
15	90.510 s

3.6 DALI Scene

Click "DALI Scene" in the main menu to enter

In this page, you're able to configure the scenes of single DALI device.

3.7 DALI Scene Advanced

Click "DALI Scene Advanced" in the main menu to enter

In this page, you're able to configure the scene of multiple DALI devices at once.

Please note that you must search DALI device (please check 3.3) at first. Otherwise, you're unable to see any dimming sliders in this page by checking "Only Display Short Addresses Found".
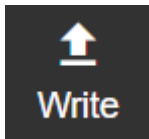

By unchecking "Only Display Short Address Found", you can configure DALI scenes for DALI short 0-63 without searching at first. But it will take longer time to save scene to non-existing DALI devices.

Example: storing 100%, 75%, 50%, 25% to DALI short address 0-3 correspondingly:
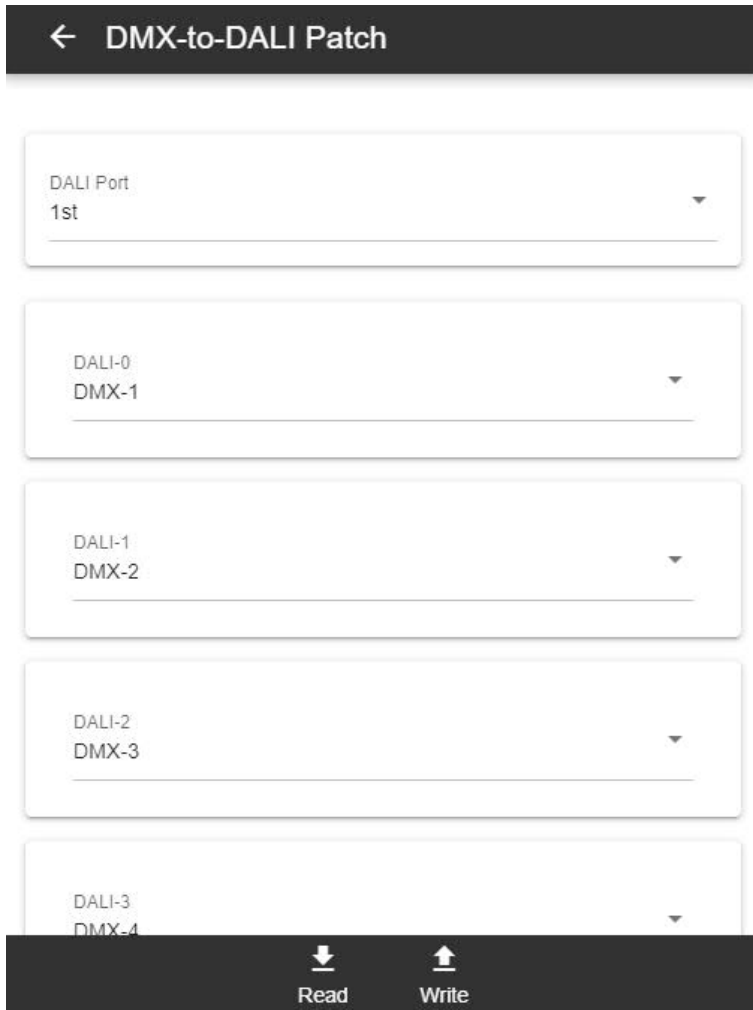
1. Set the slider of DALI 0-3 to 100%, 75%, 50%, 15%:

2. Click "Write" to save the scenes:

3.8 DMX-to-DALI Patch

Click "DMX-to-DALI Patch" in the main menu to enter

It is able to determine the mapping between DMX-512 and DALI short address.

Please note that DMX-to-DALI patch is invalid if DALI broadcasting feature is enabled.

By default, DMX-512 address 01 is mapping to DALI short address 0, DMX-512 address 02 is mapping to DALI

short address 1, and so on.

You can change the mapping in this page.

Example: Make DALI short address 0,1,2 controlled by DMX-512 address1

DALI-0	DALI-1
DMX-1 ▾	DMX-1 ▾

DALI-2	DALI-3
DMX-1 ▾	DMX-4 ▾

DALI-4	DALI-5
DMX-5 ▾	DMX-6 ▾

| DALI-6 | DALI-7 |

⬇ Read   ⬆ Write

Click "Write" to save the setting

3.9 EDX-to-DALI Patch

Click "EDX-to-DALI Patch" in the main menu to enter

It is able to determine the mapping between EDX zone/channels and DALI short address.

Example: Make DALI short address 0 patched to EDX zone 2/ channel 3

EDX's zone2/ channel3 command will control DALI device with short address 0

EDX's zone2 scene command will trigger the corresponding scene in DALI devices whose short address is 0.

Limited Warranty

1. Lite-Puter is only responsible for the product itself.

2. Lite-Puter warrants to repair any manufacturing defects within one year of distribution date.

3. Lite-Puter does not offer on-site service. Should a defect appear in Lite-Puter's product, please deliver the product to local distributors or Taiwan Headquarters.

4. This Limited Warranty does not cover:

a. Any fault caused by false usage or imprudence (collision, inadequate installation or adjustment, insufficient ventilation, or improper repairs)

b. Force majeure factors (flooding, earthquake, volcanic eruption, or other factors beyond Lite-Puter's control).

c. Labor costs incurred in diagnosis of defects; installation, reinstallation, wiring, rewiring, repairing, adjustment, or reprogramming of a product; or any other consequential expenses.

d. Other Lite-Puter or non-Lite-Puter products or devices offered, packaged, or sold with the product.

5. Lite-Puter does not warrant that the product will operate without interruption or free of error.

Lite-Puter Enterprise Co., Ltd.

Address: 9F, No. 196, Sec. 3, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

Tel: +886-2-86472828

Fax: +886-2-86472626

Website: www.liteputer.com.tw

E-mail: sales@liteputer.com.tw

Lite-Puter Technology（Shanghai）Co.,Ltd.

Address: No. 465, Xingmei Rd., Minhang Dist., Shanghai 200237, China

Tel: +86-21-54408210

Fax: +86-21-54403376

Website: www.liteputer.com.tw

E-mail: sales_china@liteputer.com.tw