User Manual

DP-DL01D

EDX/DMX to DALI Interface

INDEX

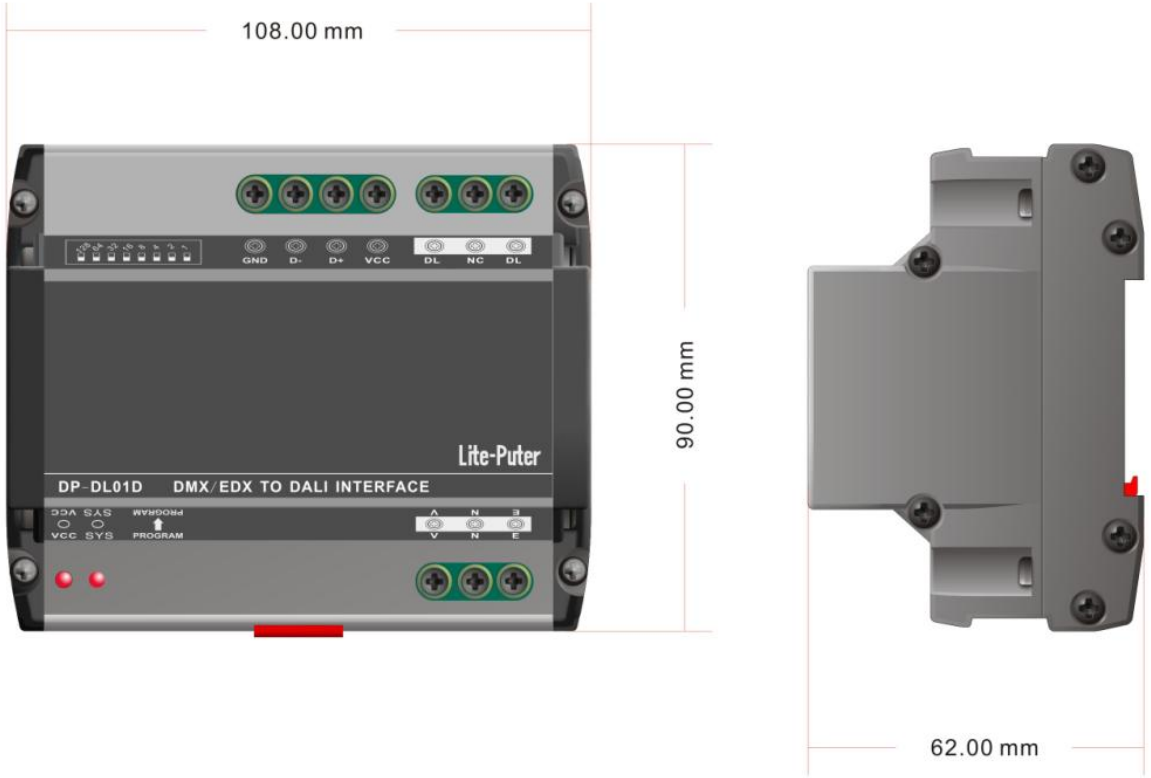
1. Introduction

1.1 Features

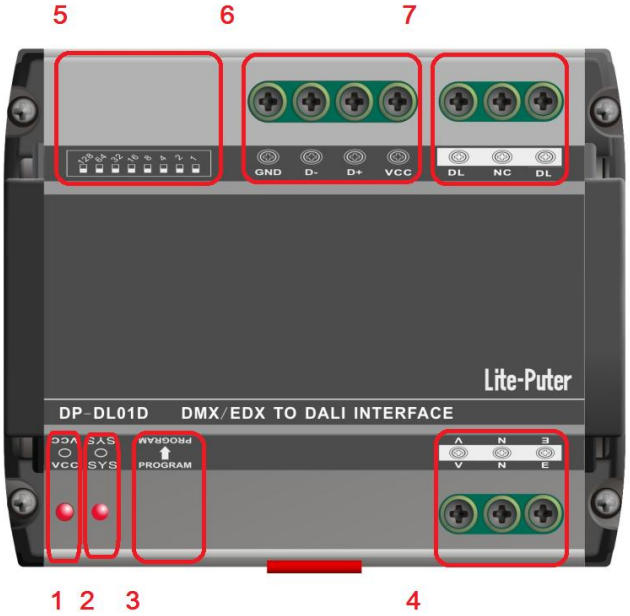
1. Convert EDX signal to DALI signal
2. Convert DMX-512 to DALI
3. Control up to 64 DALI ballasts/drivers

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: 160g



1.3 Function



1. Power LED
2. System State LED
3. Firmware Programming Port
4. AC 100-240V Input
5. ID Number Switch
6. EDX/DMX-512 port
7. DALI port

1.4 About EDX/DMX-512 Wiring

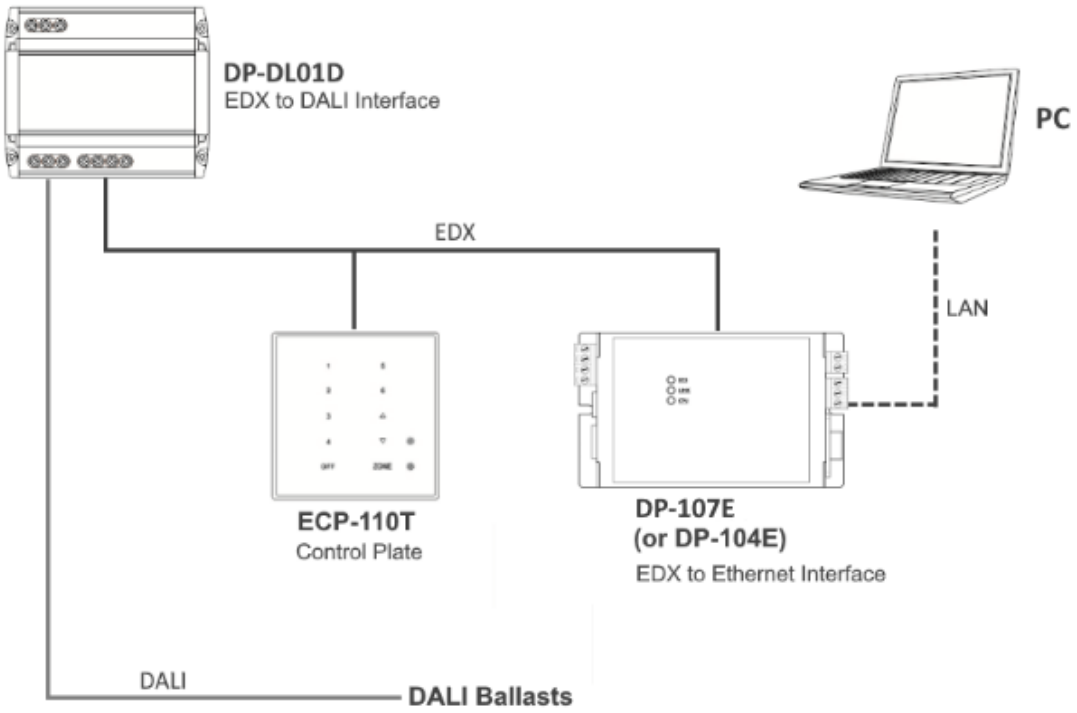
The digital signal wiring is basically the same as RS-485 wiring. If you are not familiar with RS-485 wiring, please check EDX/DMX-512 wiring guide on Lite-Puter's website:

http://www.liteputer.com.tw/tech_guide.asp

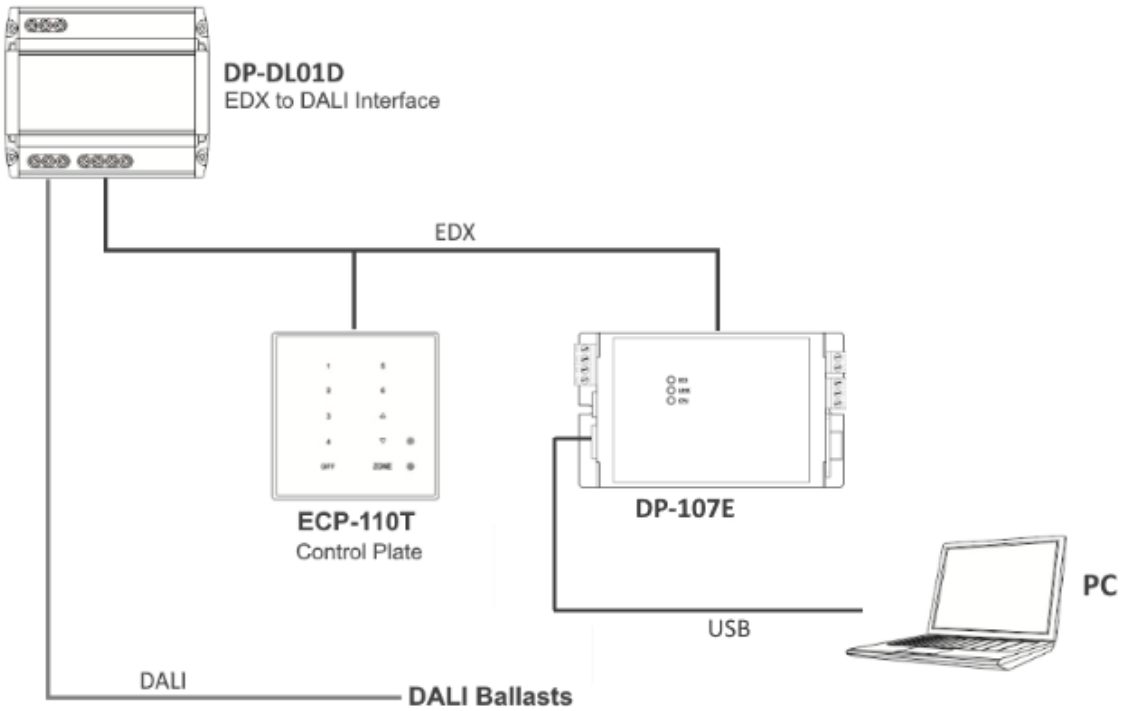
1.5 System Diagram

1.5.1 EDX to DALI System

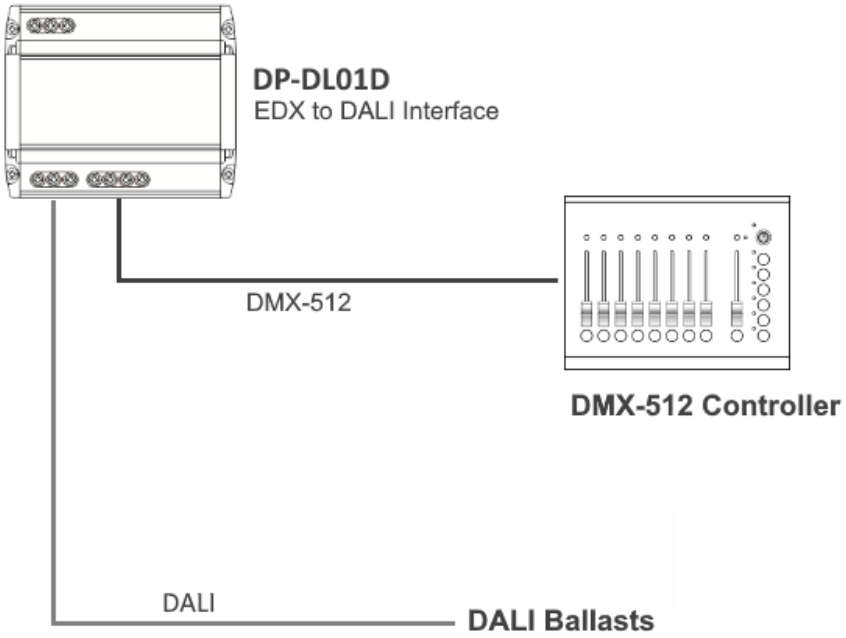
By Ethernet (DP-107E or DP-104)



By USB (Only Applicable For DP-107E)



1.5.2 DMX-512 to DALI System



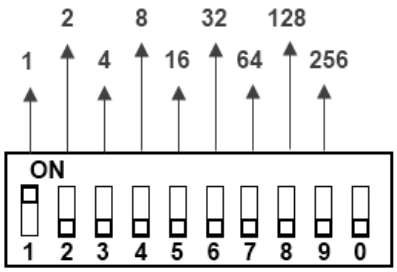
2. Operation

2.1 ID Set

ID number can be configured by DIP switch.

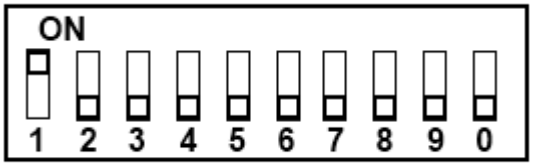
The number configuration is based on BCD code.

Each switch on the 10 digit DIP switch represents as following figure.

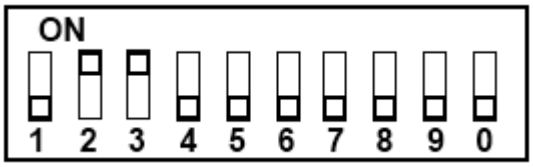


Examples:

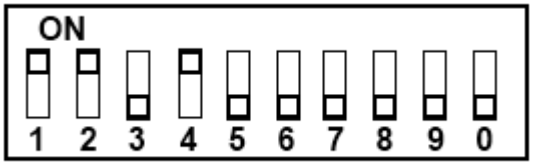
ID number is 01 (1)



ID number is 06 (2+4)



ID number is 11 (1 + 2 + 8)



3 EDX to DALI GUI

"EDX to DALI" is an application to configure DP-DL01D.

An EDX to Ethernet interface (PL-DP106E or DP-104E) is required to make "EDX to DALI" communicate with DP-DL01D.

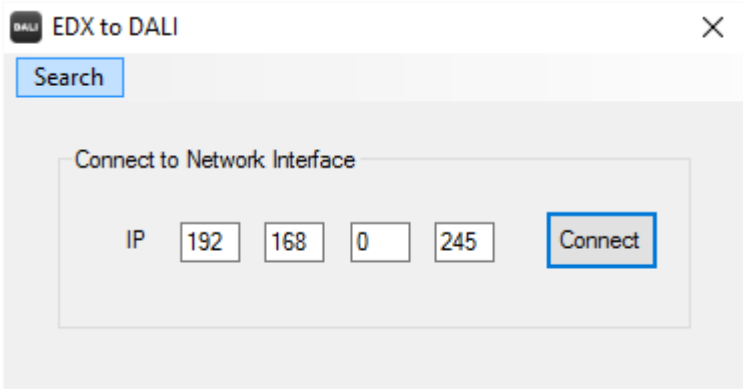
Please refer the previous EDX to DALI wiring diagram.

3.1 Install EDX to DALI

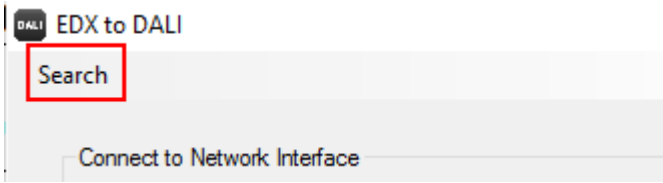
Install "EDX to DALI" application in Windows

3.2 Connect to EDX to Ethernet Interface

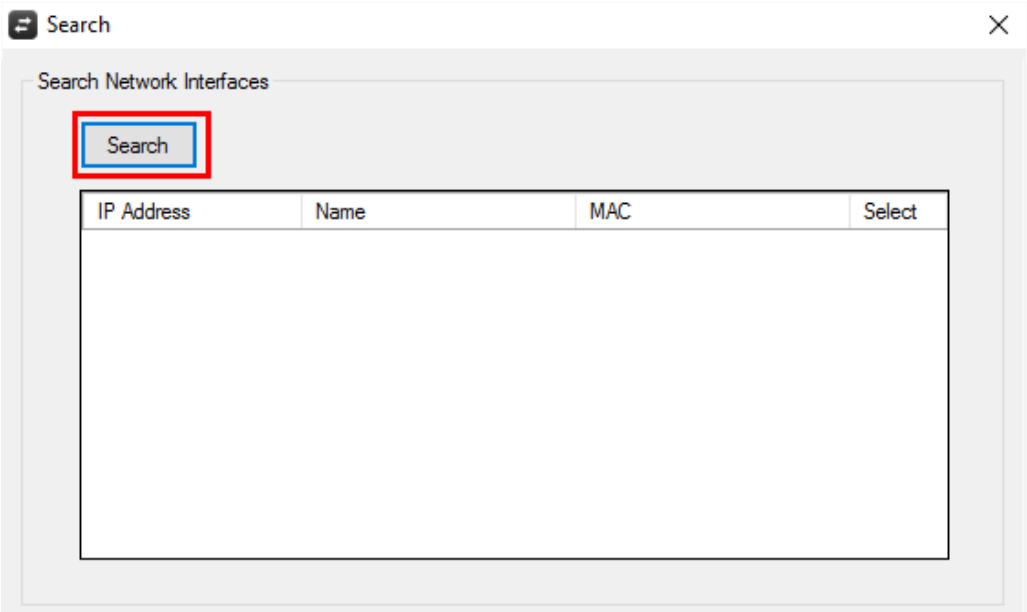
Run the application and enter the IP address of the network interface. Then click "Connect".



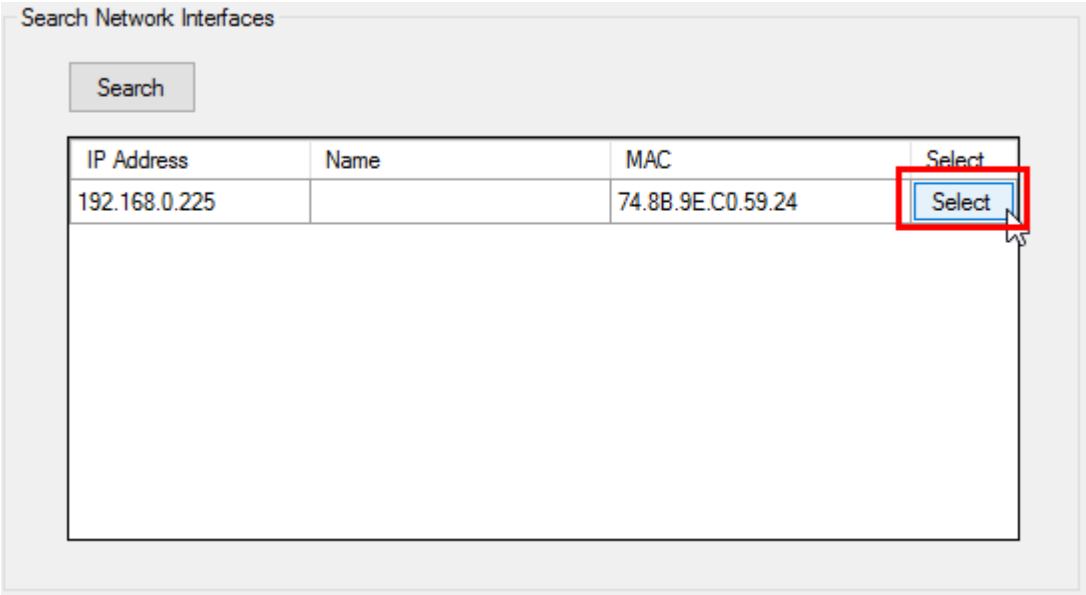
Or click "Search" to search the EDX to Ethernet interfaces on the network.



Click "Search" button to show all interfaces on the network.



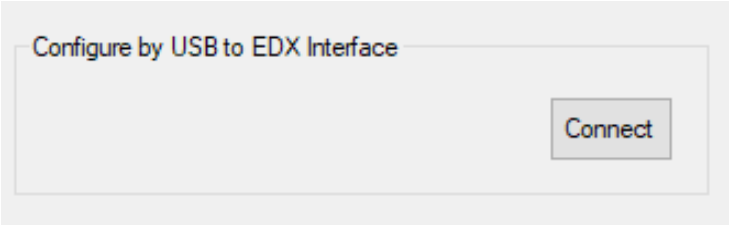
Click “Select” button in the interface list to connect to the network interface.



3.2.1 Connect by Using USB Cable (Only Applicable to DP-107E)

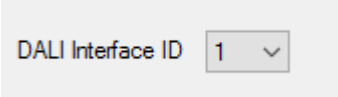
It is also possible to use USB port of DP-107E to configure DP-DL01D.

Simply connect DP-107E's USB to the PC, and run EDX2DALI GUI. Click "Connect" in "Configure by USB to EDX Interface".



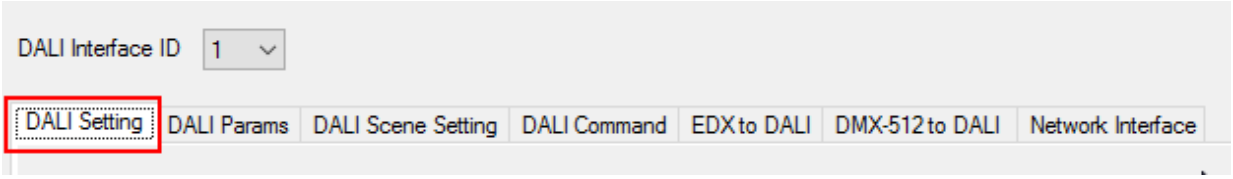
3.3 ID Number of DP-DL01D

Make sure that you select correct ID number of DP-DL01D in “EDX to DALI” GUI.

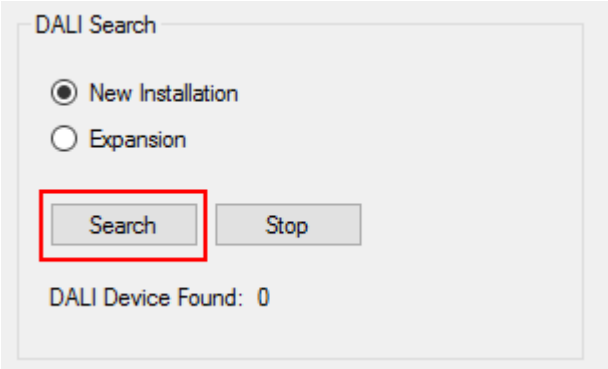


3.4 Search DALI Devices

1. Click “DALI Setting” tab



2. Click “Search”

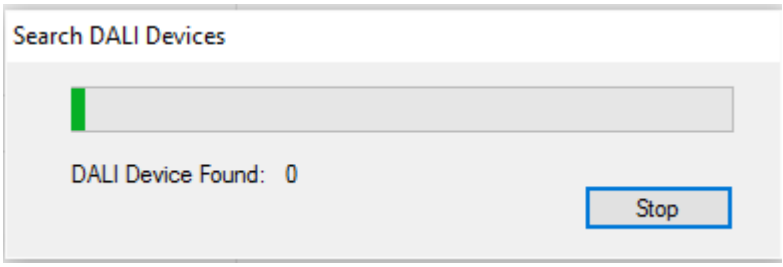


If some DALI ballasts are previously addressed and some DALI ballasts are not addressed yet, please check “Expansion” and then click “Search”.

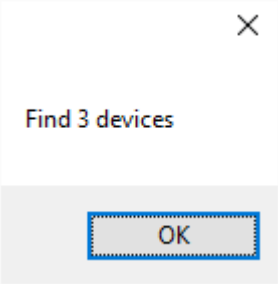
The newly installed ballasts will be addressed and the previous ballasts’ addresses will keep the same.

3. The searching progress window shows.

Please wait till all ballast are found.



4. When all ballasts are found. It shows the number that DALI ballasts are found.



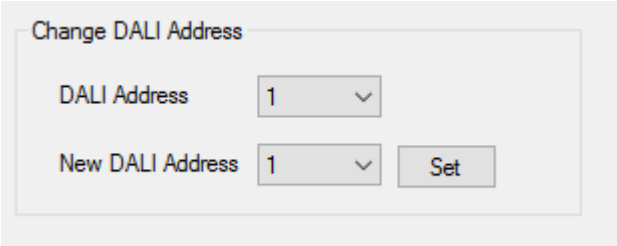
DALI address are randomly addressed during search process.

You can use "Change DALI Address" function in "DALI Setting" tab to change the address after searching process.

3.4 Change DALI Address

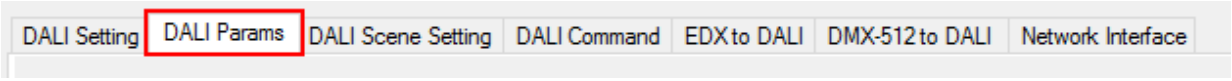
In "DALI Setting" tab, find "Change DALI Address" part.

Select the DALI address and new DALI address and then click "Set" to change the address.

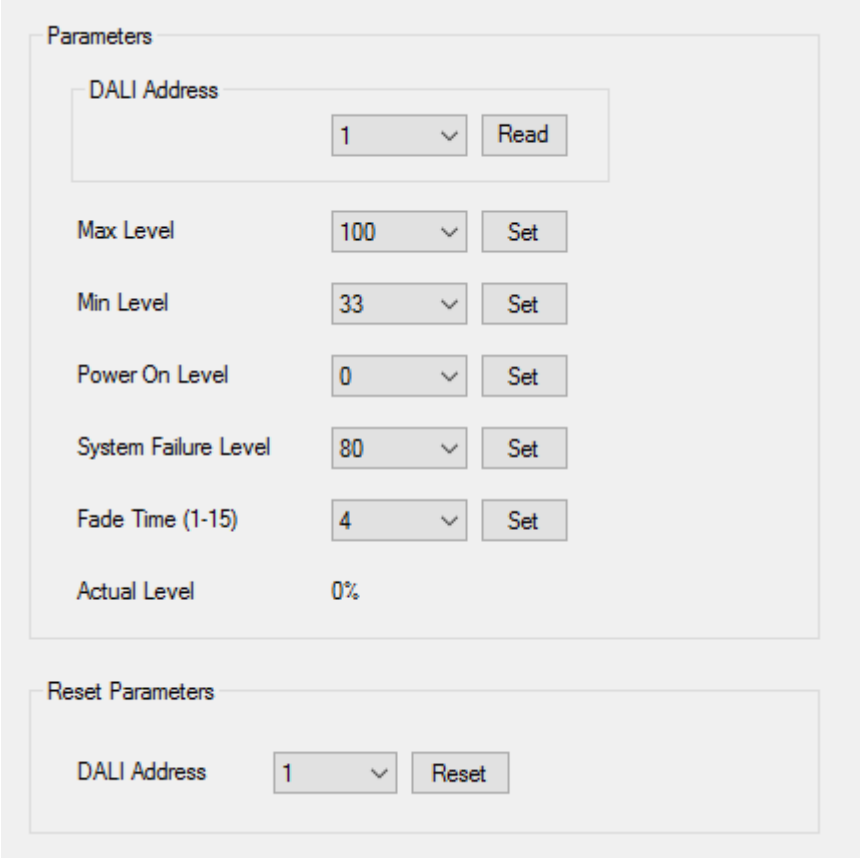


3.6 Set DALI Device Parameters

1. Click “DALI Params” tab



2. DALI parameters can be read/write.



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

Actual Level: the real-time output level

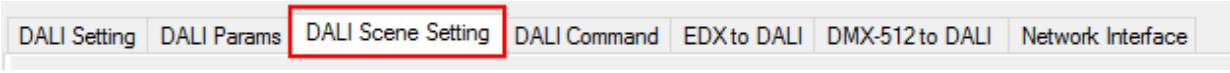
Fade Time: the time to change from current output level to requested output level.

Please refer the table below for real fade time.

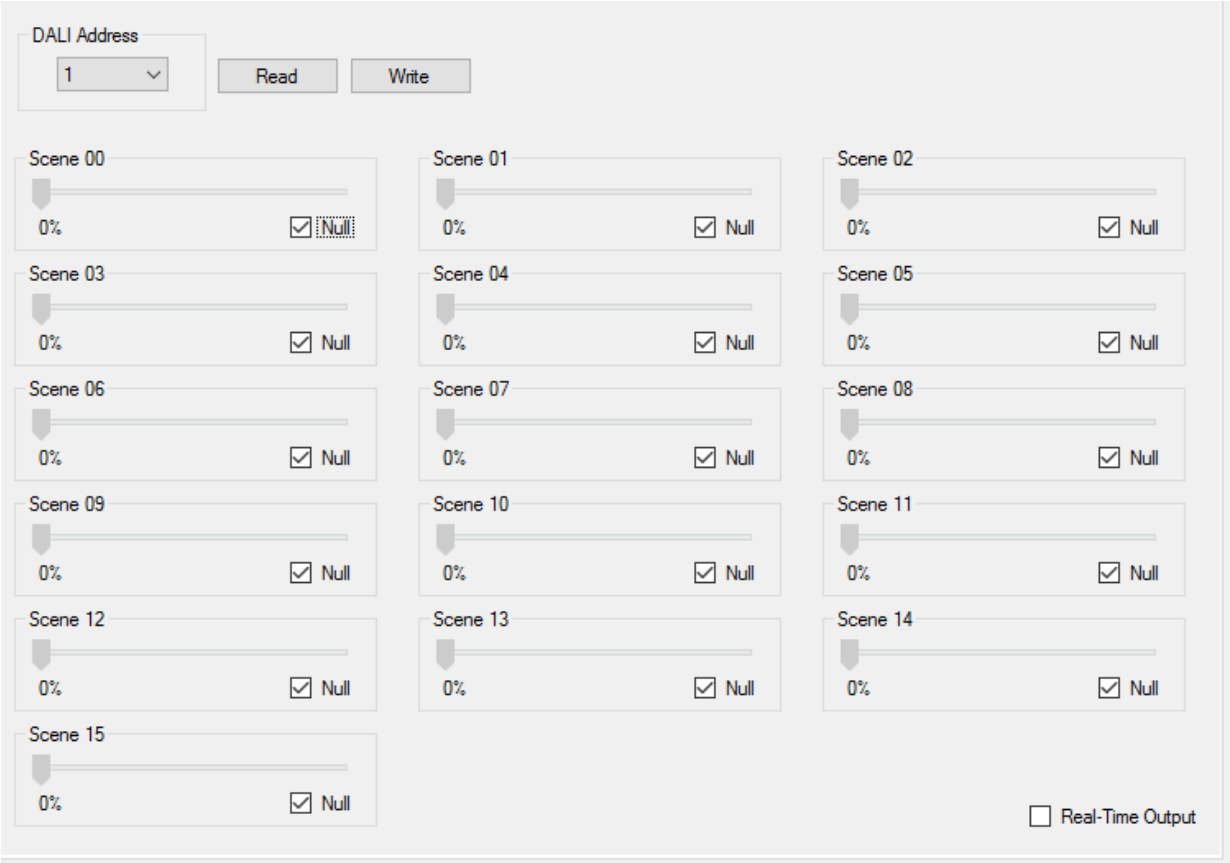
n	Fade Time
1	0,707 s
2	1.000 s
3	1,414 s
4	2.000 s
5	2,828 s
6	4.000 s
7	5,657 s
8	8.000 s
9	11,314 s
10	16.000 s
11	22,627 s
12	32.000 s
13	45,255 s
14	64.000 s
15	90.510 s

3.7 DALI Scenes

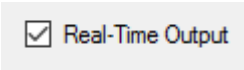
1. Click “DALI Scene Setting” tab



2. You can read/set DALI scenes by DALI address.



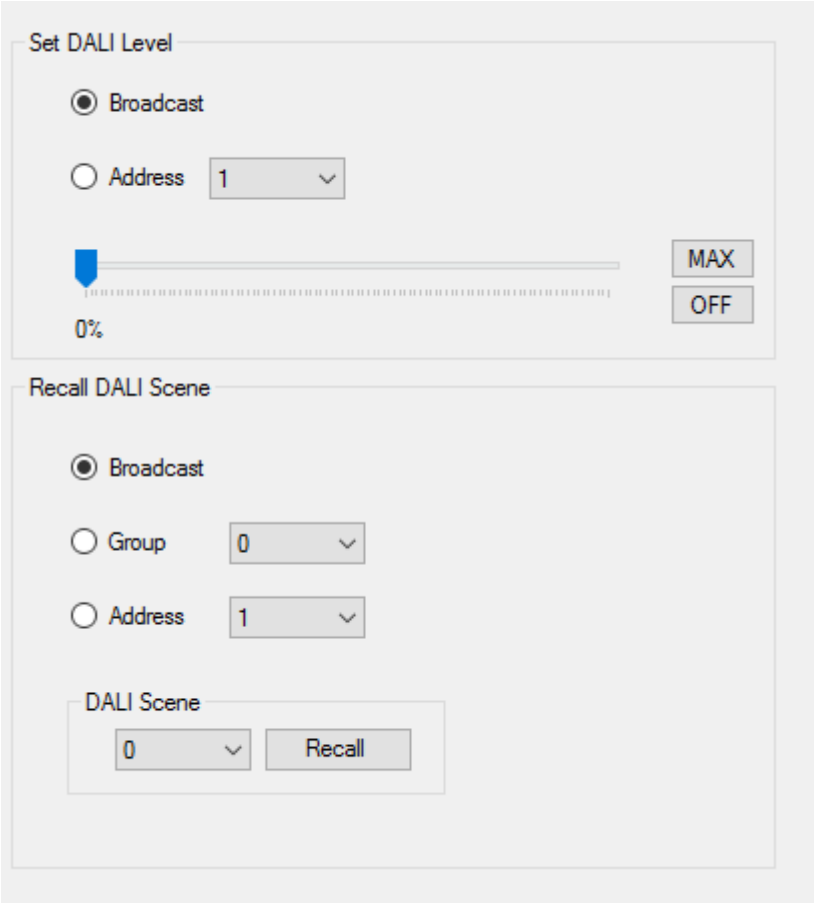
3. If you want to check the real-time output, please check “Real-Time Output”. The DALI output level will be controlled by the last changed slide bar.



3.8 DALI Command Test

1. Click “DALI Command” tab

2. You can set DALI dimming level or recall DALI scenes.



3.9 EDX to DALI Patch

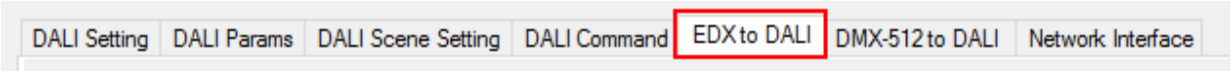
The "EDX to DALI Patch" function is to make EDX commands able to control DALI devices.

You can use EDX scene control panel (ECP-110T, ECP-310) to recall the scenes of DALI ballasts.

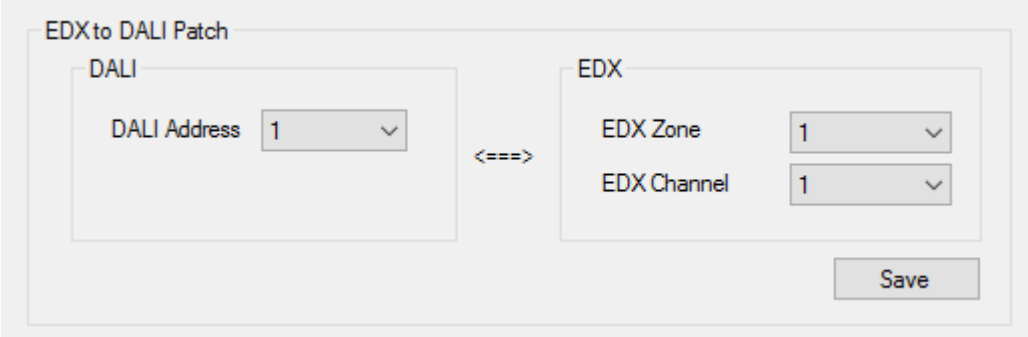
By doing this, a DALI system can be integrated to EDX system.

Please refer "EDX to DALI System Diagram".

1. Click "EDX to DALI" tab



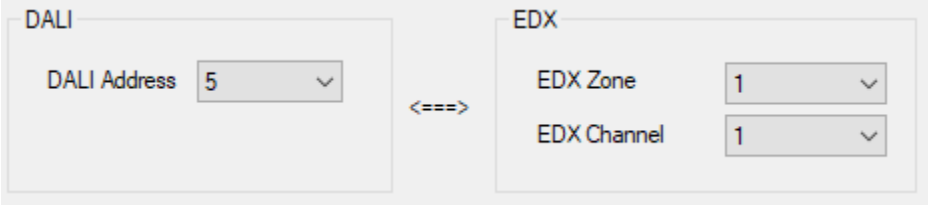
2. You can patch/map DALI address to EDX zone/channel. Click "Save" to store the change.



EX: DALI address 05 is patched to EDX zone1/channel 1:

EDX's zone1/ channel 1 command will control DALI address 05.

EDX's zone1 scene command will trigger the corresponding scene in DALI devices whose address is 05.



EX: DALI address 01 is patched to EDX zone 2/ channel 3

EDX's zone2/ channel3 command will control DALI address 01.

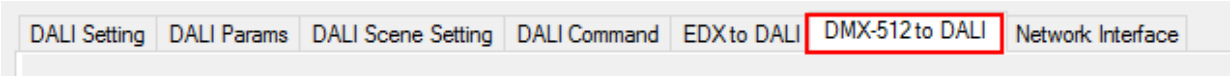
EDX's zone2 scene command will trigger the corresponding scene in DALI devices whose address is 01.

3.10 DMX-512 to DALI Patch

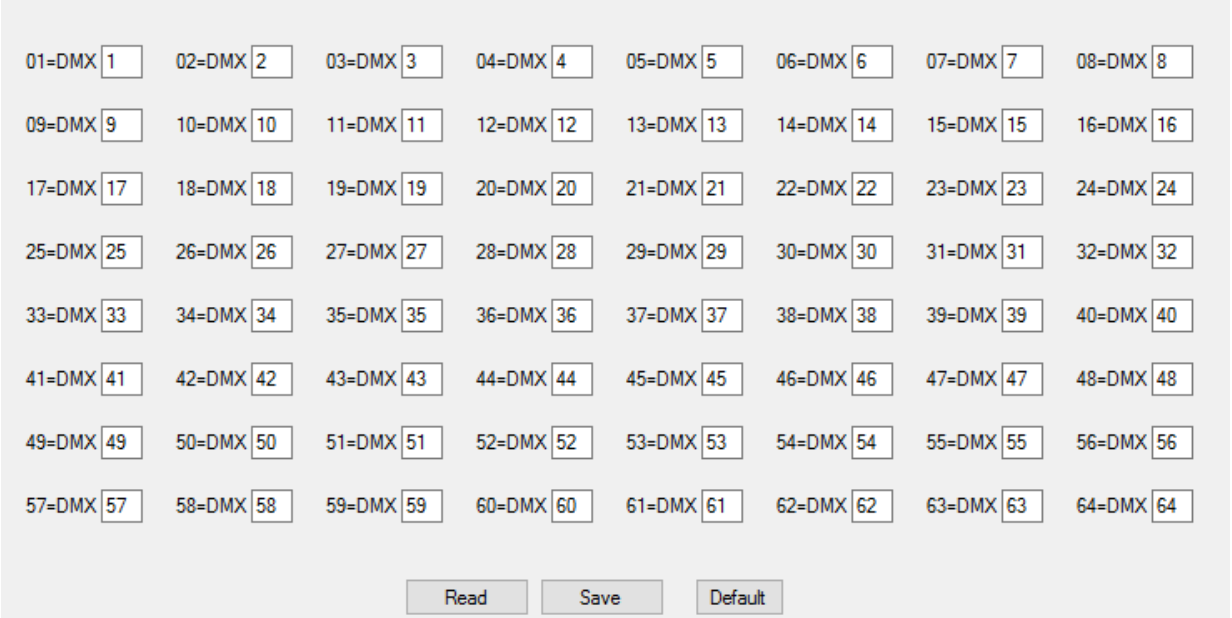
The "DMX-512 to DALI Patch" function is to make DMX-512 controller able to control DALI devices.

Please refer "DMX-512 to DALI System Diagram".

1. Click "DMX-512 to DALI" tab



2. Set corresponding DMX-512 to DALI address mapping and click "Save" to store the change.



If DALI address 03 is patching to DMX-512 address 10, DMX-512's channel 10 signal will control DALI ballast whose address is 03.

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.

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