HDL-MC64-DALI.431

User Manual

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Catalog

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GZ HDL Technology Co., Ltd

Modification Record

This record accumulates instructions for each document update. The latest version of the document contains updates from all previous document versions。

Num	Version	Modification Content	Date
1	V1.0.0	First official release	2020/05/23

1 Brief Introduction

This manual mainly describes the debugging configuration of HDL-MC64-DALI.431.

Figure 1. 64CH DALI Ballast Dimming Actuator

1.1 Overview

With built-in DALI power supply and DALI Buspro, 64CH DALI Ballast Dimming Actuator (See Figure 1) supports up to 64 DALI ballasts. With scene control function, 16 zones, each with 16 scenes, can be established. Its functions include:

(1) Gateway between HDL Buspro system and DALI Ballast
(2) Up to 64 DALI drivers supported
(3) Scene controller
(4) Up to 16 separate zones, zone dimming supported
(5) 16 scenes for each zone, up to 90.51s running time for each scene
(6) Low limit and high limit settable for each channel
(7) Status recall function
(8) Built-in DALI power supply insulates with HDL Buspro
(9) Color temperature control supported. Users can directly set the color temperature value or relatively adjust the color temperature.
(10) Enable to read the current color temperature value
(11) Scene control color temperature supported
(12) Short circuit protection for DALI wires
(13) Online update supported via HDL Buspro Setup Tool.

1.2 Installation and Wiring

The device should be installed with standard 35mm DIN rail in distribution box.

Installation – See Figure 2 - 4. Wiring – See Figure 5.

Step 1. Fix the DIN rail with screws.

Step 2. Buckle the bottom cap of the device on the edge of the DIN rail.

Step 3. Press the device on the DIN rail, slide it and fix it up until an appropriate position is adjusted

Installation - Figure 2

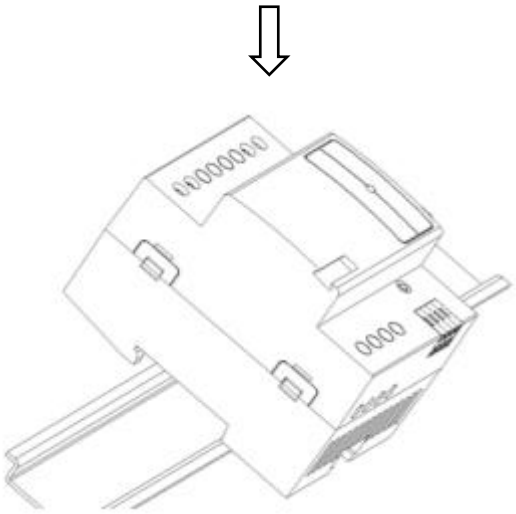


Figure 3

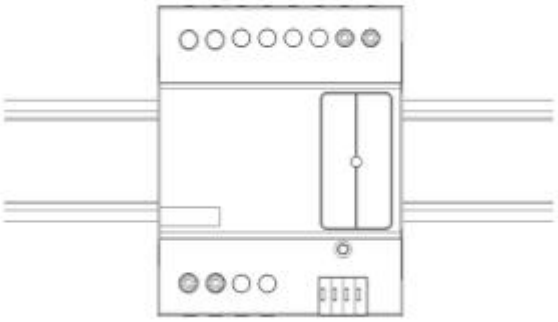
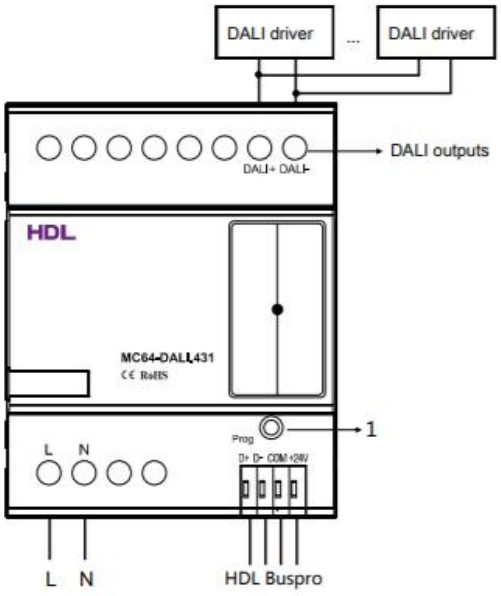


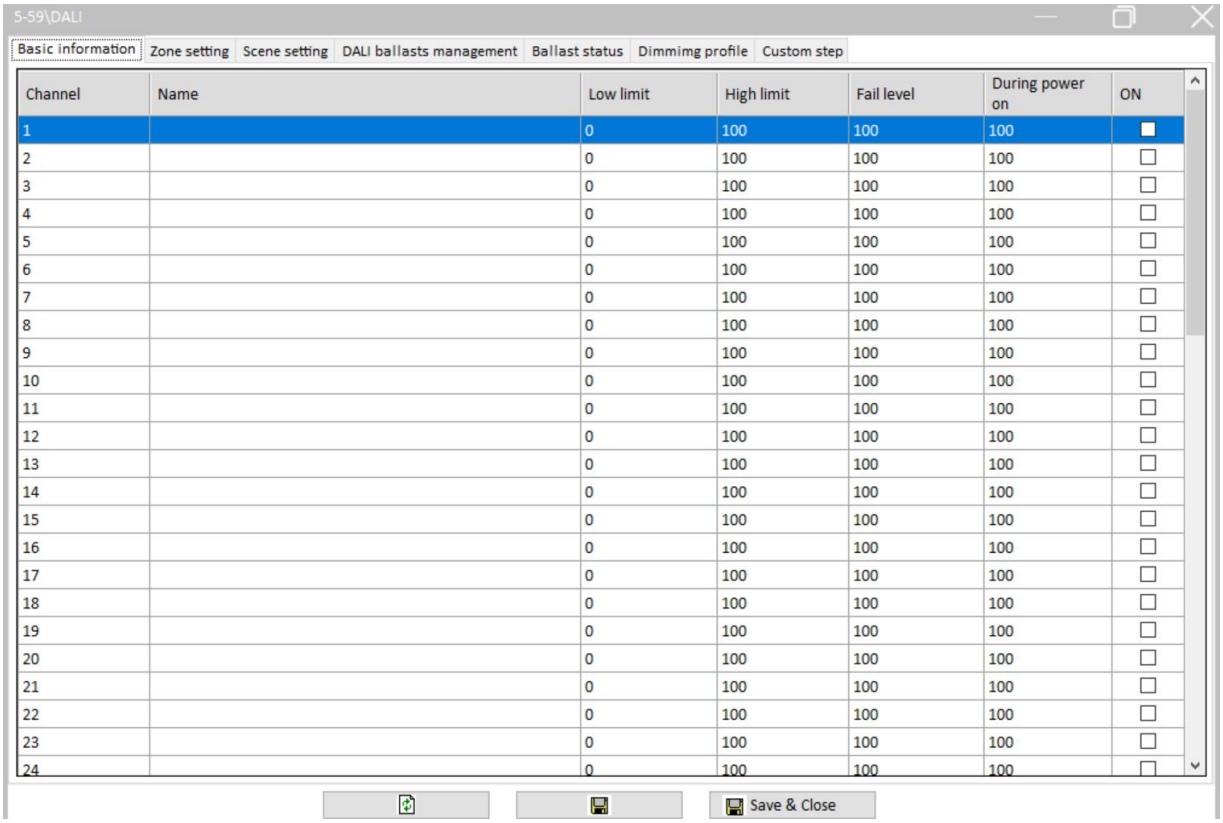
Figure 4



Wiring - Figure 5

2 Debugging Configuration

2.1 Basic Information



Basic Information – Figure 6

Name: The channel remark

Low limit: When the dimming value is below the low limit, its brightness directly changes to 0, and the setting range: 0 ~ high limit

High limit: When the brightness value reaches above the high limit value, its brightness value directly changes to the maximum level value, range: low limit value ~ high limit value

Fail level: Brightness when Dali signal line is disconnected

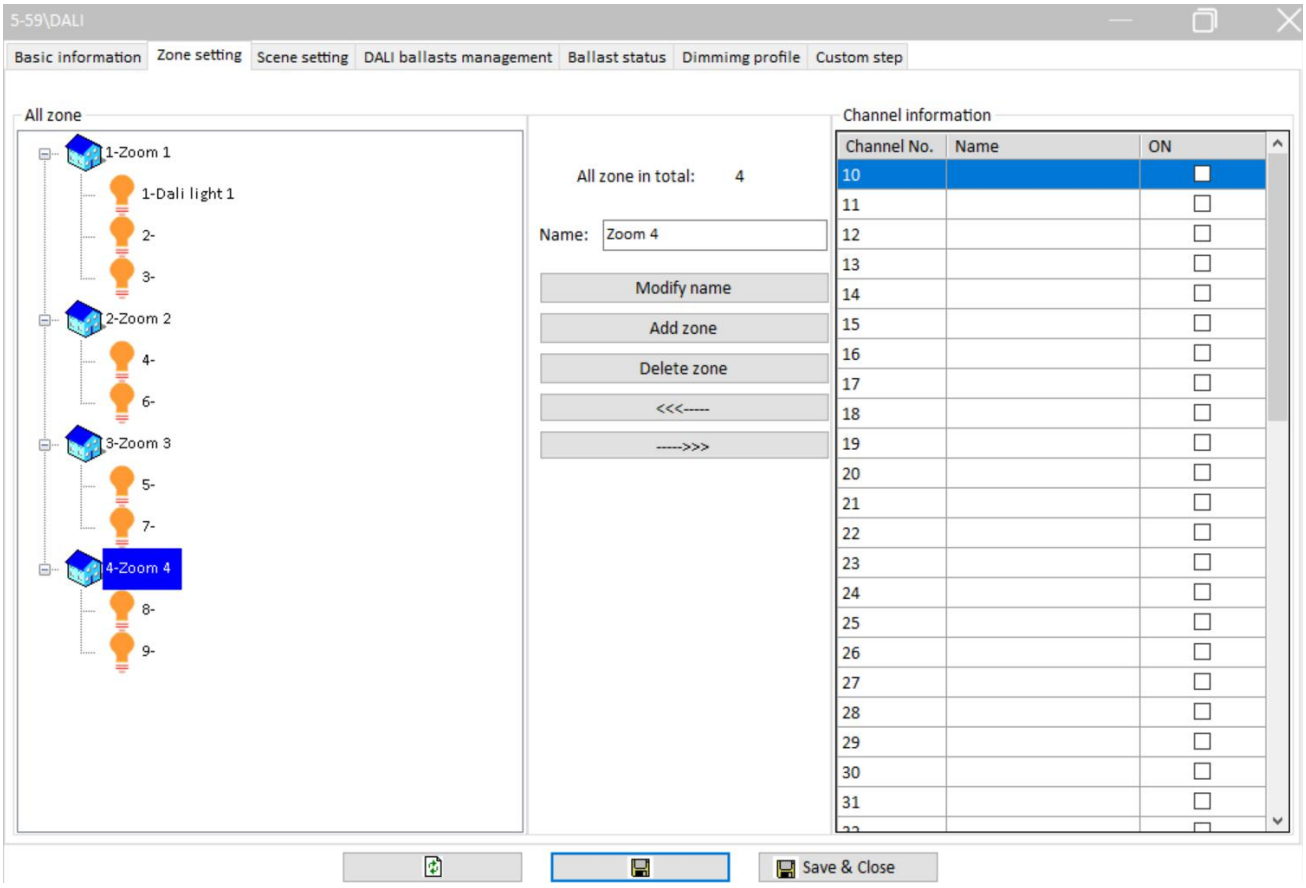
During power on: Brightness when Dali signal line is connected. Dali module needs 15s-20s to remember the status before the power off.

2.2 Zone setting

Separate the channel to a zone and use it with the scene.

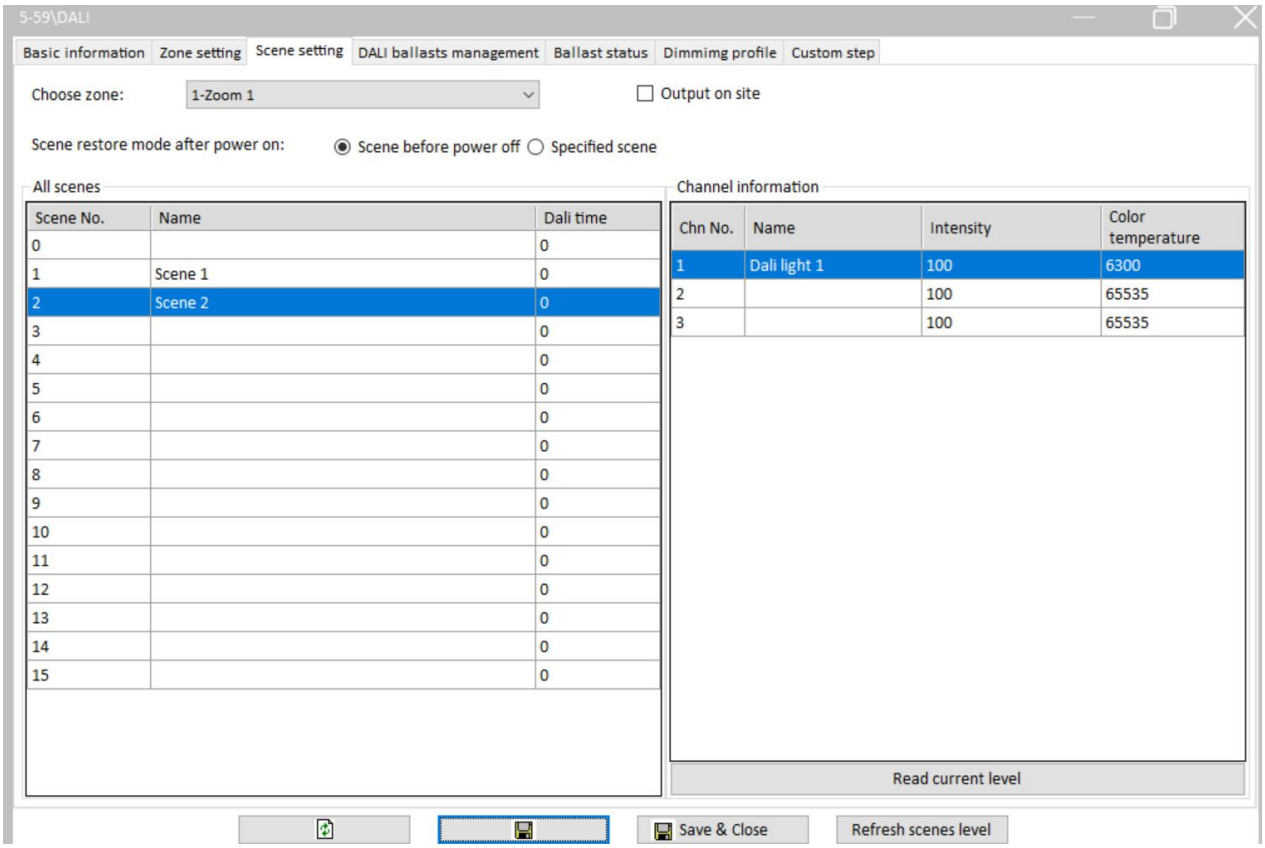
HDL Zoom number is corresponding to below DALI group number. DALI module can have up to 16 independent areas, supporting area dimming. An area (group) can be controlled directly by controlling channel number 65-80.

HDL Channel Number	HDL Zoom Number	DALI Group Number
65	1	0
66	2	1
67	3	2
…	…	…
79	15	14
80	16	15



Zone setting - Figure 7

2.3 Scene setting



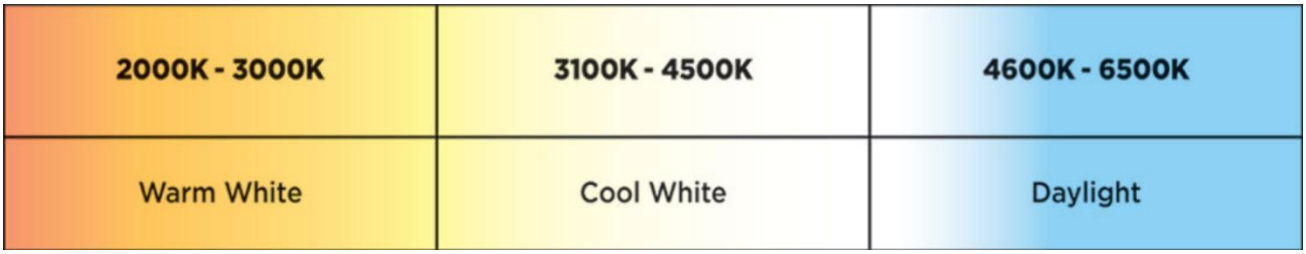
Scene setting - Figure 8

Output on site: Test the current scene result

Scene before power off: Restore to the state before power failure after power on ag ain.

Specified scene: Restore to the set scene number after power on again.

Color temperature: Adjust light color temperaure. The range is 0-65535 and you can select common color temperature. See Figure 9.



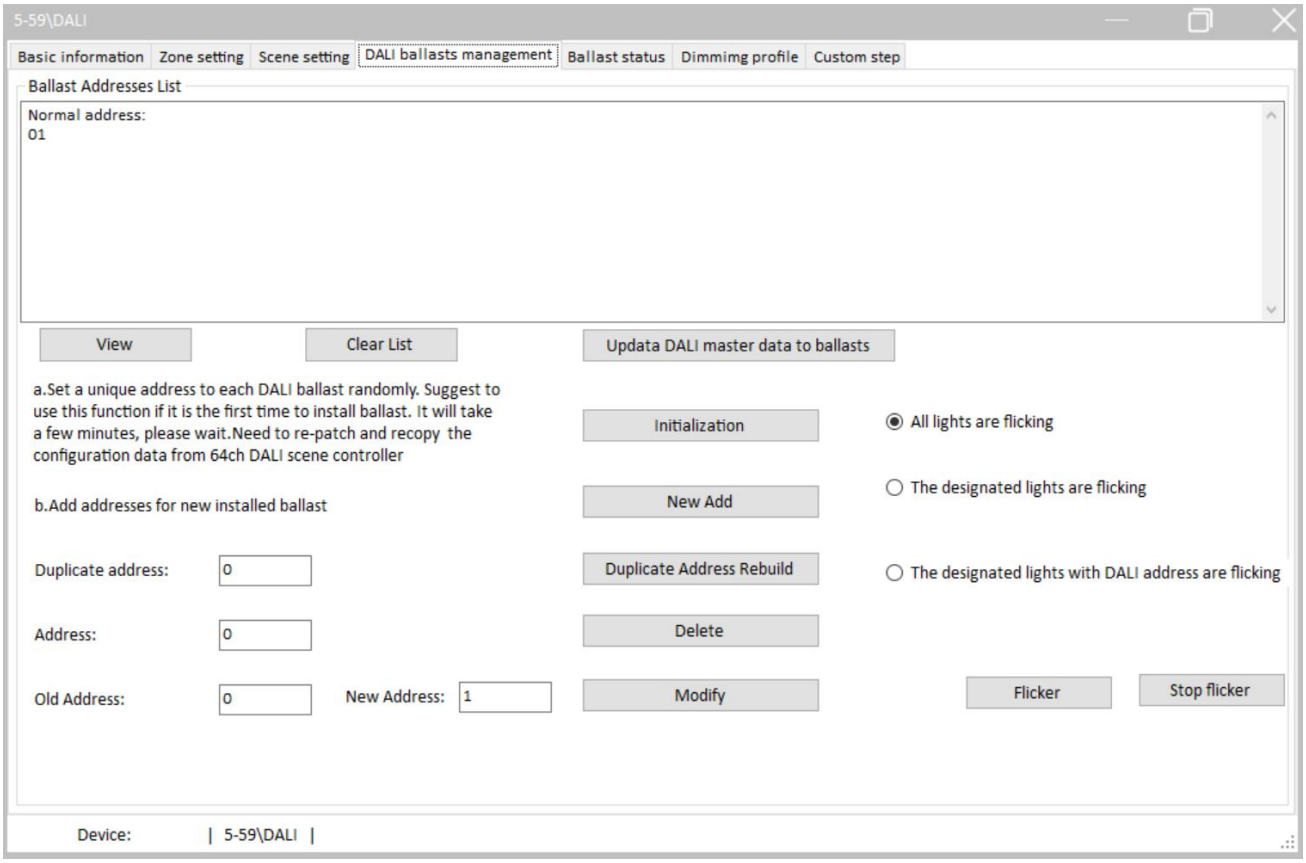
Color Temperature Common Range - Figure 9

2.4 DALI ballasts management

For the new device, the first configuration needs to enter the Dali ballast management page – Figure 10, click "Initialization", the module will randomly generate the address to the ballast, and display it in the interface of "Dali address list".

Since the address is randomly generated, the specific location of the luminaire is determined by the 'The designated lights with DALI address are flicking' function.

After the location is determined, the address can be modified according to the actual situation.



DALI ballasts management - Figure 10

Ballast Address List: Display all current ballast addresses.

View: Check ballast address.

Clear List: Clean the ballast address list.

Update DALI master data to ballasts: Update the latest configuration to ballast.

Initialization: Initialize all the DALI ballast addresses.

New Add: Scan and Add new ballast address.

Duplicate Address Rebuild: Regenerate duplicate addresses.

Delete: Delete the ballast address.

Modify: Modify the ballast address.

All the lights are flicking: Control all the ballasts blinking.

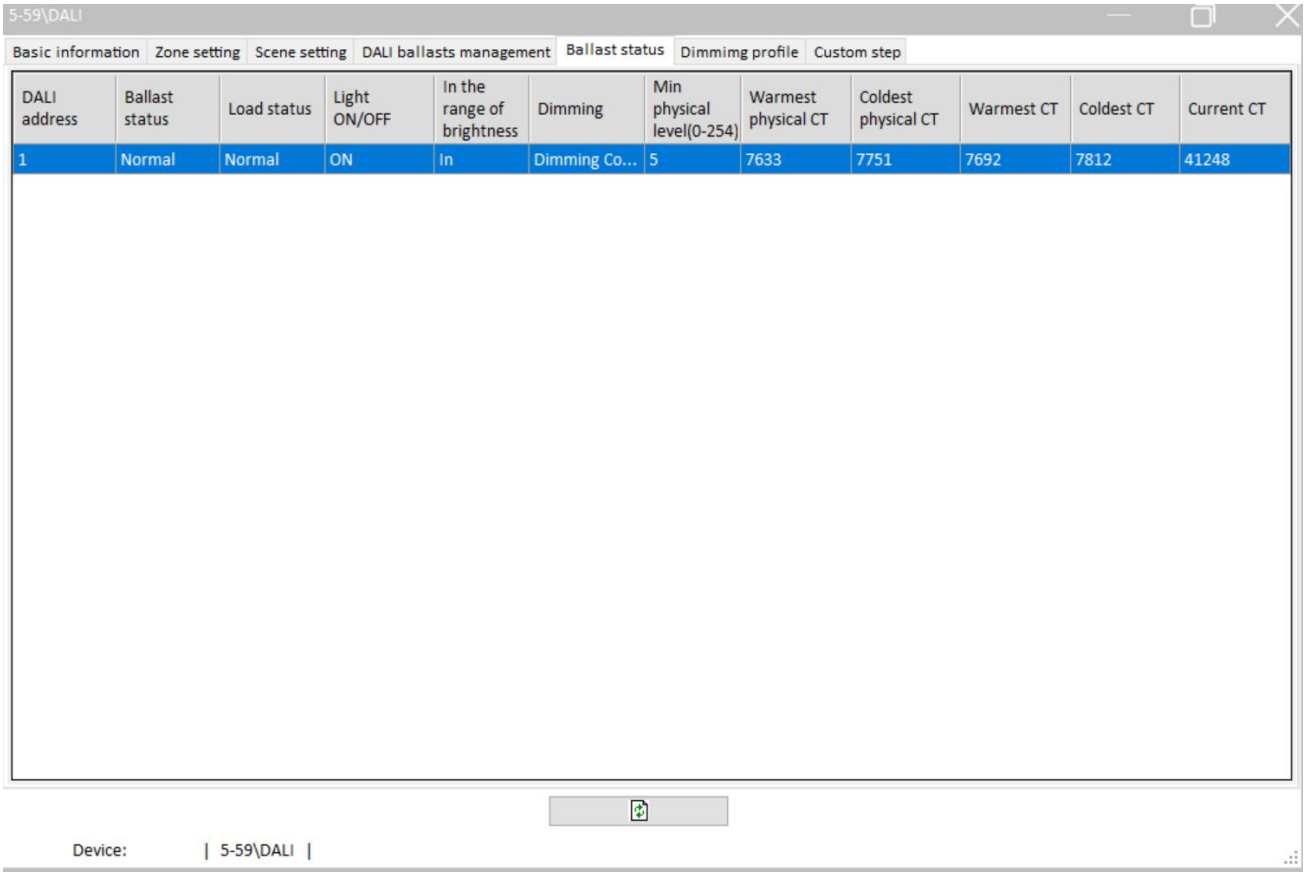
The designated lights are flicking: Ballast blinking in designated area.

The designated lights with DALI address are flicking：Specified ballast address blinks.

DALI channel number is corresponding to below address number.

Channel Number	DALI Address
1	1
2	2
3	3
…	…
63	63
64	0

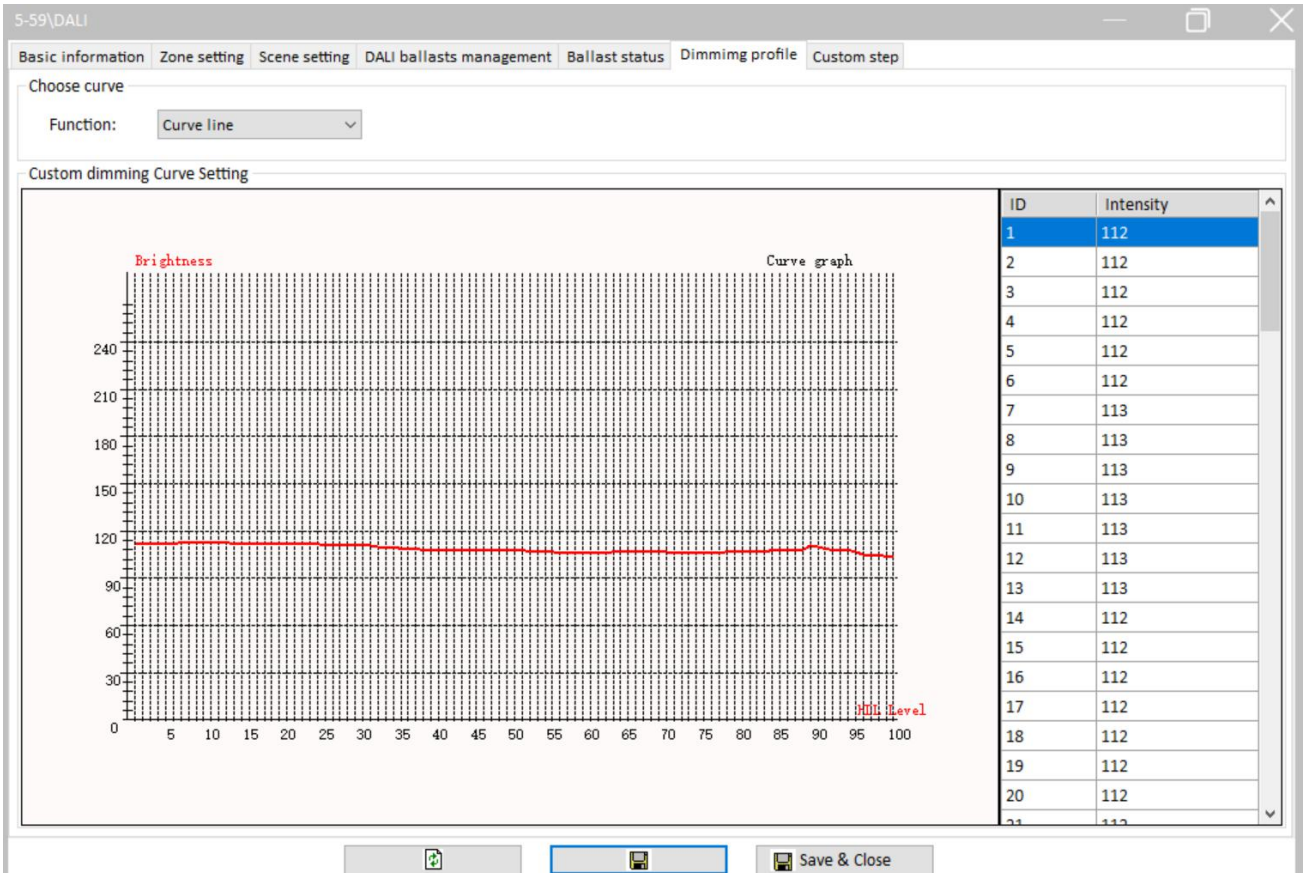
2.5 Ballast Status



Ballast Status – Figure 11

Ballast status reads and displays the parameters about the ballast and is convenient to troubleshooting.

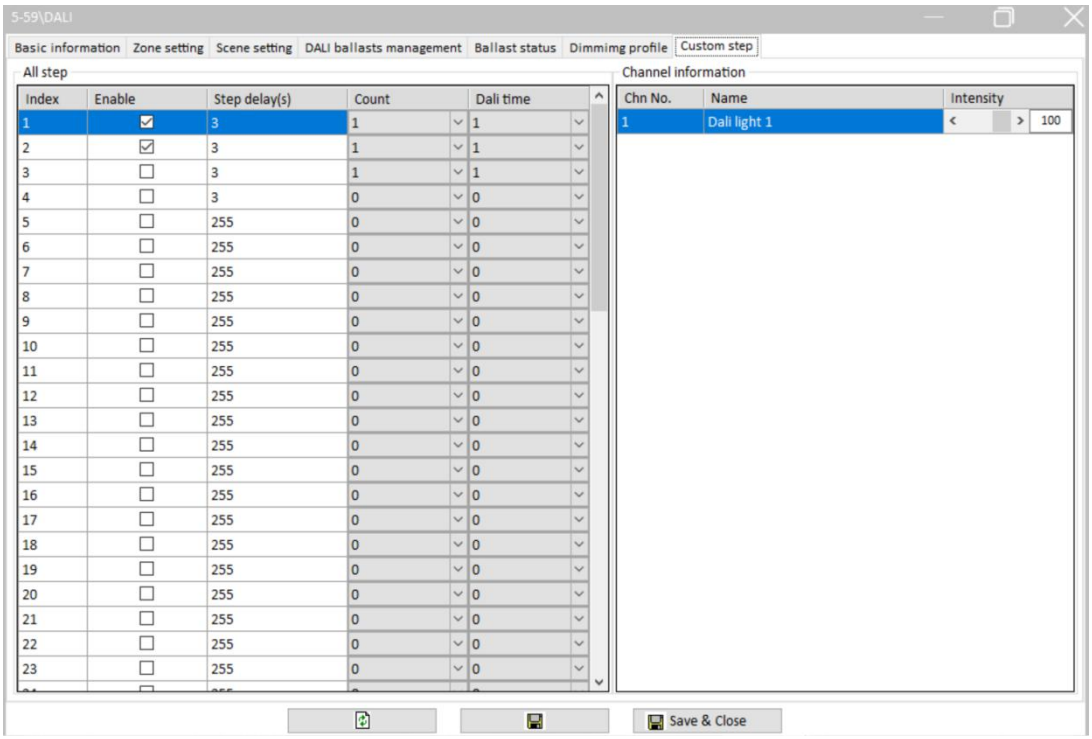
2.6 Dimming Profile



Dimming Profile – Figure 12

The default is linear dimming, which can be adjusted according to the ballast used.

2.7 Custom Step



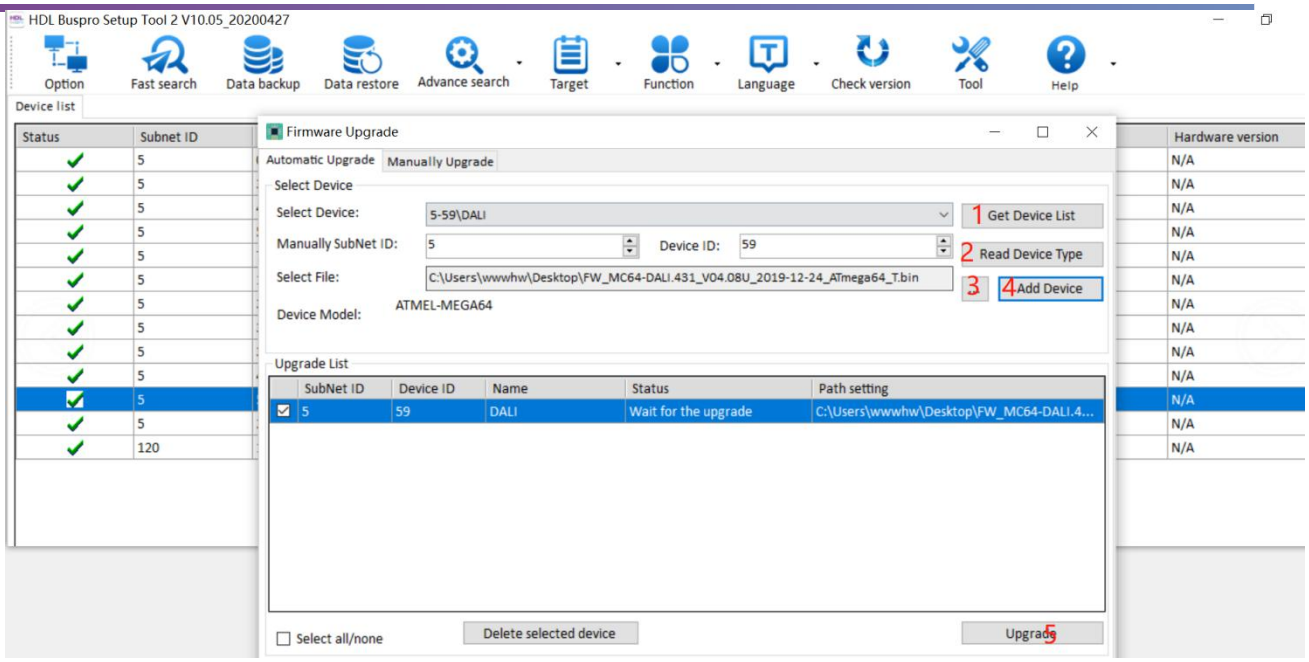
Custom Step – Figure 13

It is equivalent to sequence control.

3 Device Upgrade

3.1 Automatic Upgrade

Automatic upgrade is applicable for the devices searched out.

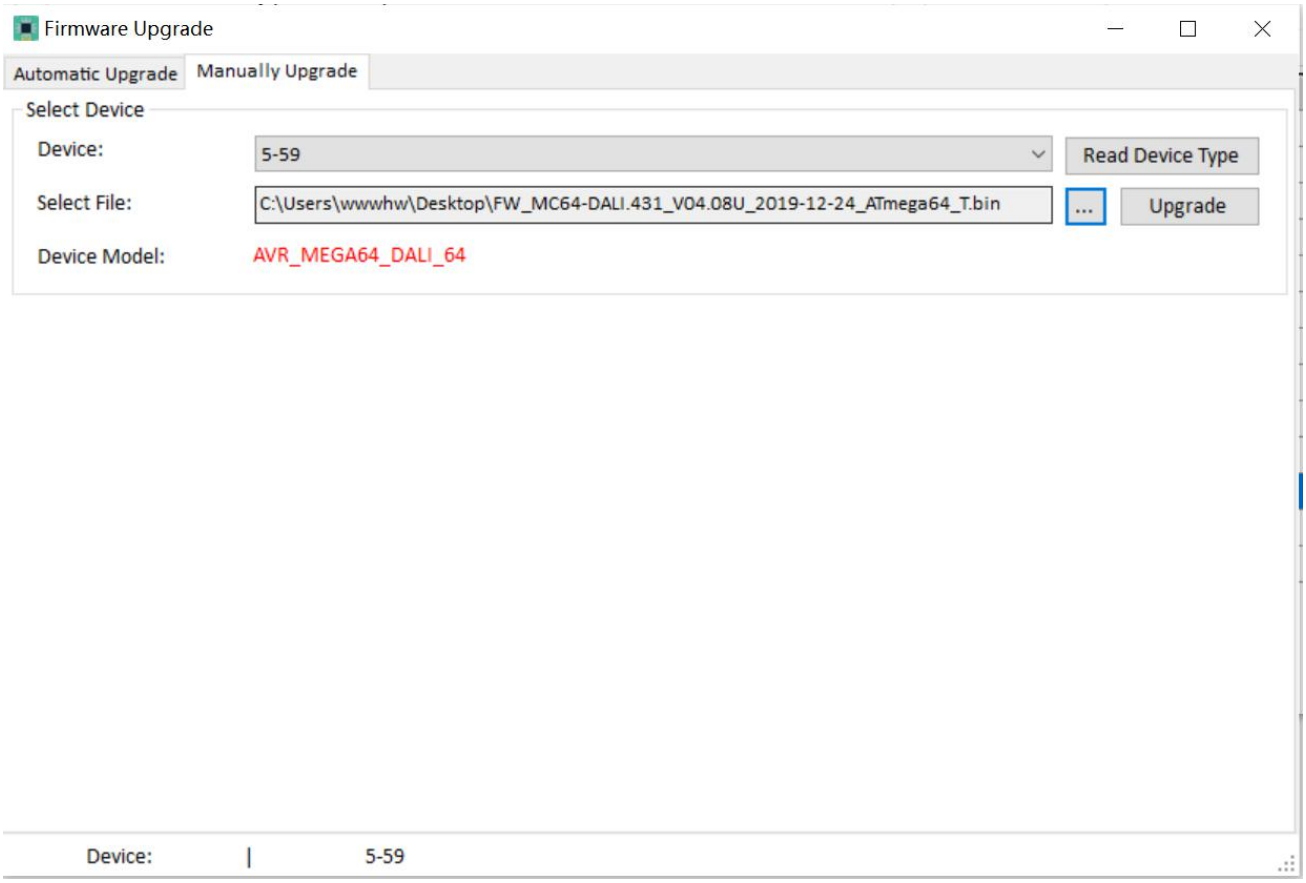


Automatic Upgrade – Figure 14

1. Select the device to upgrade.
2. Read device type.
3. Select the device firmware.
4. Add to upgrade list.
5. Begin the upgrade.

3.2 Manually Upgrade

If upgrade failure, select manually upgrade page.



Manually Upgrade – Figure 15

1. If it shows DALI module address and type, select the firmware.
2. Manually upgrade it.

3.3 Access in Manually Upgrade Mode

How to access in the manually upgrade mode:

1. Open the manually upgrade page.
2. Power off the DALI module. Long press the Prog button then power on it. Do not release the Prog button until the Prog red indicator light is on.
3. In the manually upgrade page, you can see the DALI address and type, select the firmware and upgrade.