Manuals+ — User Manuals Simplified.

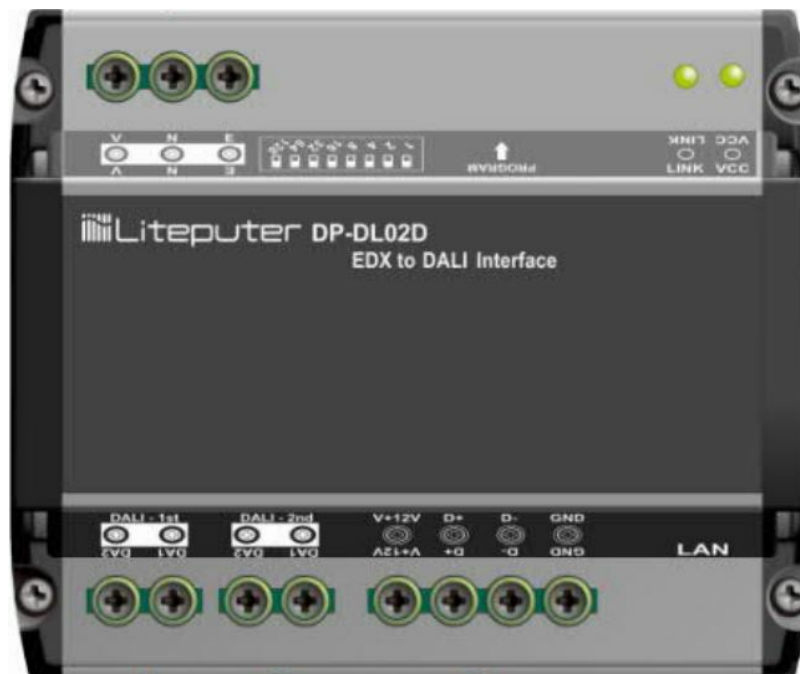# Liteputer DP-DL02D EDX and DMX to DALI Interface User Manual

Contents

Liteputer DP-DL02D EDX and DMX to DALI Interface

Product Information

Product Name	DP-DL02D EDX/DMX to DALI Interface
Features	• Convert EDX signal to DALI signal • Convert DMX-512 to DALI • Control up to 64 x 2 DALI ballasts/drivers (DALI universe x 2)
Specifications	• AC Input • DALI Output #1 • DALI Output #2 • EDX Port • LAN • DIP Switch
About EDX/DMX-512 Wiring	The digital signal wiring is basically the same as RS-485 wiring. For more information, please check the EDX/DMX-512 wiring guide on Lite-Puter's website: **http://www.liteputer.com.tw/tech_guide.asp**

Product Usage Instructions

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 the DMX-512 to DALI broadcasting feature, the DMX DIP determines the channel number that converts to DALI commands 1-7.
- The number configuration is based on the BCD code. Each switch on the DIP switch represents the following figure:

DIP Switch Position	DMX Channel Number
1	1
2	2
3	4
4	8

- For example, if you want to convert the level of DMX channel 1 to DALI broadcasting, set DIP switches 1 and 8 to ON.
- Please note that the DMX-to-DALI patch is invalid if the DALI broadcasting feature is enabled.

EDX to DALI GUI (EDX-2-DALI)

- EDX-2-DALI is an application to configure DP-DL02D. Please download the EDX-2-DALI app on Liteputer's website: **https://www.liteputer.com.tw/download-app-en/**
- **Install EDX-2-DALI**
- Install the EDX-2-DALI application in Windows.

Connect to EDX to Ethernet Interface

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

Introduction

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)

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

I/O

1. AC Input
2. DALI Output #1
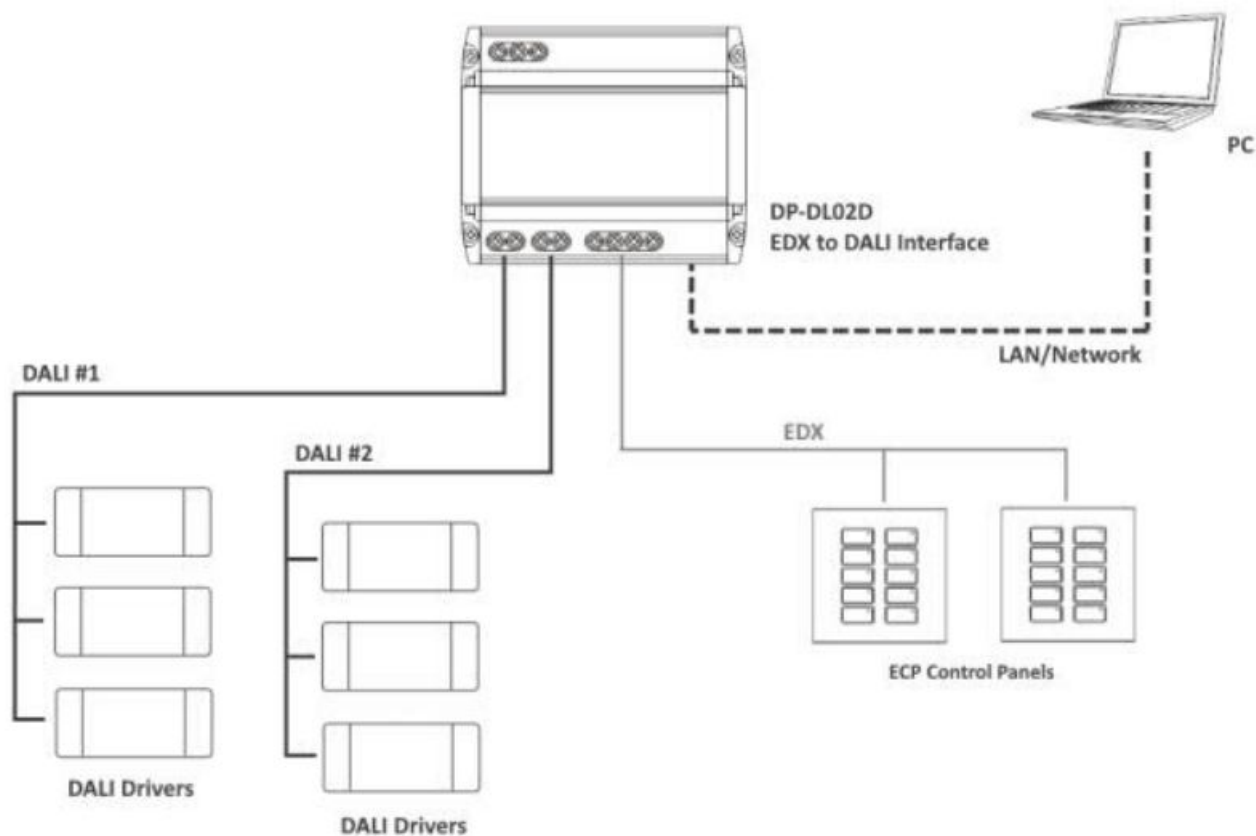3. DALI Output #2
4. EDX Port
5. LAN
6. DIP Switch

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 the EDX/DMX-512 wiring guide on Lite-Puter's website:
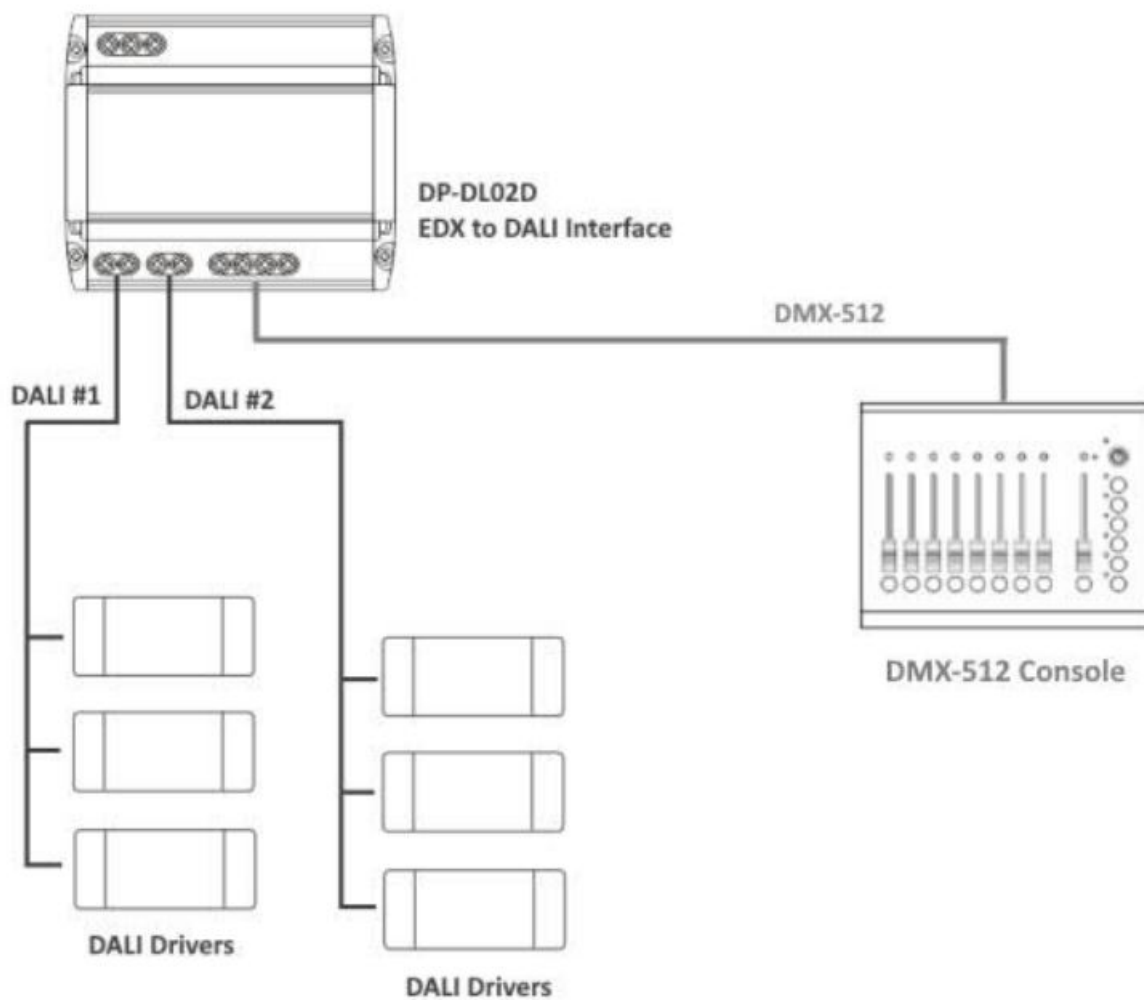 **http://www.liteputer.com.tw/tech_guide.asp**
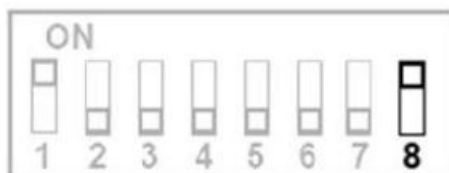
System Diagram
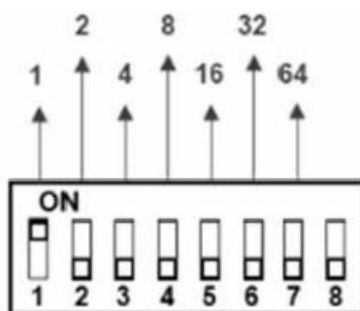
EDX to DALI System

DMX-512 to DALI System
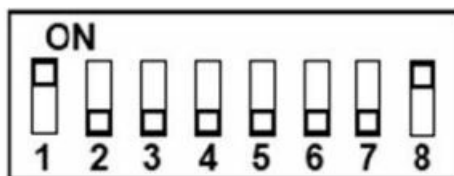

DMX-512 to DALI Broadcasting

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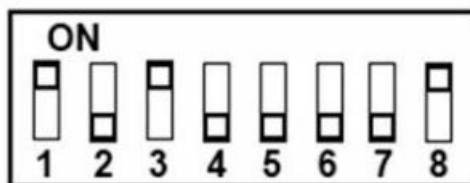

- By enabling DMX-512 to the DALI broadcasting feature, the DMX channel number which converts to the DALI command is determined by DIP 1-7.
- The number configuration is based on the BCD code.
- Each switch on the DIP switch is represented as the following figure.
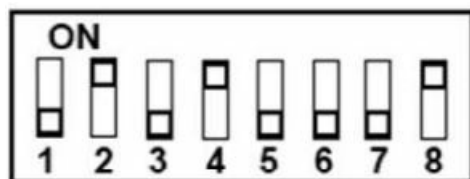

- For example, if you want to convert the level of DMX channel 1 to DALI broadcasting:

- 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 the DMX-to-DALI patch is invalid if the DALI broadcasting feature is enabled.

EDX to DALI GUI (EDX-2-DALI)

- EDX-2-DALI" is an application to configure DP-DL02D.
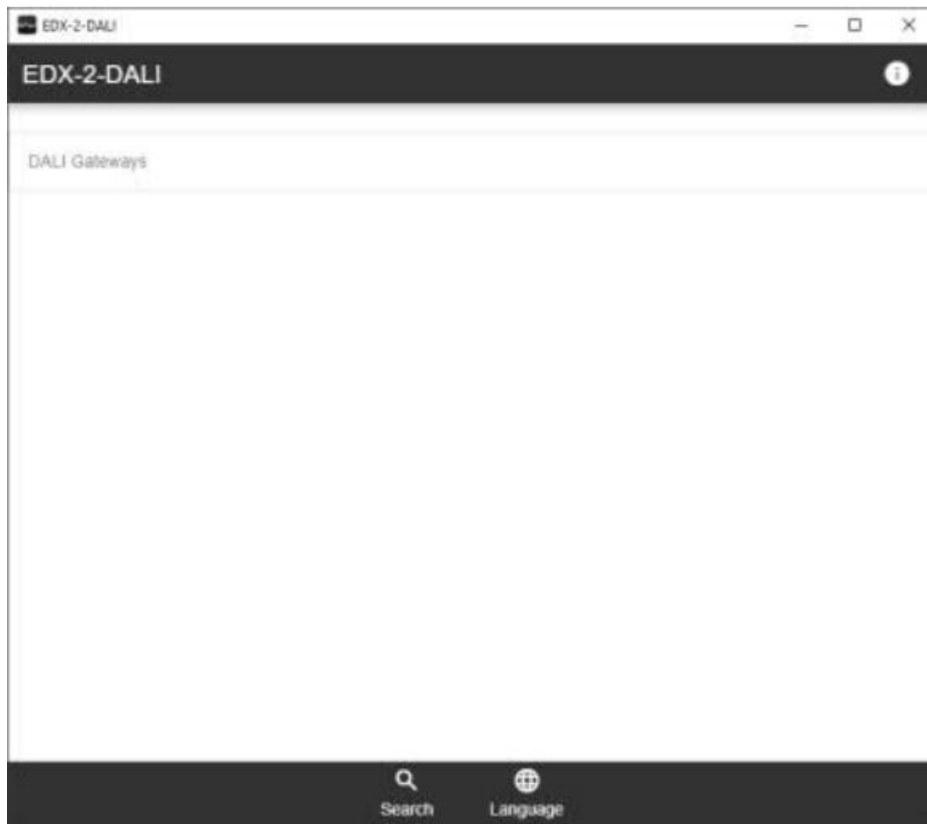- Please download the EDX-2-DALI app on Liteputer's website: **https://www.liteputer.com.tw/download-app-en/**

Install EDX-2-DALI
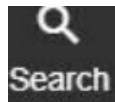
- Install "EDX-2-DALI" application in Windows
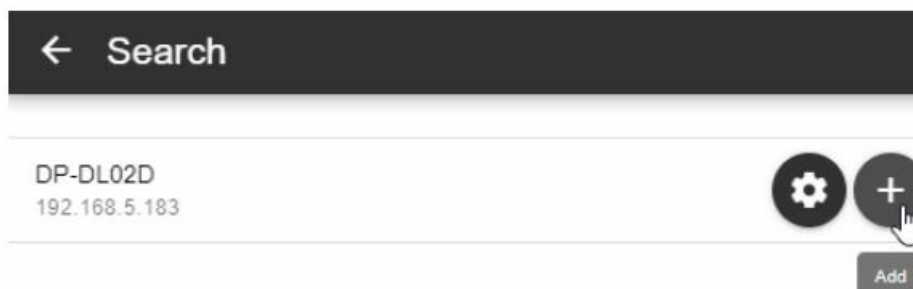
Connect to EDX to Ethernet Interface
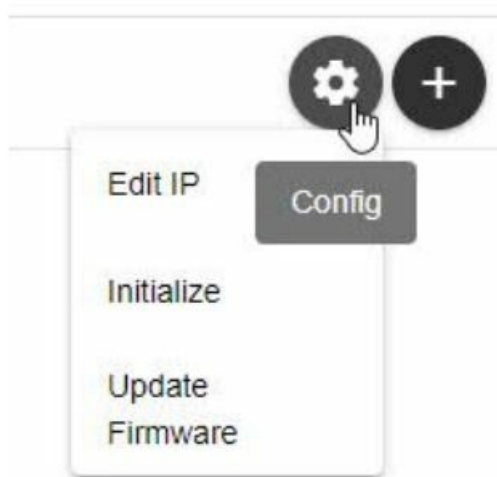
- Run the application

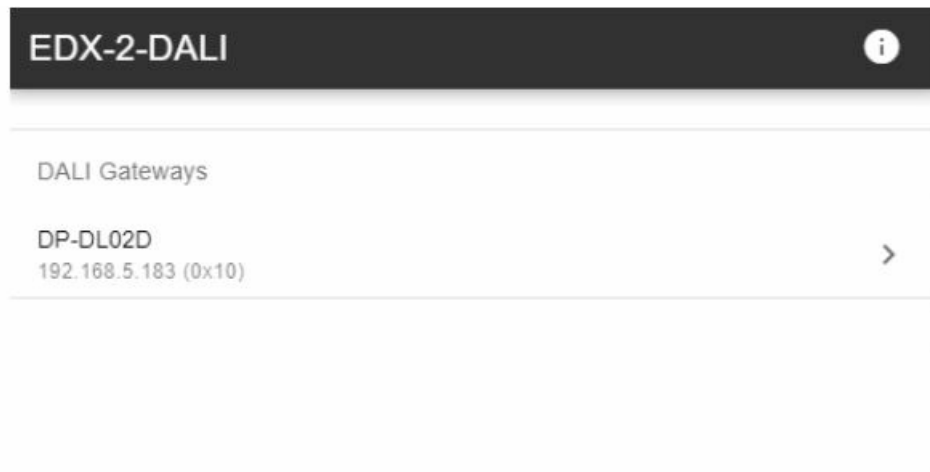- Click "Search" to search the device on the network.

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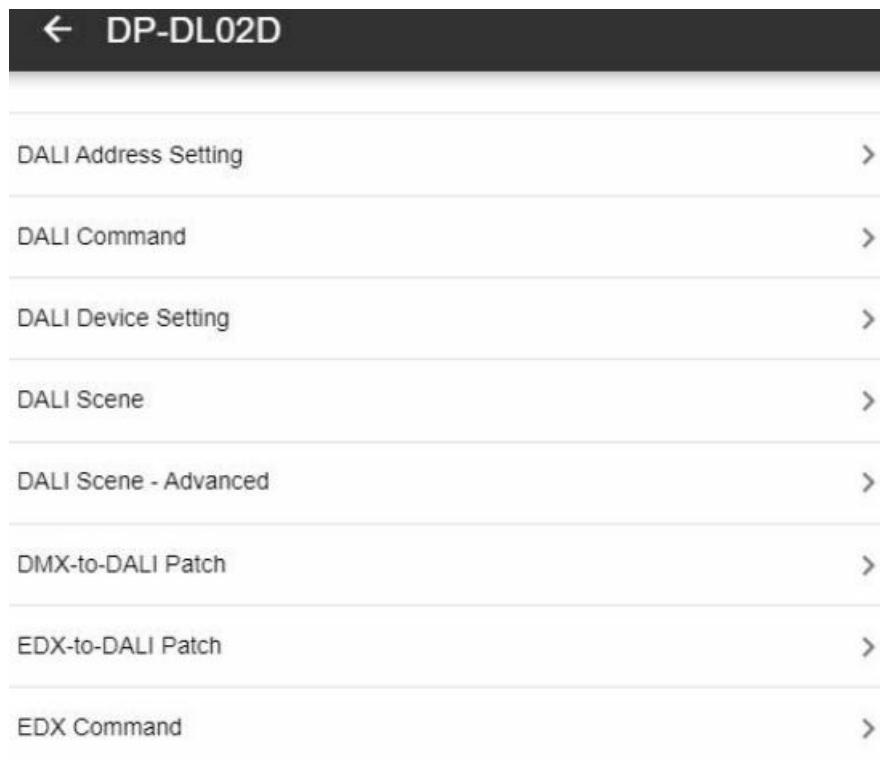

- If the IP address of DP-DL02D is not valid (for example, your local IP is 192.168.0.xxx, but the IP address of.
- DP-DL02D is 192.168.3.xxx), you might click the "config" button to change the IP. Otherwise, you cannot connect to DP-DL02D even though you are able to see it in the list.

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

- If DP-DL02D is connected, the main menu shows:

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 the DALI bus

Search Mode

- **New Installation:** All short addresses of DALI devices will be cleared.
- **Expansion:** If the DALI device already has a short address, the short address will remain 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 addresses of the previous devices will remain the same.
- Select the DALI port and the search mode, and then click "START" to start searching.
- The search process will take longer time if there are more DALI devices on the DALI bus.

Once the search process is done, you will be 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.

DALI Command

- Click "DALI Command" in the main menu to enter

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

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 the "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 the 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

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.

DALI Scene Advanced

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

- On 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) first.
- Otherwise, you're unable to see any dimming sliders on 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.
- However, it will take a longer time to save scenes 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:

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 the DALI short address.
- Please note that the DMX-to-DALI patch is invalid if the 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 on this page.

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

- Click "Write" to save the setting

EDX-to-DALI Patch

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

DALI Port
1st

Short Address - 0

EDX-Zone
1

EDX-Channel
1

Short Address - 1

EDX-Zone
1

EDX-Channel
2

Short Address - 2

EDX-Zone
1

EDX-Channel
3

Short Address - 3

↓ Read   ↑ Write

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

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

Short Address - 0

EDX-Zone
2

EDX-Channel
3

- EDX's zone2/ channel3 command will control the 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 the 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.

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Documents / Resources

	Liteputer DP-DL02D EDX and DMX to DALI Interface [pdf] User Manual DP-DL02D, DP-DL02D EDX and DMX to DALI Interface, EDX and DMX to DALI Interface, DMX to DALI Interface, DALI Interface, Interface