Lifud SmartSet Software User Manual
V1.0.0

Contents

1. Introduction

1.1 Software introduction

The Lifud SmartSet software is mainly used to configure the parameters of Lifud LED driver, which needs to match the NFC programmer and Lifud programmer. The list of hardware equipment is as follows:

Product	Name	Brand	Model
	NFC desktop programmer	FEIG	ID CPR30+
	NFC handheld programmer	FEIG	ID ISC.PRH101-USB
	NFC batch programmer	FEIG	ID ISC.LRM1002-E ID ISC.ANT300/300-A
	Lifud programmer	Lifud	LF-SCS080C

1.2 Programmable drivers

LED drivers programmed by NFC programmer and Lifud programmer, including high-power LED drivers and intelligent power.

1.3 Target readers

Companies or individuals using Lifud LED drivers and having some basic knowledge of computer.

1.4 System requirements

· Operating system: Windows 7 and above, 64/32-bit operating system.

· Memory: 512M and above.

· Runtime environment: . NET Framwork4.6.1 is required at least. If installation environment is required during the installation process, please open the following link to download and install it.

https://dotnet.microsoft.com/en-us/download/dotnet/6.0

2. Installation guide

2.1 Download the installation package

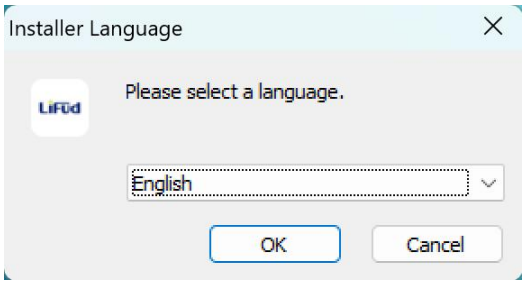
Through our website https://www.lifud.com/Download/1725350718193094656.html, download the installation package or contact our sales staff to get the installation package.

The following figure shows the installation package:

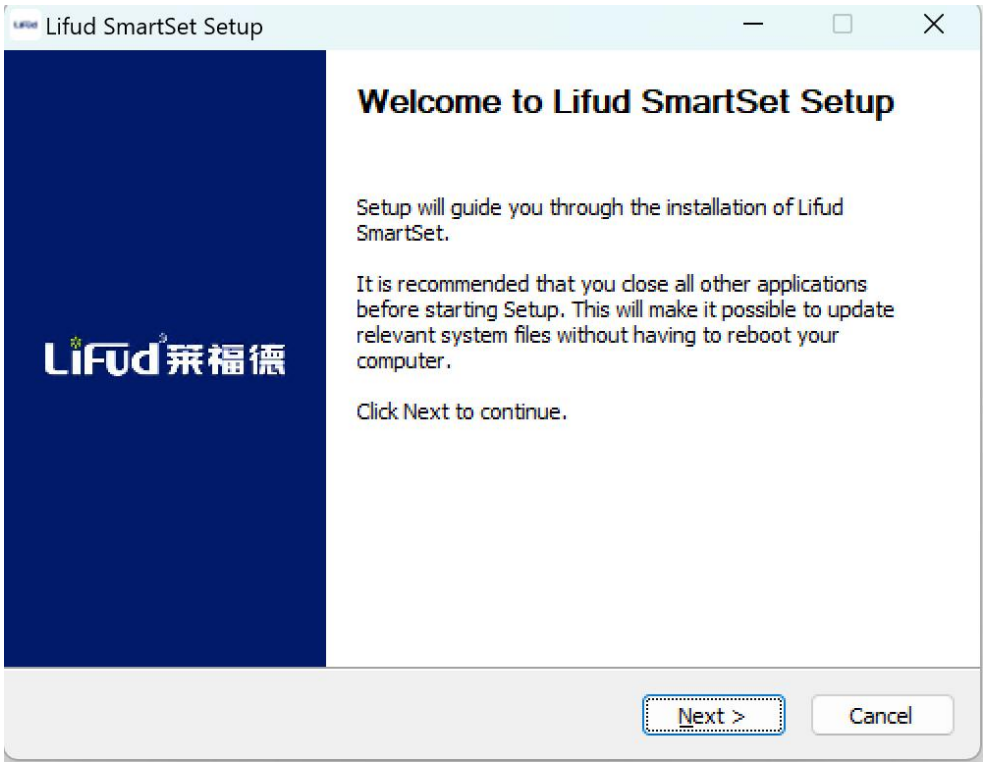
2.2 Install the software

Double click the Lifud SmartSet1.0.0.exe file to open the installation wizard and follow the prompts to install the software.

① Select the installer language. The application supports Chinese and English language.



② Click **“Next”** on the Welcome screen



③ Software license

Click **“I Agree”.**

④ Select components to install

Lifud SmartSet: software body, must be checked.

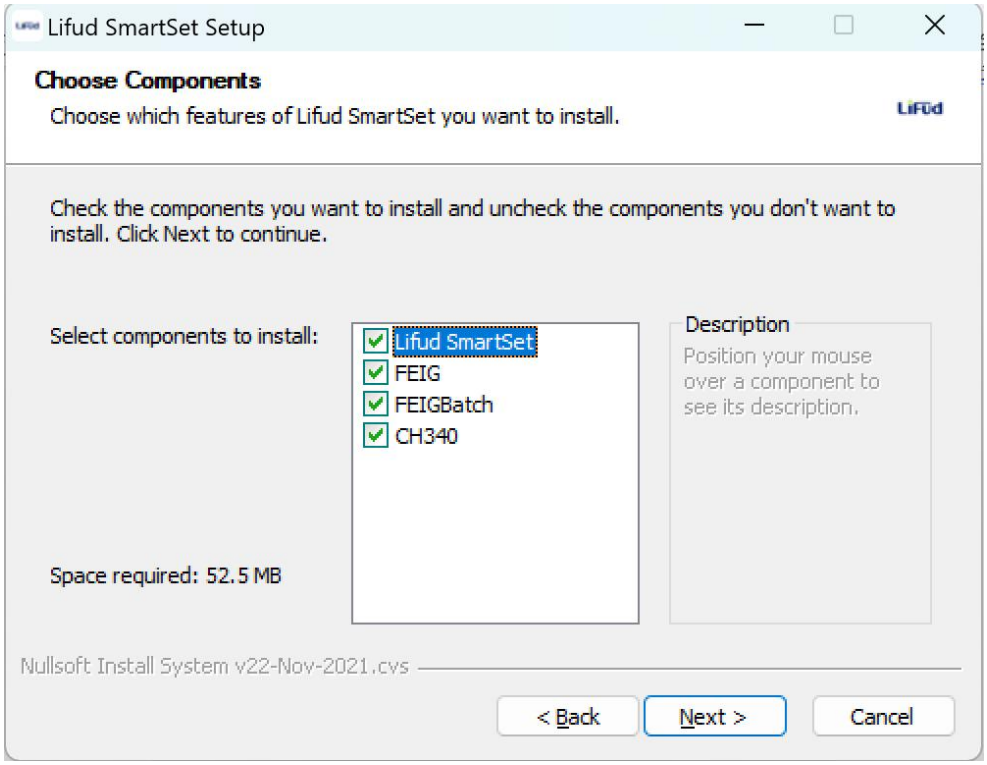
FEIG: FEIG's NFC desktop programmer driver.

FEIGBatch: FEIG's NFC batch/handheld card reader driver.

CH340: USB-to-serial driver.

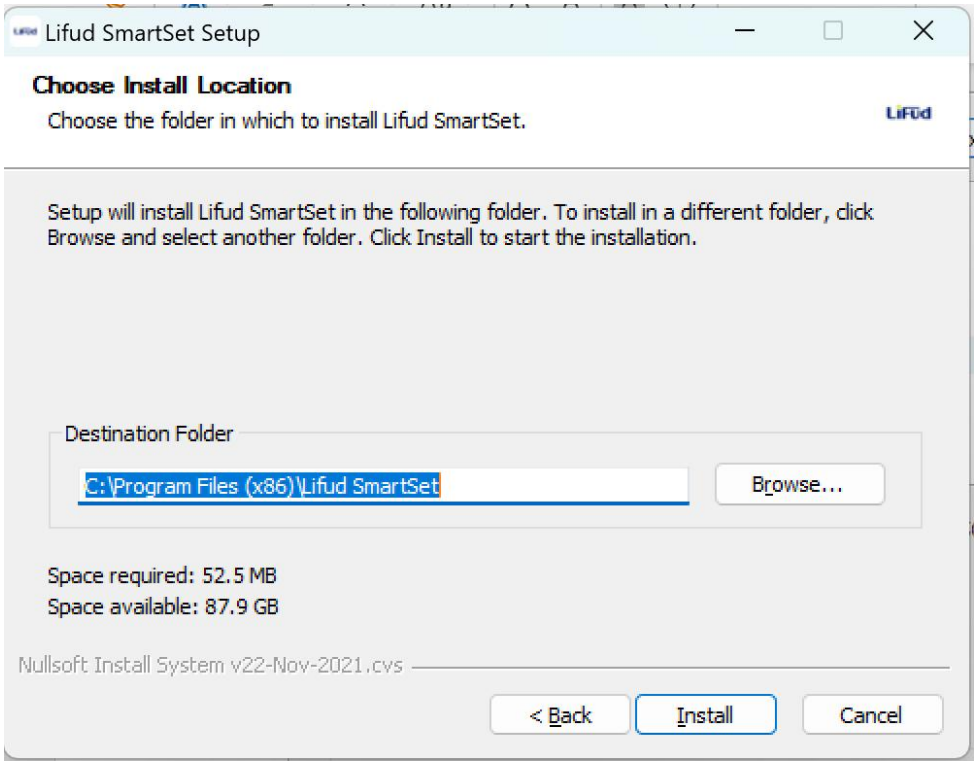
If the driver has been installed on the computer, you can deselect it. You can select the driver to install according to your actual situation. If the driver is not installed, the software cannot work normally.

After selecting the installation components, click **"Next".**

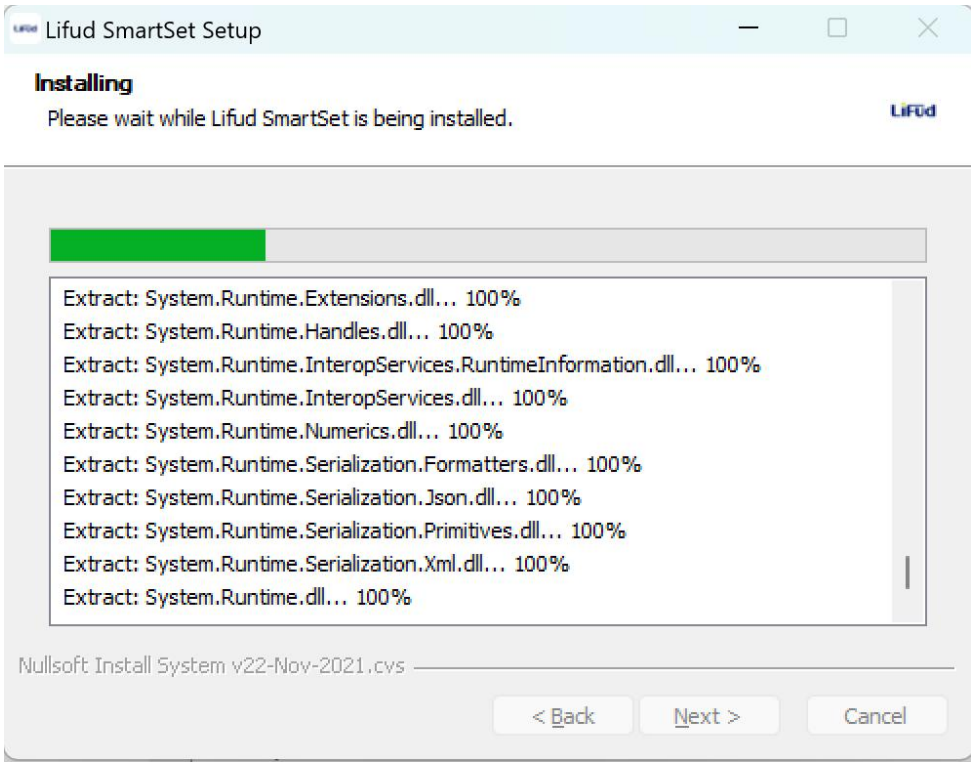


⑤ Select the destination folder

Click "**Browse"** to change the destination folder.

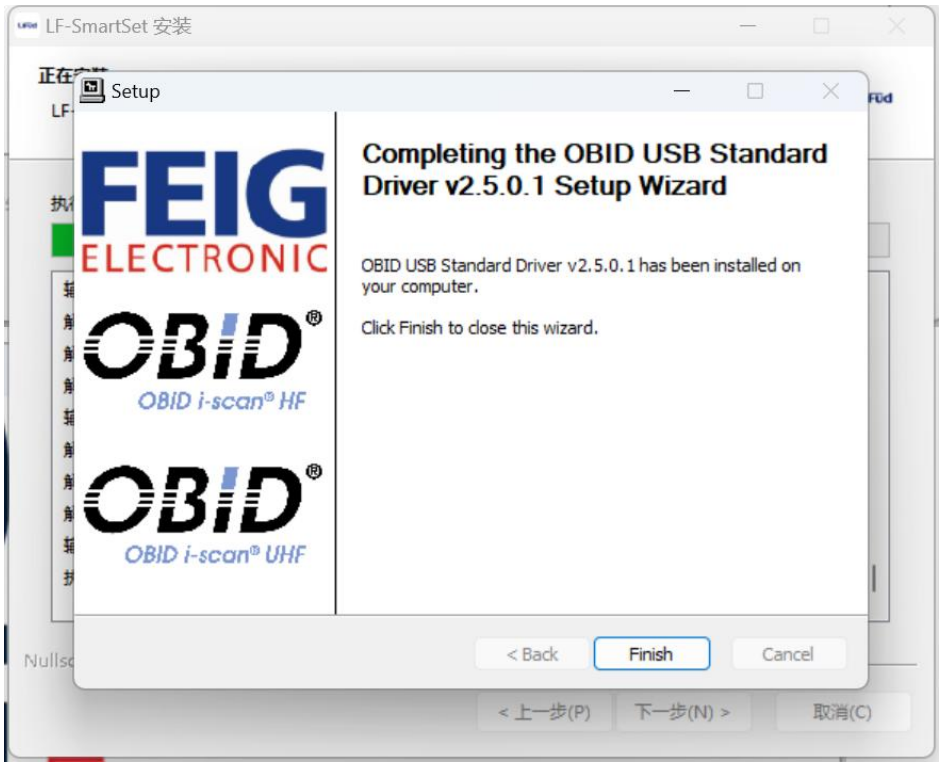


Click **“Install”** and install the software and drivers as prompted.



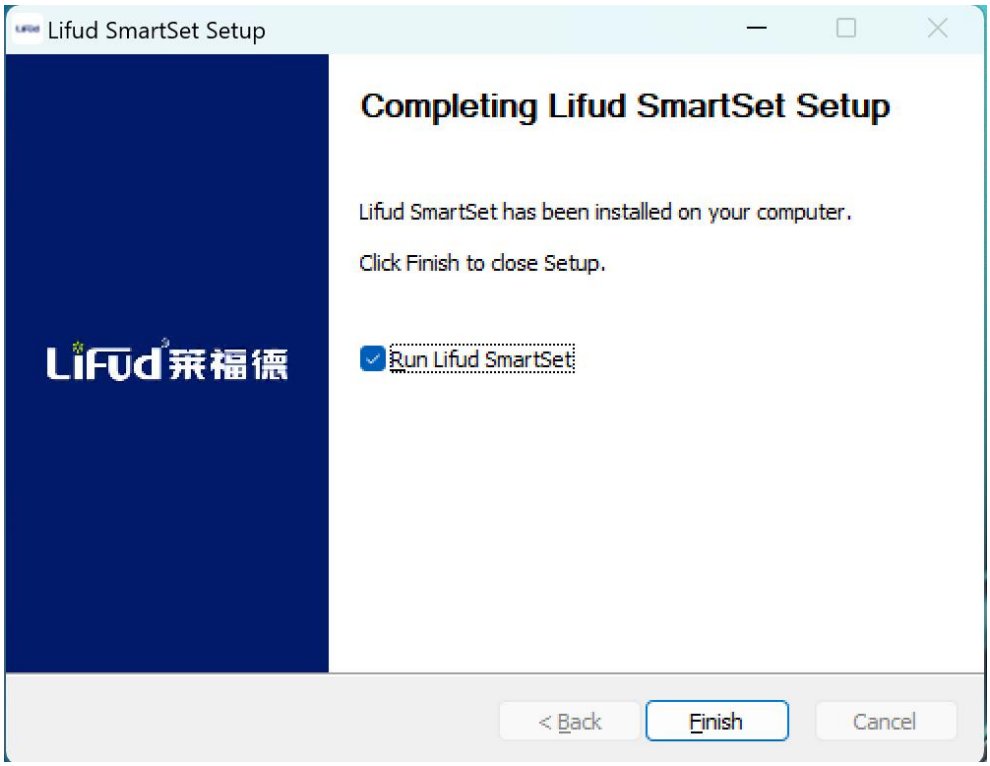
⑥ Install the FEIG driver

⑦ Install the FEIGBatch driver



Click **“Finish”**, and the CH340 driver will be automatically installed.

When the installation is complete, click **“Finish”** to run the software, while the desktop will generate a shortcut.



The software shortcut is as follows.

3. Connect to the device

3.1 NFC device connection

When using the NFC programmer to program the driver parameters, the antenna of the NFC driver should be in a parallel position with the antenna of the NFC programmer, and the driver should not be allowed to operate with power on. The driver must be powered off and fully discharged before it can read and write normally.

PC software NFC programmer NFC driver

The driver is placed as follows.

NFC desktop programmer **NFC batch programmer**

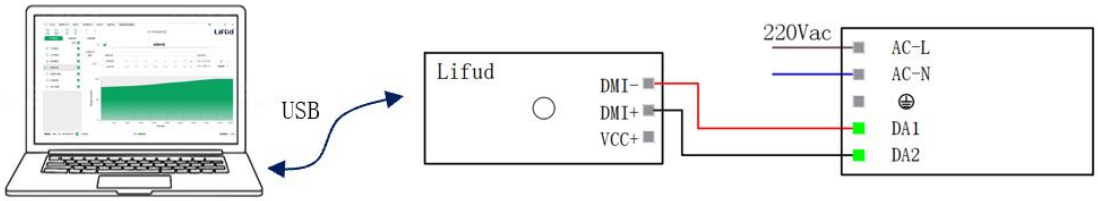
3.2 Lifud programmer connection

The Lifud programmer is connected to the computer through the USB data cable, and connected to the LED driver through the wire.

PC software Lifud programmer LED driver

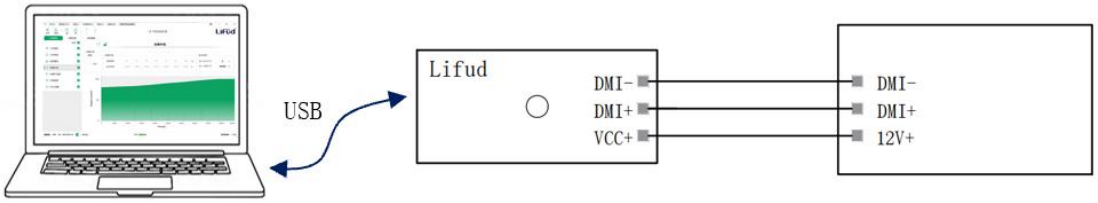
All the LED drivers that support Lifud programmer in our company can use LF-SCS080C programmer. Because of different product types, the wiring connecting the Lifud programmer to the LED driver will be different. Please follow the wiring instructions as specified in the product specification.

3.2.1 LED driver wiring for DALI series



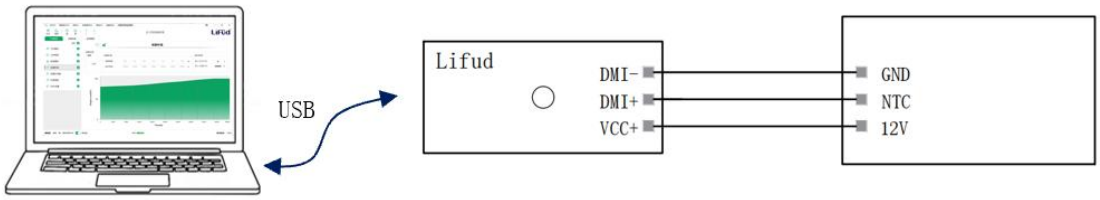
Note: When using the Lifud programmer to program the DALI driver parameters, the driver must be connected to AC, so that it can read and write normally. When programming the D4i driver, it is necessary to turn off the DALI bus power supply function.

3.2.2 LED driver wiring for high power series



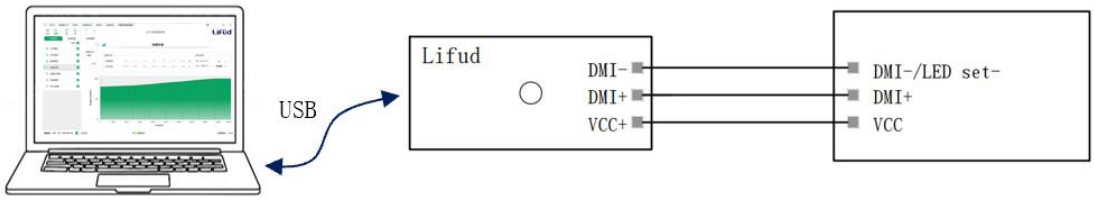
Note: When using the Lifud programmer to program the high power 0-10V driver parameters, it can read and write normally before the LED driver is connected to AC.

3.2.3 LED driver wiring for GMD-YN series



Note: When using the Lifud programmer to program the LED driver parameters of GMD-YN series, it can read and write normally before the LED driver is connected to AC.

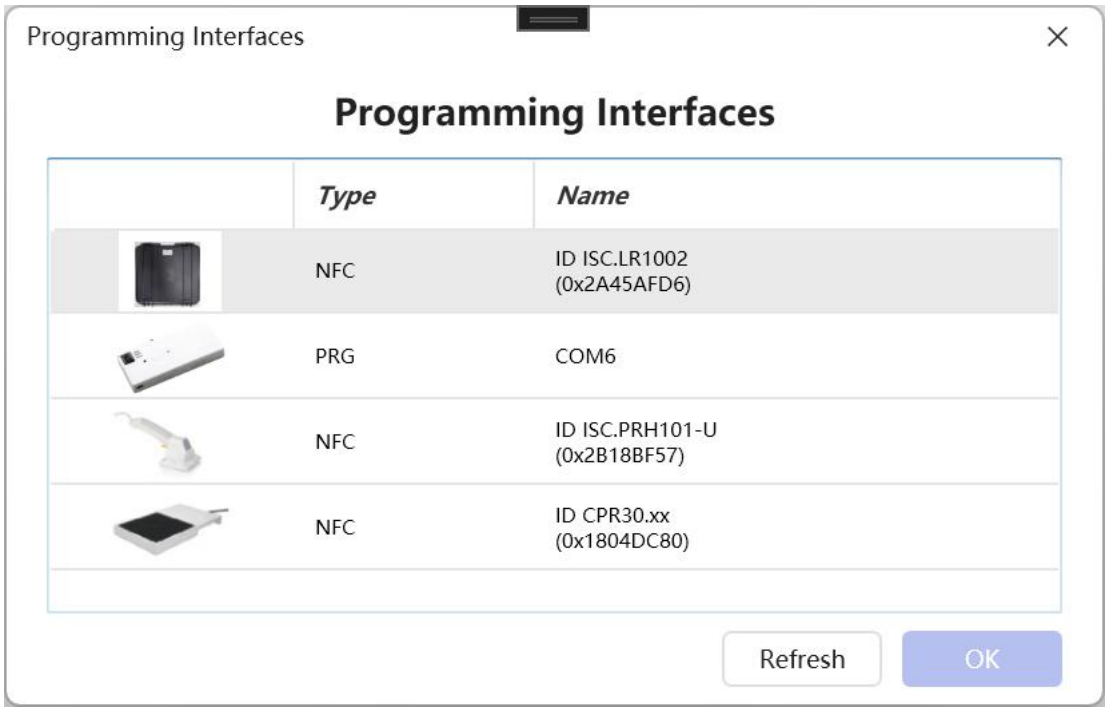
3.2.4 LED Driver wiring for ACD-C series



Note: When using the Lifud programmer to program the LED driver parameters of ACD-C series, it can read and write normally before the LED driver is connected to AC.

3.3 Select the programming interfaces

Open the software and click “Programming Interfaces” in the menu bar to see the programmer devices your computer is connected to.



Type: programmer type, NFC, and Lifud programmer (PRG).

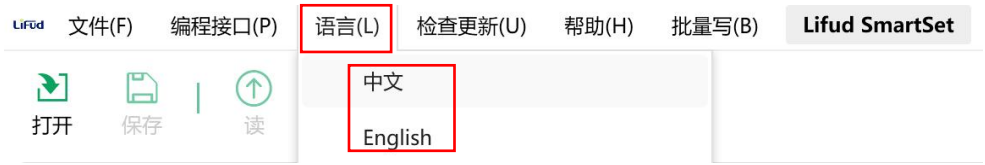
Name: the ID of the NFC programmer. PRG is the corresponding COM port.

Refresh: refresh the list of programmers.

OK: click the programmer you need, and then click “OK” to read and write data with the programmer you have chosen.

3.4 Language switch

After opening the software, click “Language” to switch between Chinese and English.



Click “Chinese” to switch to the Chinese interface, and click “English” to switch to the English interface.

4. Software operation

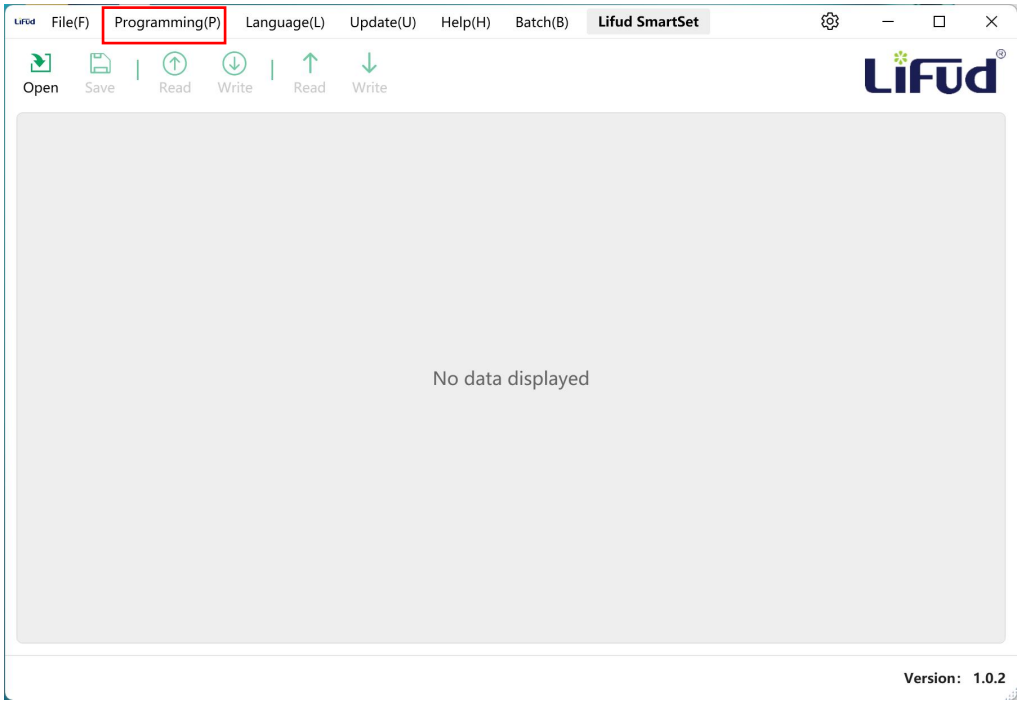
4.1 NFC single programming

The steps for NFC single programming are as follows:

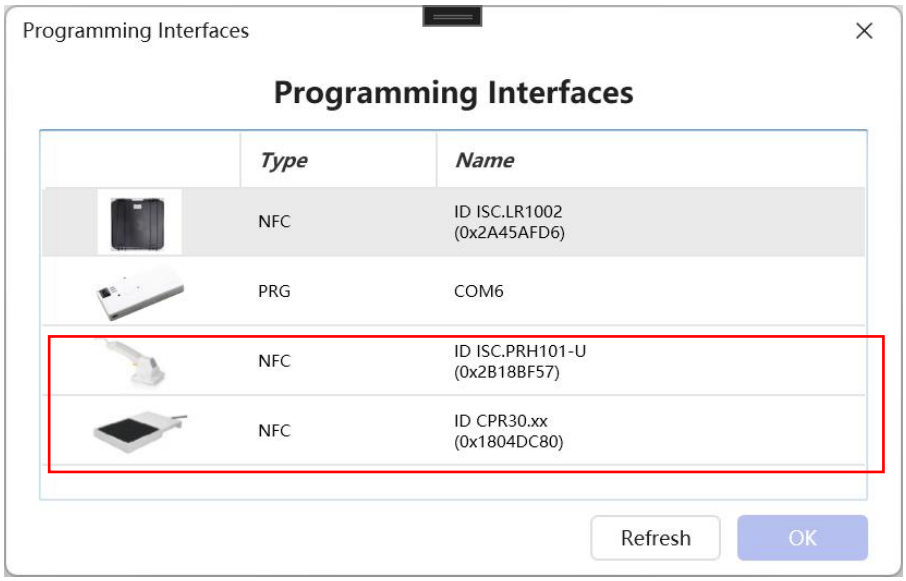
Double click to open the software -- select programming interface -- read LED driver parameters -- change LED driver parameters -- write LED driver parameters

① Double click 

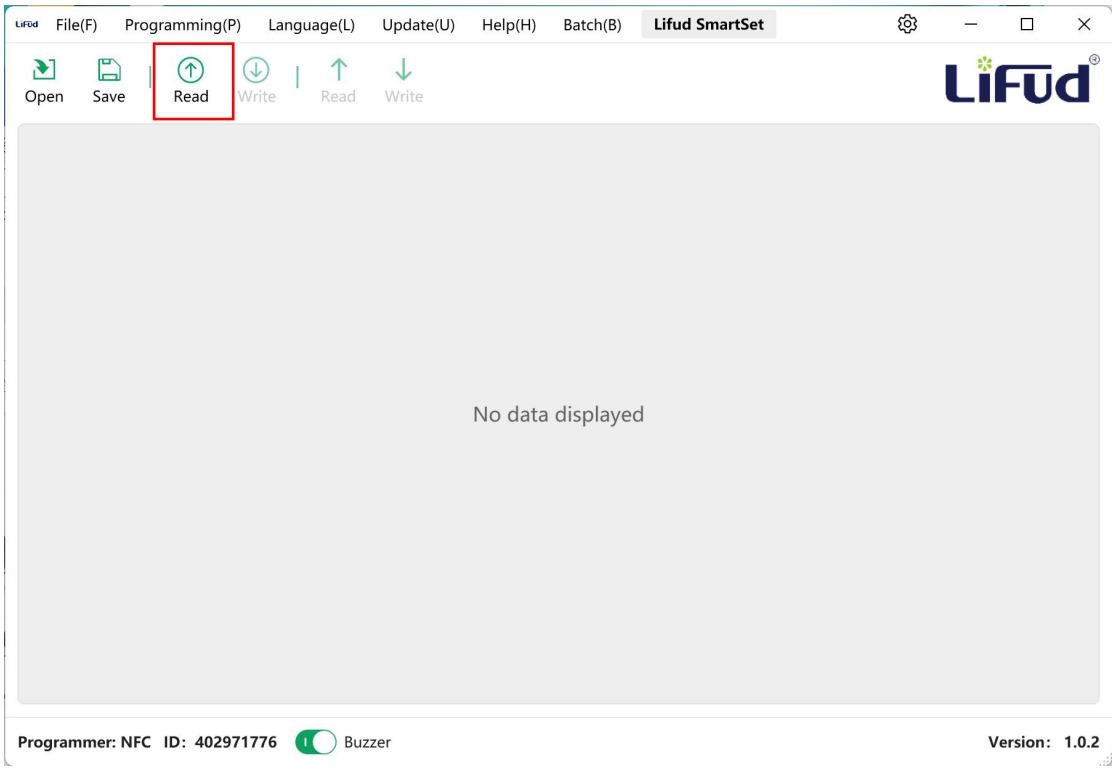
to open the software.



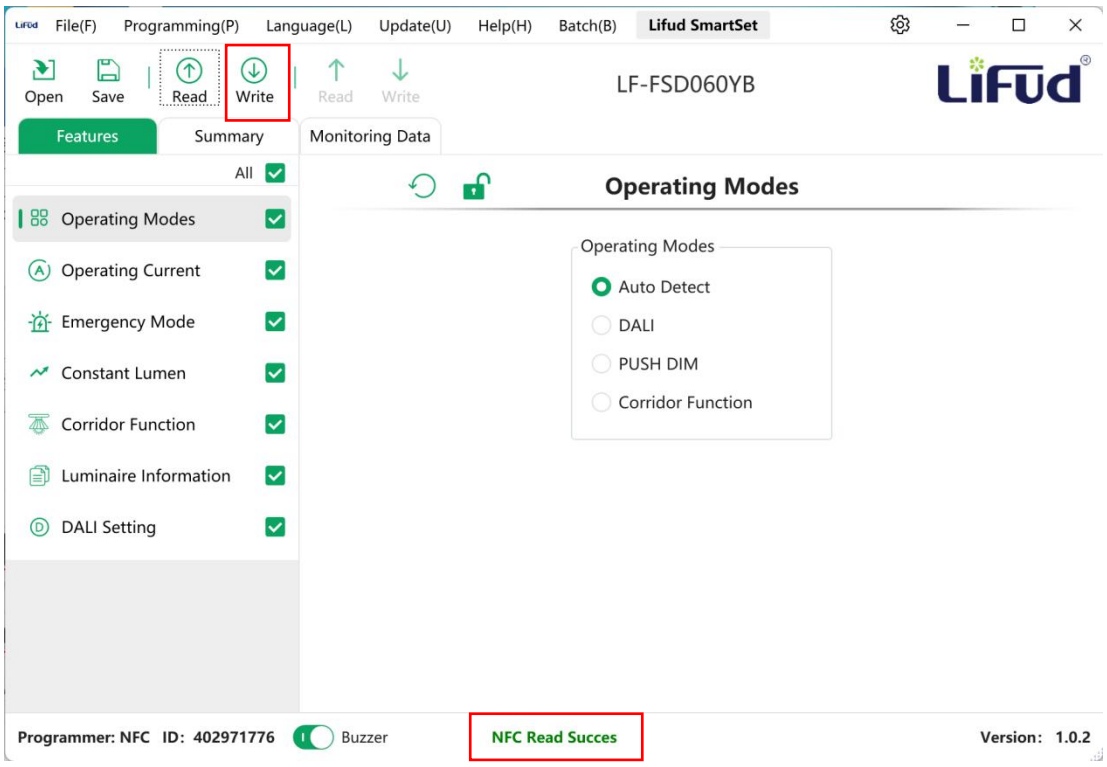
② Click **"Programming Interfaces"** on the menu bar to select the interface. The NFC single programming interface is in the red box as shown below.



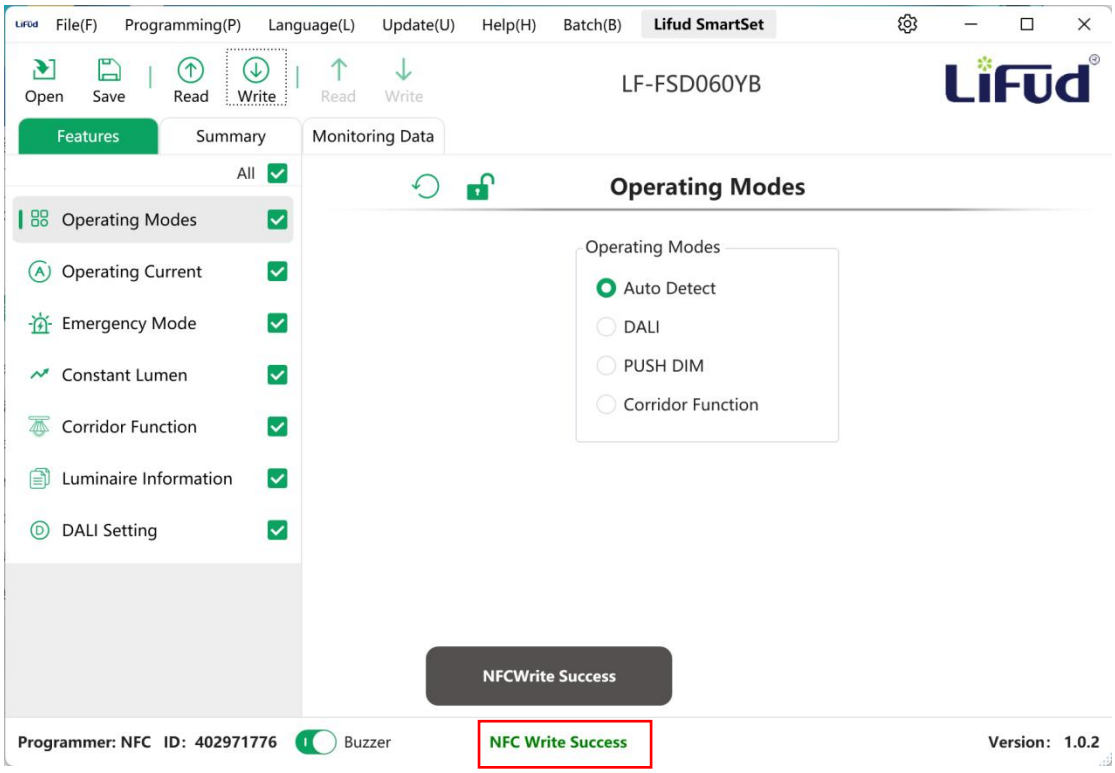
After selecting the programming interface, the following figure will be displayed.



③ Click **“Read”** in the red box above to display the data as shown below.



④ After changing the parameters, click “Write” in the red box above**.** After the writing succeeds, the writing success prompt will be displayed as shown below.



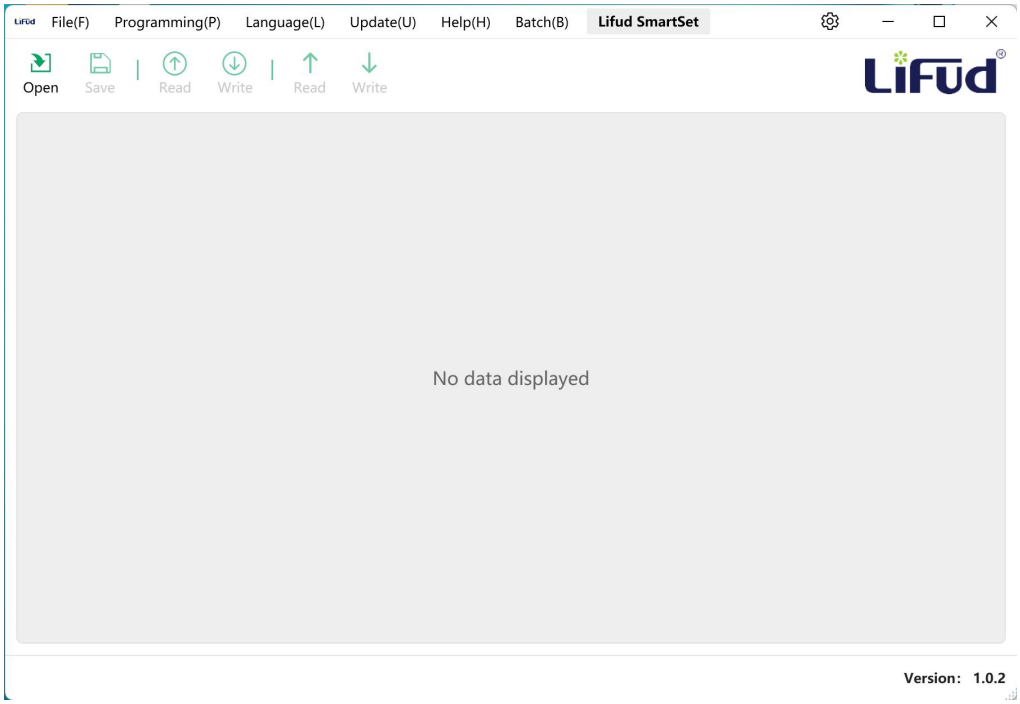
4.2 NFC batch programming

The steps for NFC batch programming are as follows:

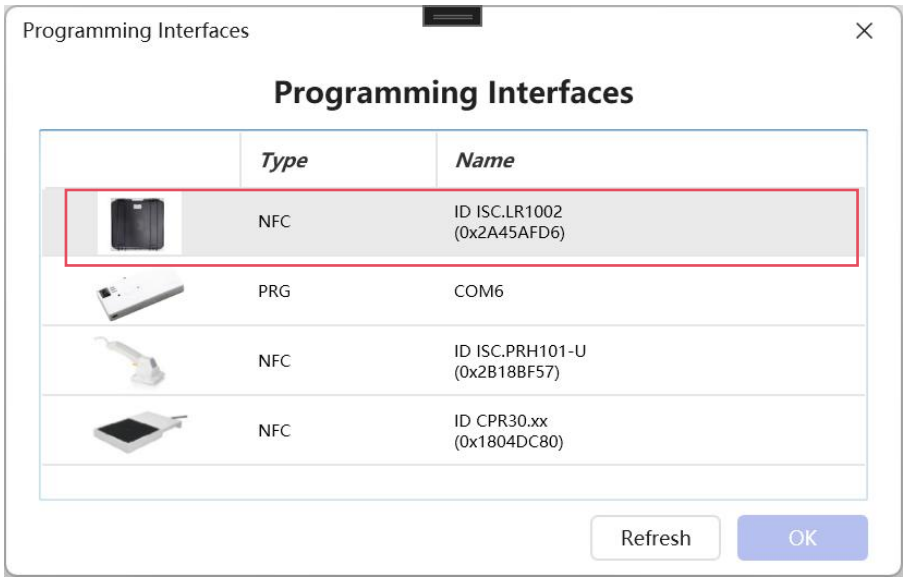
Double click to open the software -- select programming interface -- read LED driver parameters -- change LED driver parameters -- Save . Lifud file -- open the "Batch Write" interface -- import . Lifud file -- batch read -- batch write

① Double click 

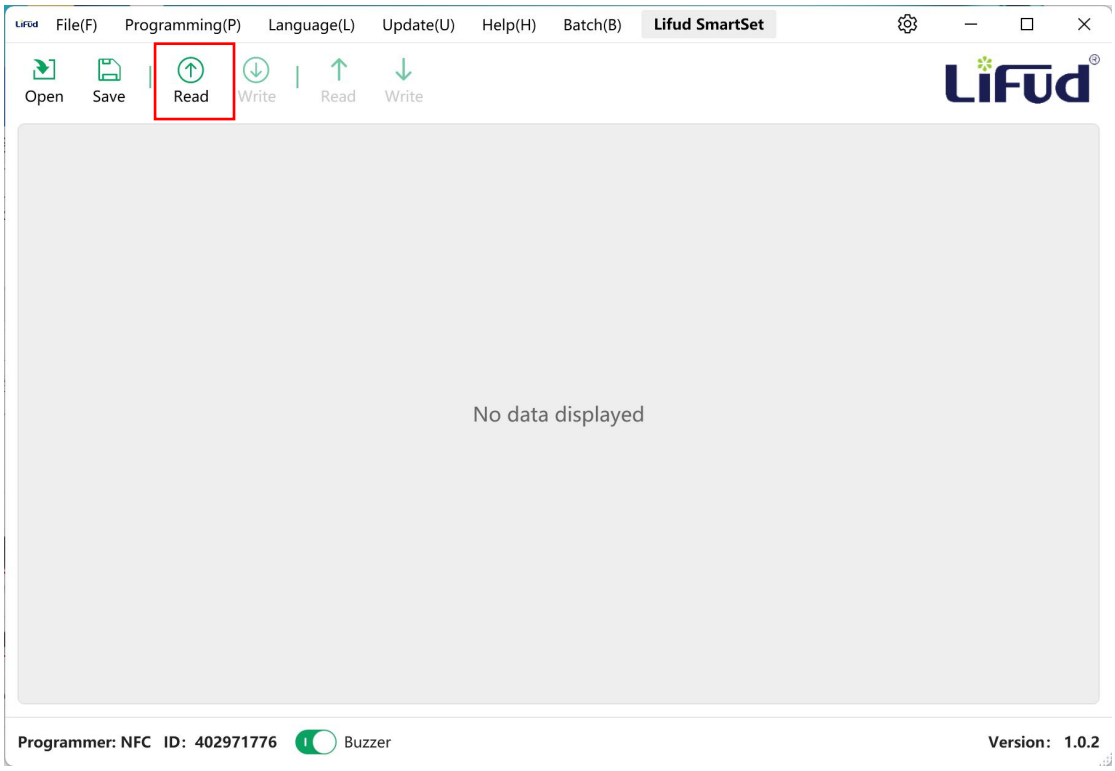
to open the software.



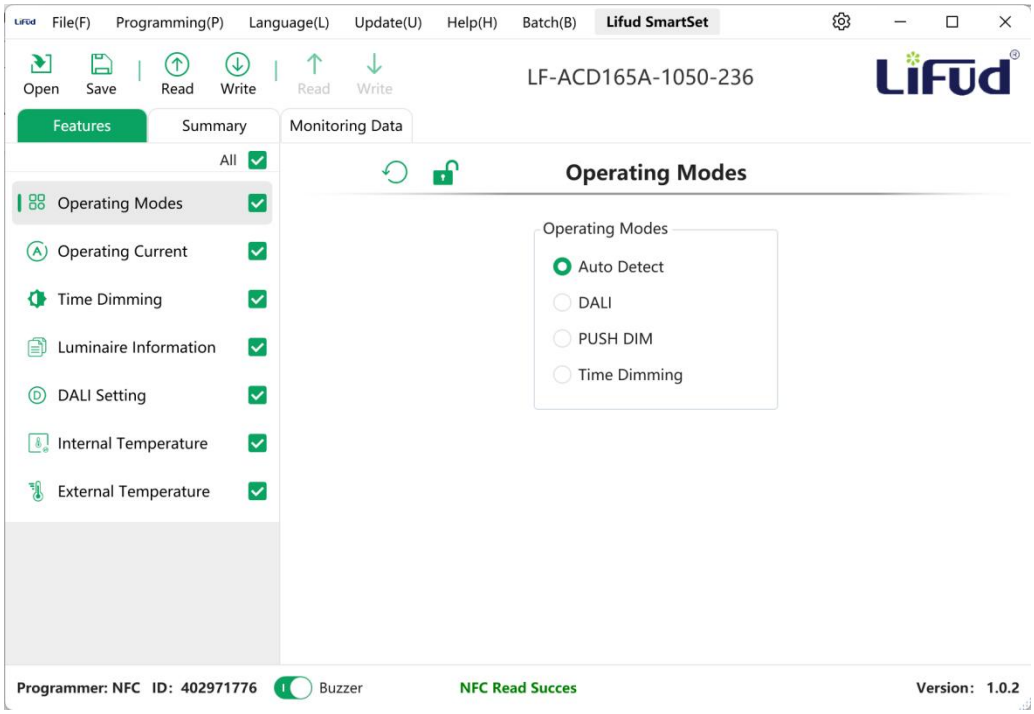
② Click **“Programming Interfaces”** on the menu bar to select the interface. The NFC batch programming interface is in the red box as shown below.



After selecting the programming interface, the following figure will be displayed.



③ Click **“Read”** in the red box above to display the data as shown below.

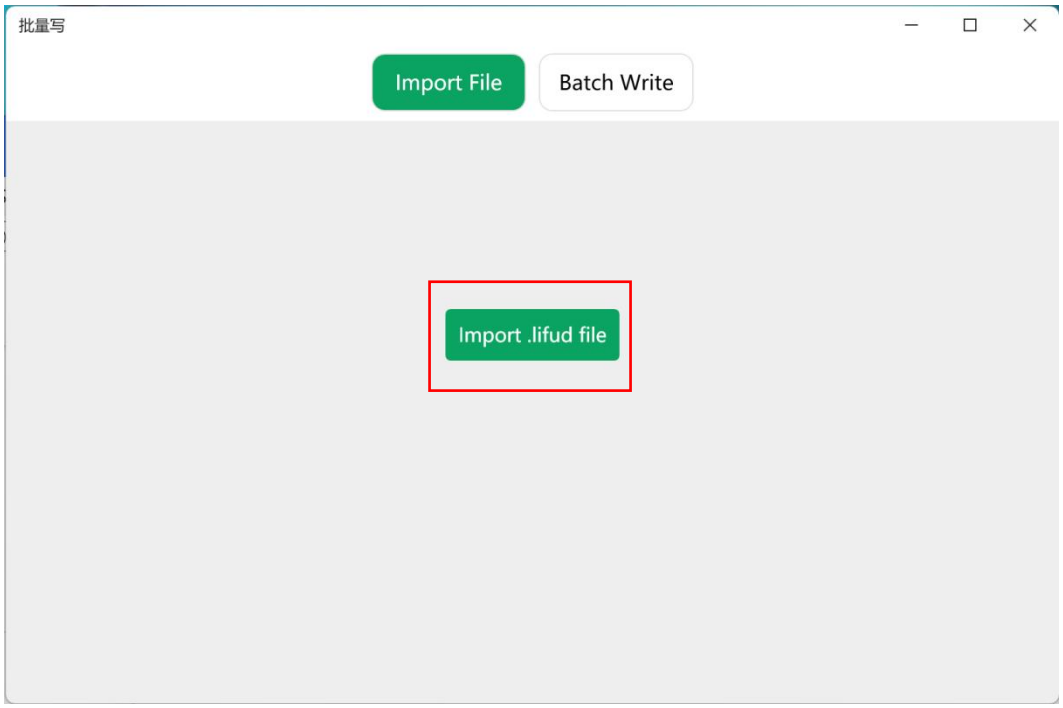


④ Change the LED driver parameters and then click “Save” to generate a .Lifud file, as follows.

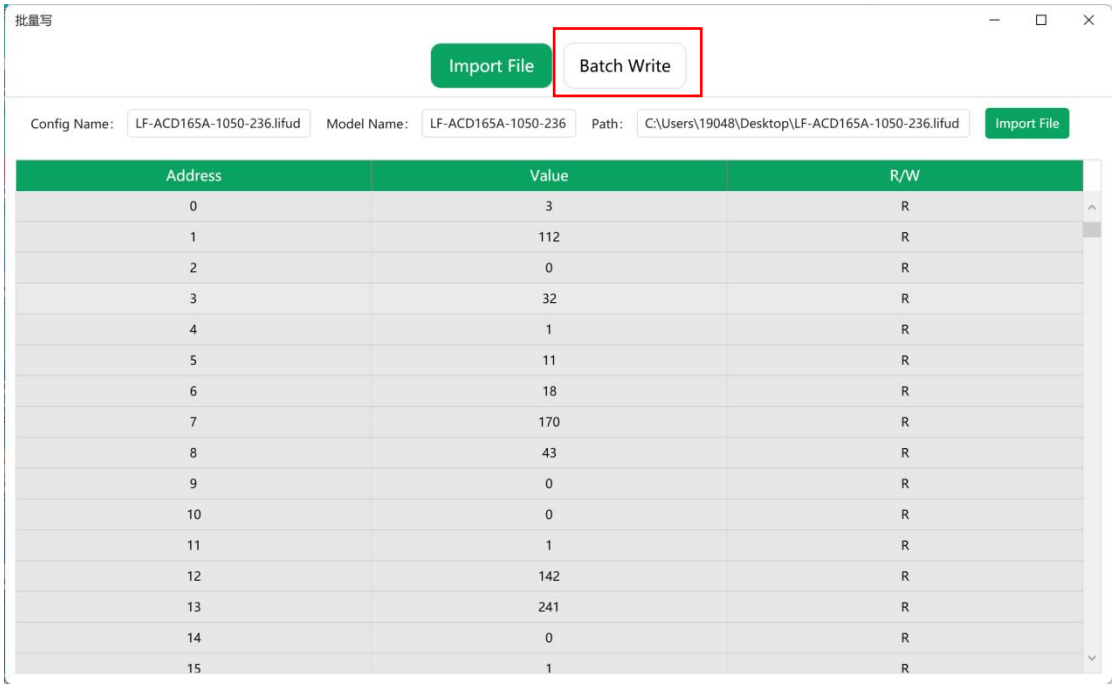
LF-ACD165A-1050-236.lifud

⑤ Click **“Batch Write”** in the menu bar to enter the batch programming

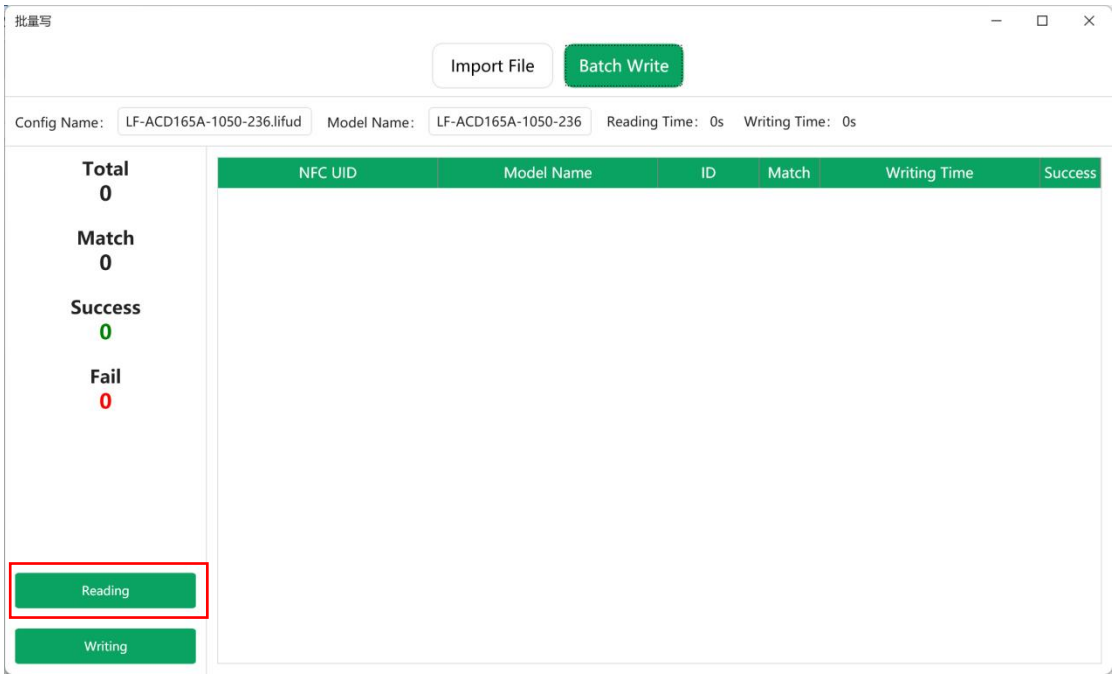
interface, as shown below.



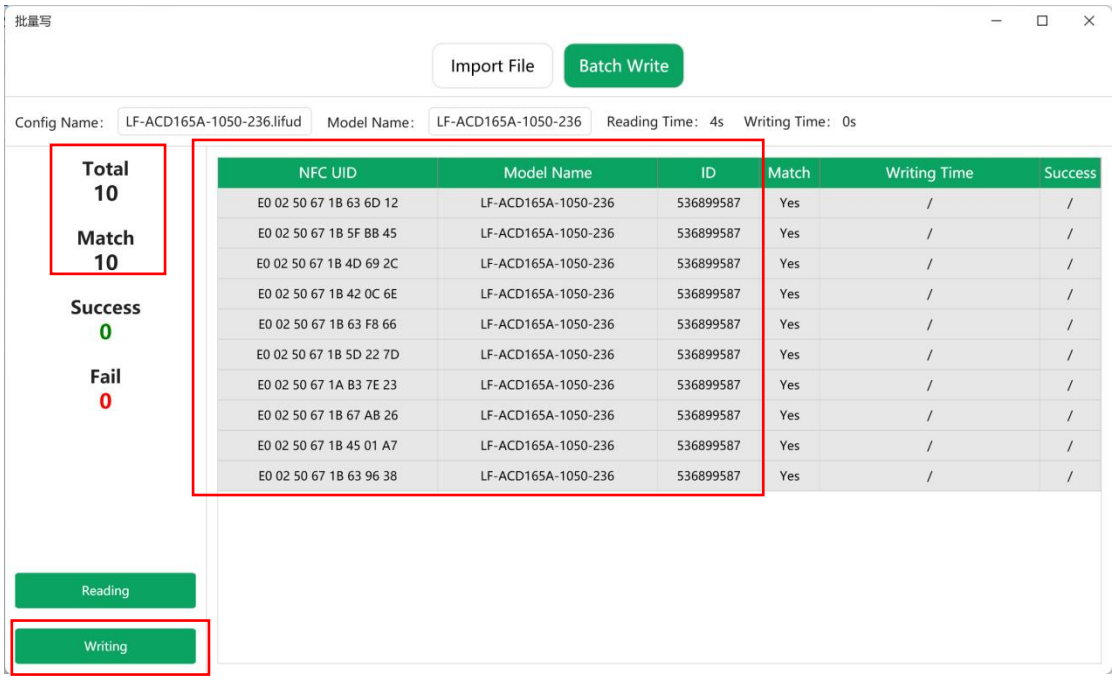
Click **“Import .lifud file” to import the saved file** LF-ACD165A-1050-236.lifud **.** After importing the file, the interface will display the following picture, and the content under this interface cannot be changed.



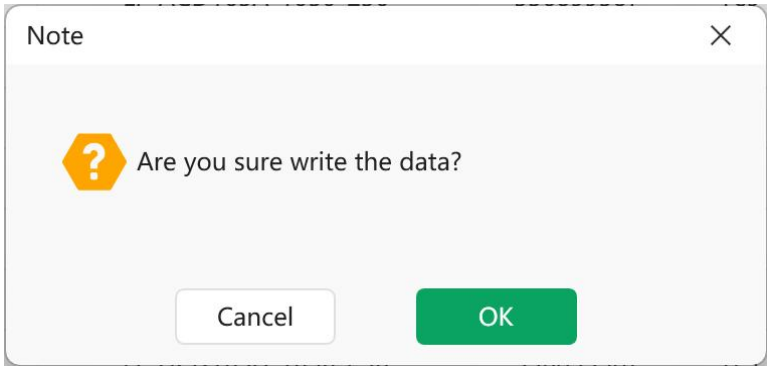
⑥ Click **“Batch write”** to enter the interface of batch reading and writing.



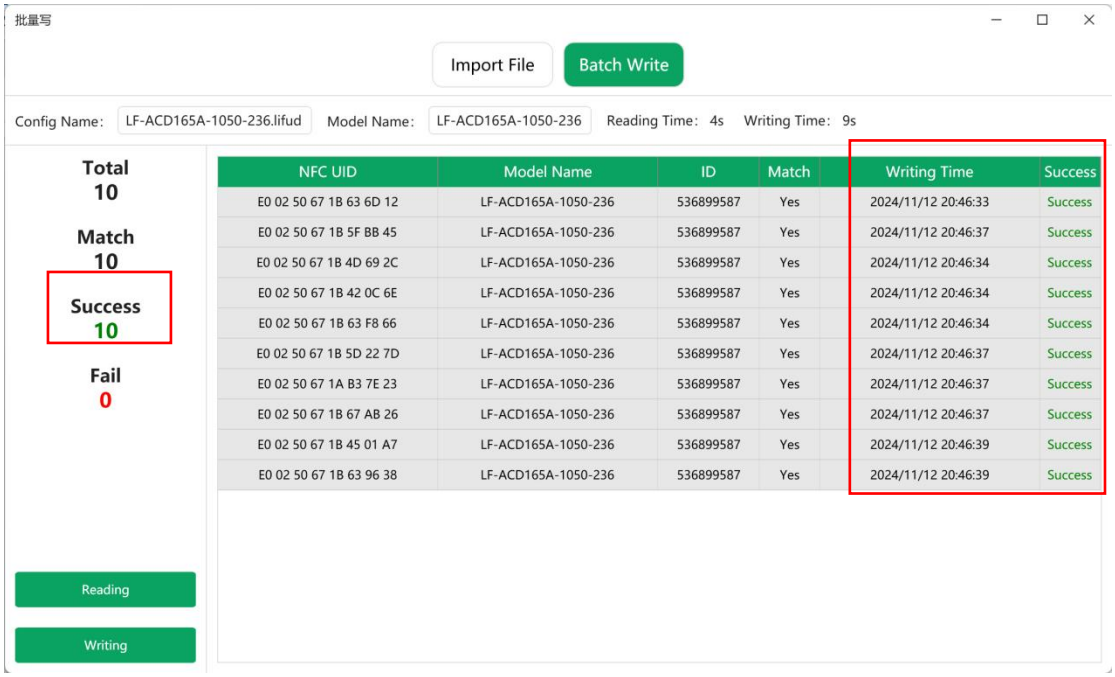
Batch reading: click **"Reading"** in the batch interface. After reading, the interface will show the total number of identified devices, the total number of match, writing time, NFC UID driver, model name, driver ID, and the matching status.



⑦ **Batch writing:** if the identified number is consistent with the actual number, you can click **"Writing"** to enter the prompt interface.



Click **“OK”** to start batch writing. After all writing is completed, the number of successful writing will be displayed, and the status of each model will show “Success”.



The subsequent LED driver also follows the above batch reading and writing steps.

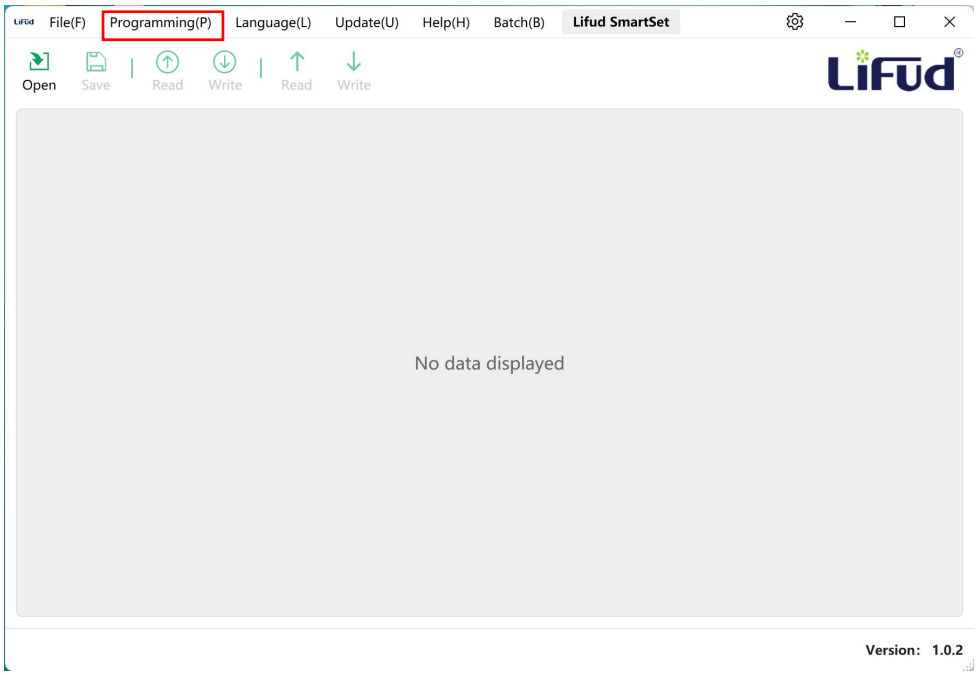
4.3 Lifud programmer programming LED driver

Lifud programmer programming LED driver operation steps are as follows:

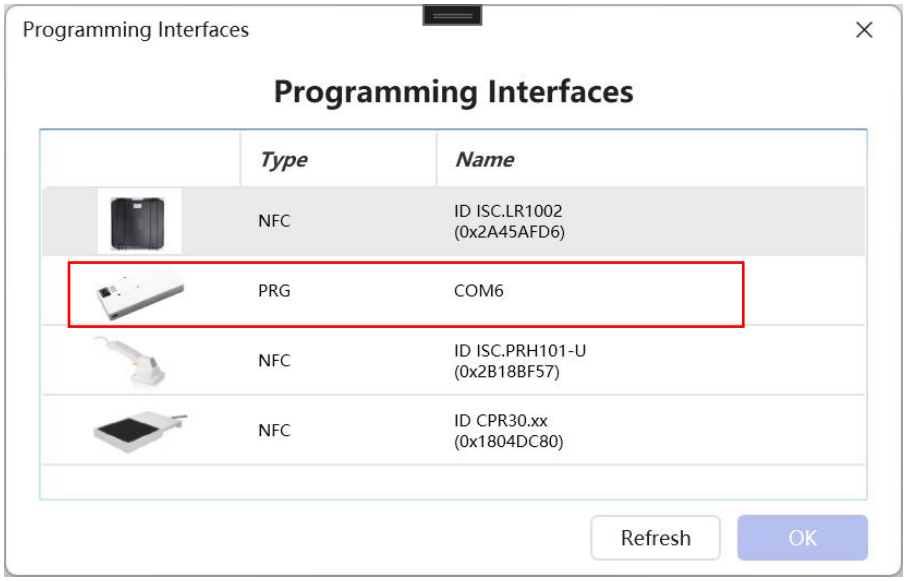
Double click to open the software -- select programming interface -- read LED driver parameters -- change LED driver parameters -- write LED driver parameters -- write to Lifud programmer

① **Double click** 

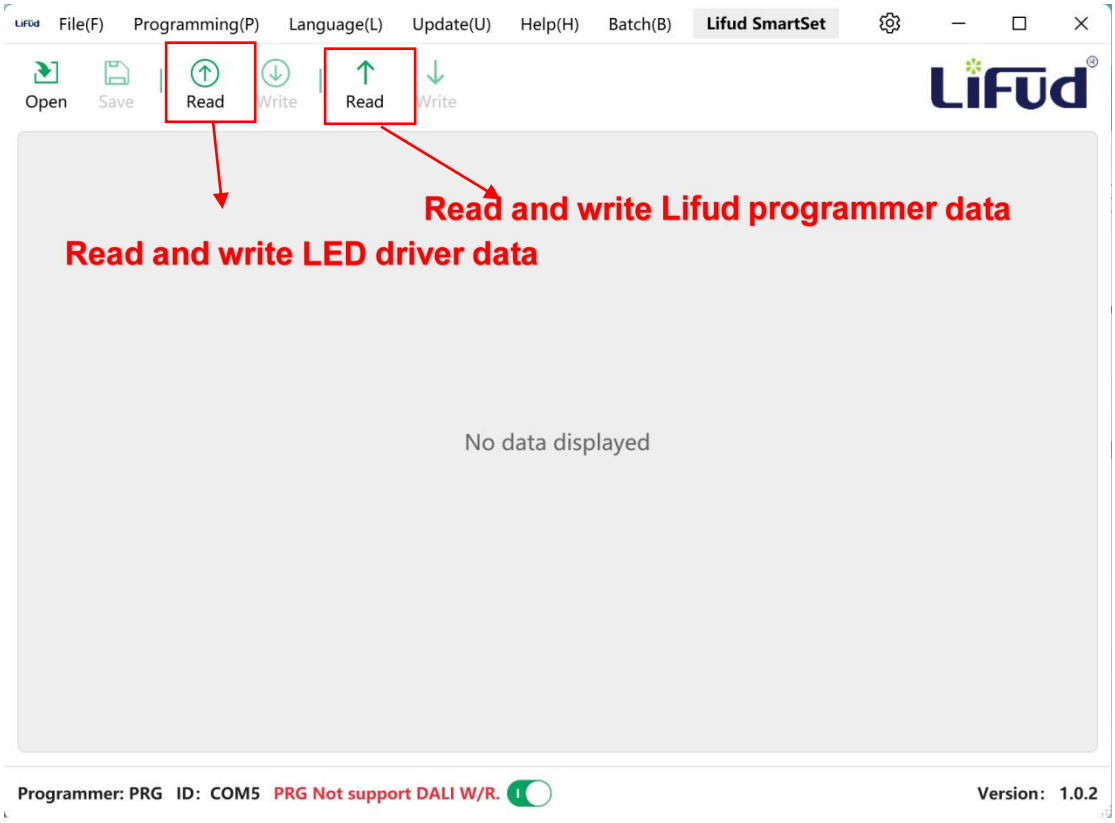
to open the software.



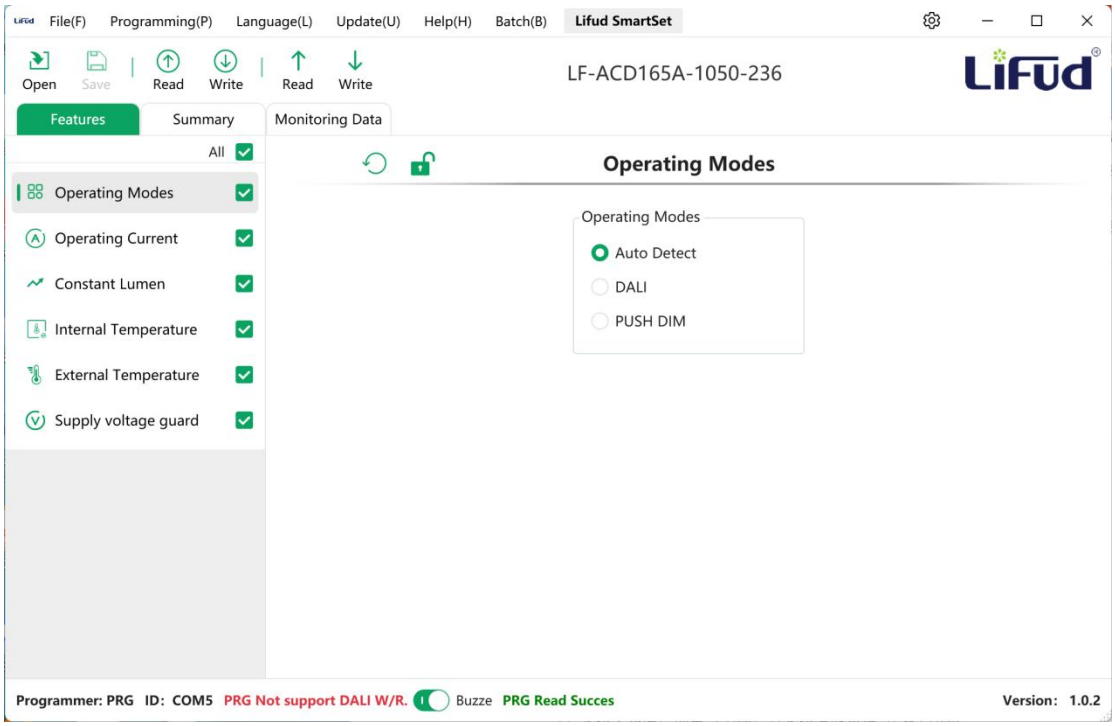
② Click **"Programming Interfaces"** on the menu bar to select the interface, and the Lifud programmer interface is shown below in the red box.



③ After selecting the programming interface, the following figure will be displayed.



④ Click **"Read"** to read the LED driver parameters;

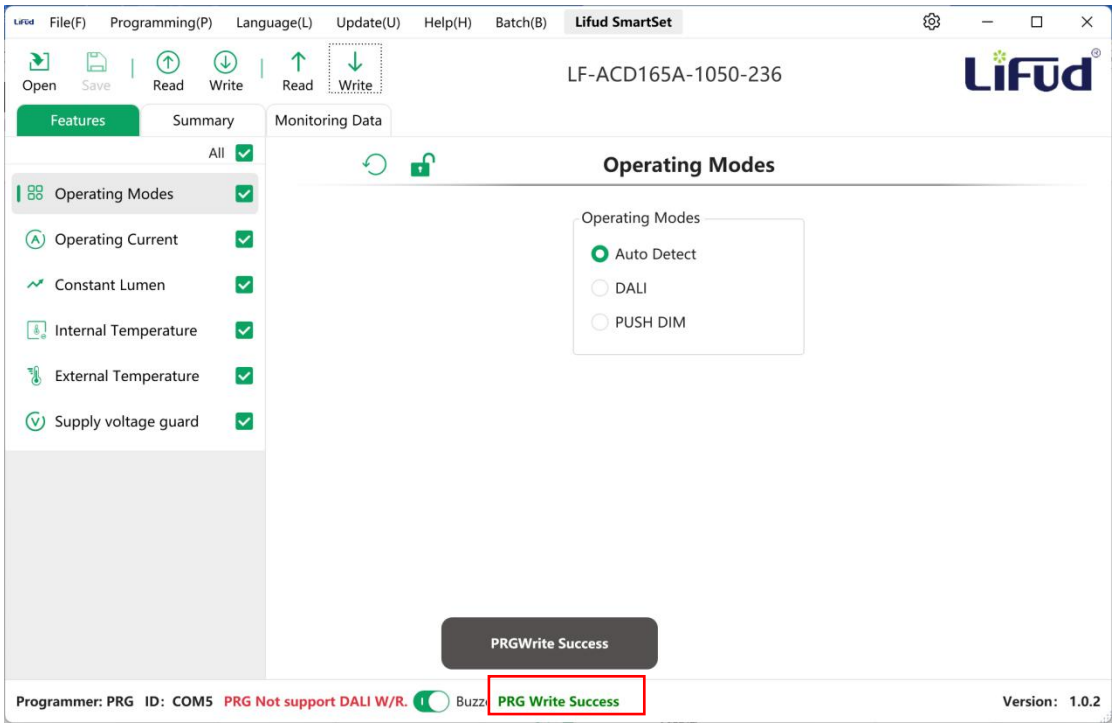


⑤ After changing the parameters, click "Write" to write the changed data to the LED driver;

⑥ Click "Write" to write the changed parameters to the Lifud parameter, which

can be offline programmed later.

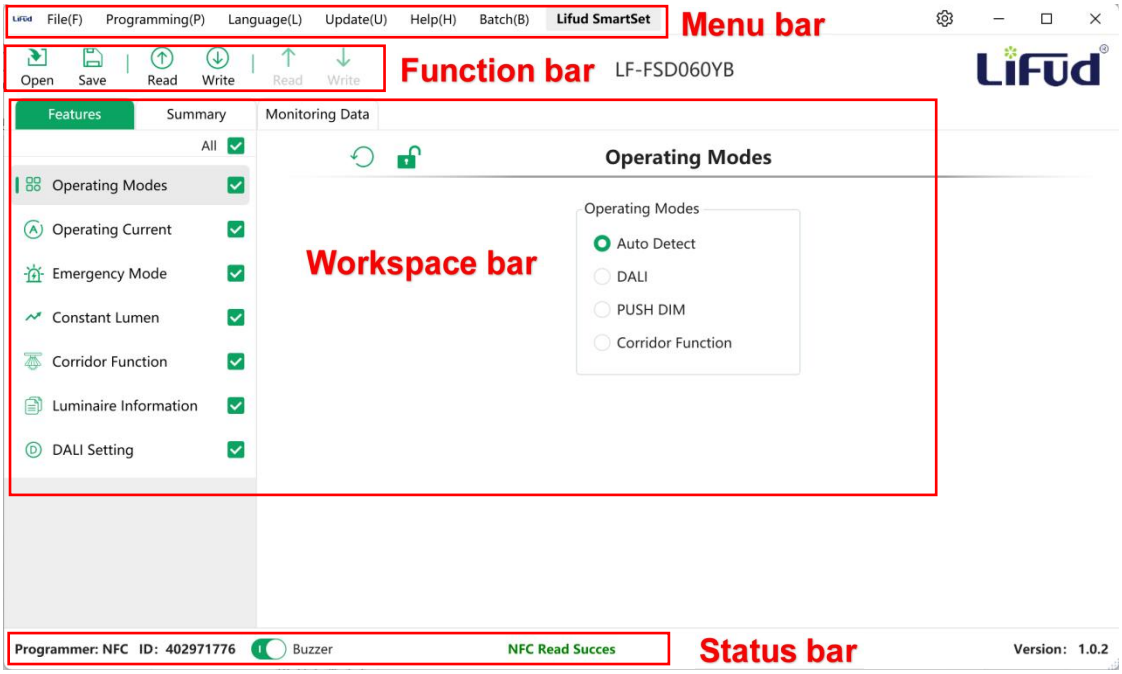
After the writing is successful, PRG is successfully written, as shown in the following picture.



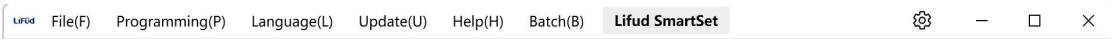
5. Software function introduction

5.1 Software interface

The software interface includes menu bar, function bar, workspace bar and status bar.



5.1.1 Menu bar



File (F) : open and save the file.

Programming (P) : select different programmers for reading and writing.

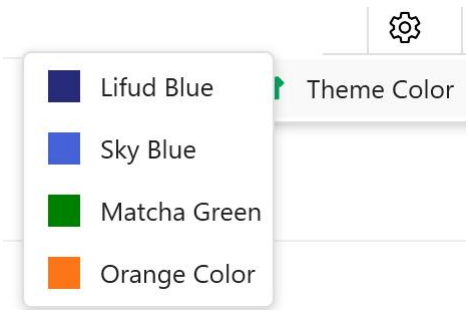
Language (L) : switch software language, supporting Chinese, English and Russian.

Update (U) : update software remotely.

Help (H) : user manual and About Us.

Batch (B) : open batch reading and writing.

: select theme color, 4 kinds of color can be selected.



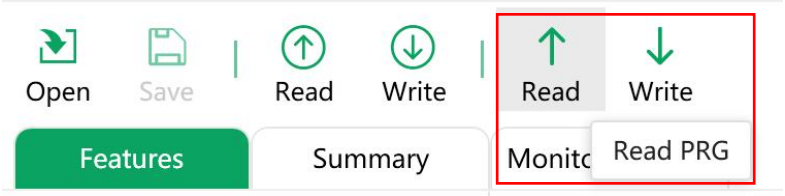
5.1.2 Function bar

Open: open . lifud file.

Save: save the interface data as a . lifud file.

Read: read LED driver data.

Write: write LED driver data.



Read: read Lifud programmer data.

Write: write Lifud programmer data.

5.1.3 Status bar

Programmer: show the programmer type and ID.

Buzzer: turn the programmer sound off or on.

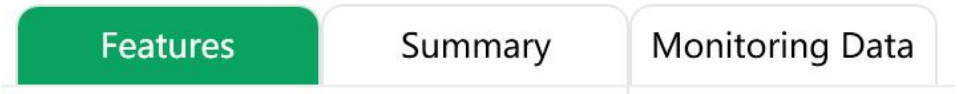
indicates to turn on the programmer sound.

indicates to turn off programmer sound.

NFC Read Success: indicate reading and writing status.

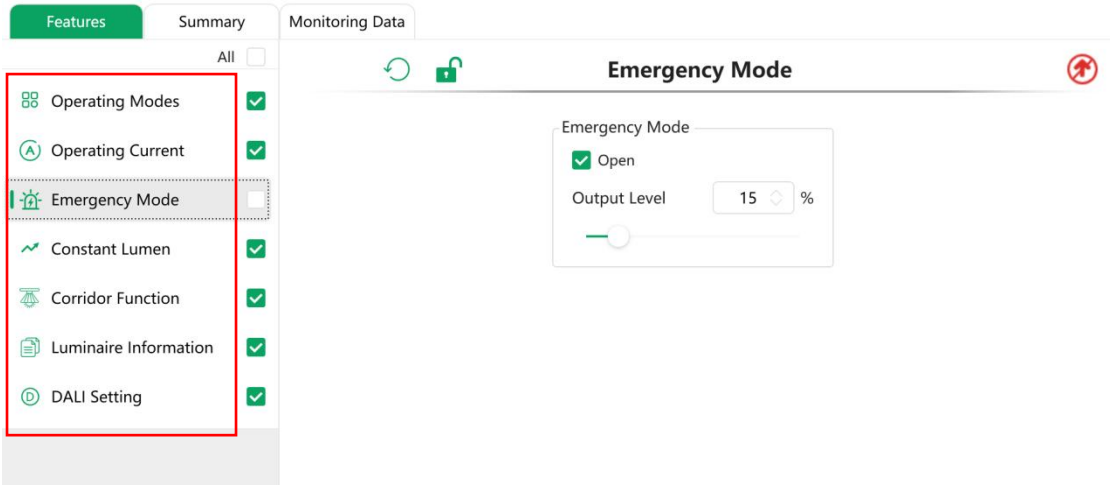
Software version: display the version number of the current software.

5.1.4 Workspace bar



The workspace bar includes features, summary and monitoring data.

① Features



- **Function area:** show programmable functions of the identified drivers. Different drivers support different programmable functions.
- **Function selection:**

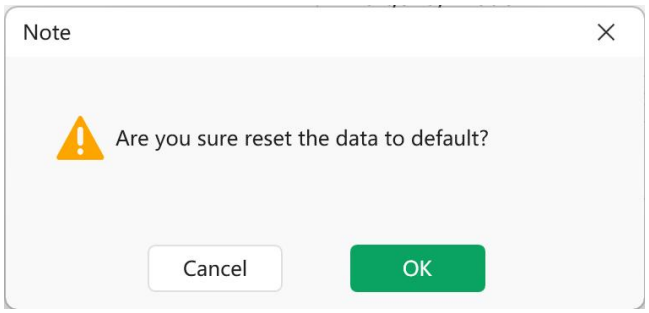
 indicates that this function is selected.

 indicates that this function is not selected. The icon  will be displayed on the interface. Even if this function parameter is changed, the changed data cannot be written to the driver.

All  select all functions.

All deselect all functions.

- **Reset button**: click  to reset the data to default, as prompted in the following picture:

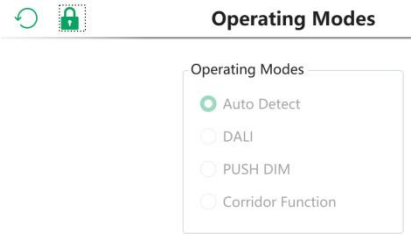


- **Interface lock:**

 **indicates that the parameter editing interface is open for**

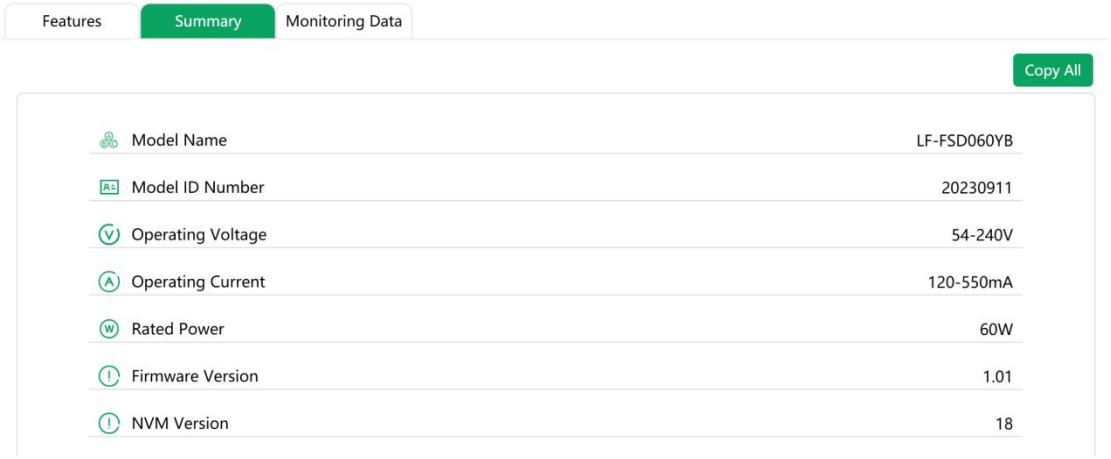
editing.

indicates that the parameter editing interface is not open for editing. The interface is gray as shown in the following figure.



② Summary

Display driver's basic information, and you can click **"Copy All"** to copy all device information.

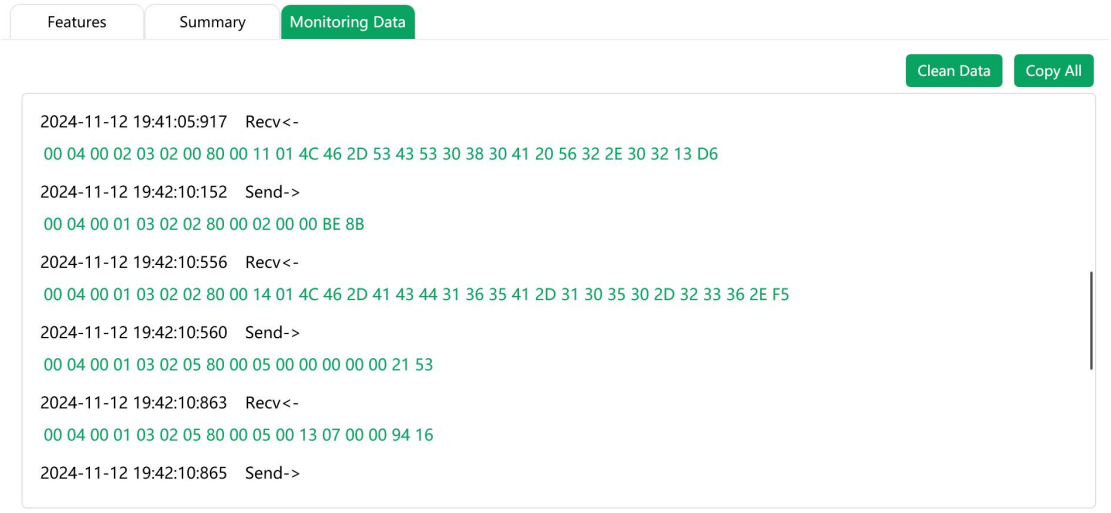


③ Monitoring data

View reading and writing data, Recv<- received data, Send-> data written to the card reader.

Click "Clean Data" to clean all data;

Click "Copy All" to copy all data;



5.2 Function parameter description

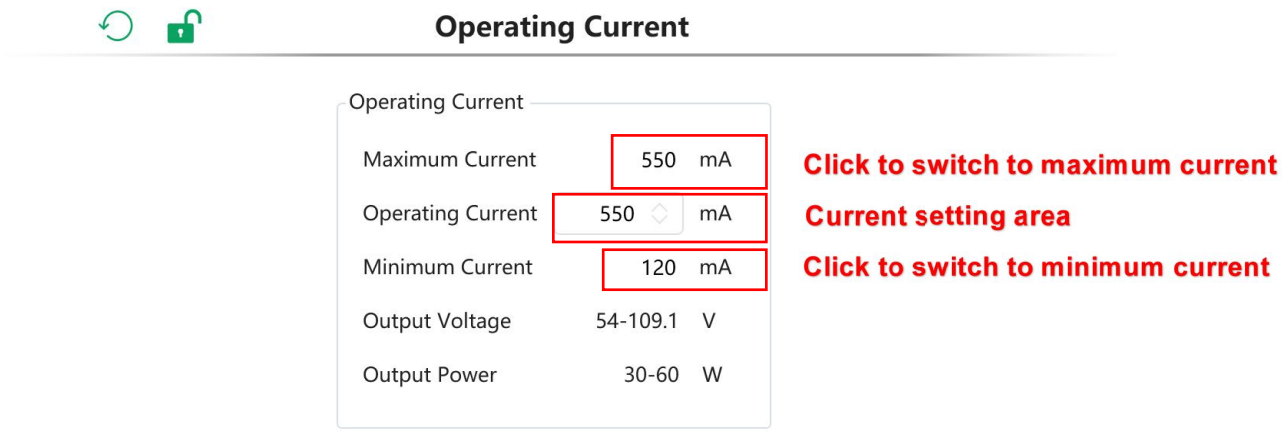
5.2.1 Operating mode

This function is used to set the operating mode of the LED driver. The operating modes supported by different series of LED drivers may be different, including Auto Detect, DALI, PUSH DIM, Corridor Function. Checking “Auto Detect” means that the LED driver can support DALI, PUSH DIM or Corridor Function; checking “DALI” means that the LED driver only supports DALI dimming function, and so on.

Set the appropriate operating mode according to your actual needs.

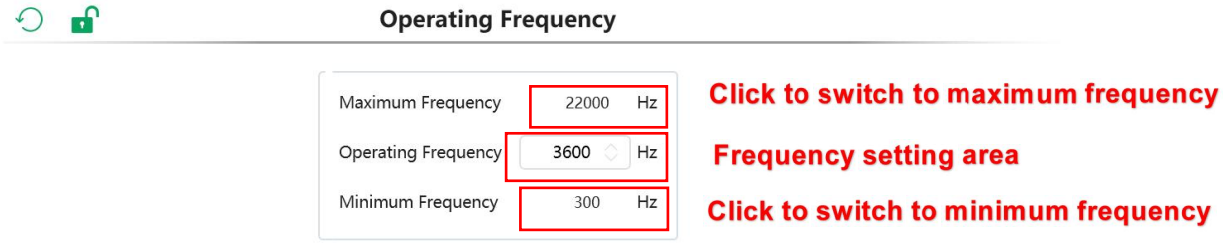
5.2.2 Operating current

Change the output current of the LED driver with the minimum accuracy of 1mA. You can directly input the value, and it will show the output voltage range and output power range corresponding to the current.



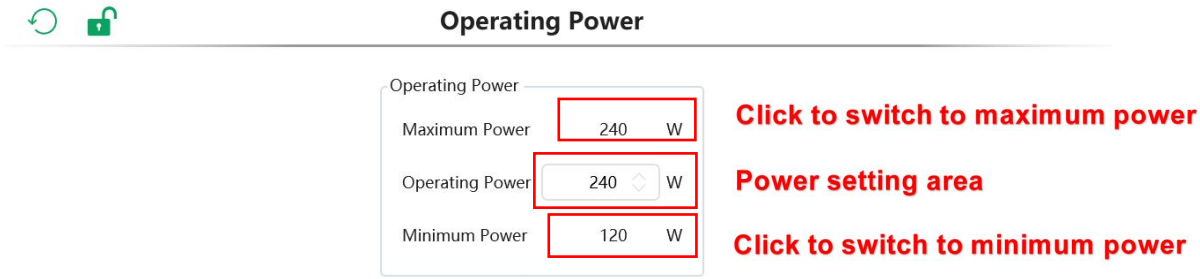
5.2.3 Operating frequency

Change the output frequency of the LED driver, mainly for constant voltage series products, and you can directly input the value.



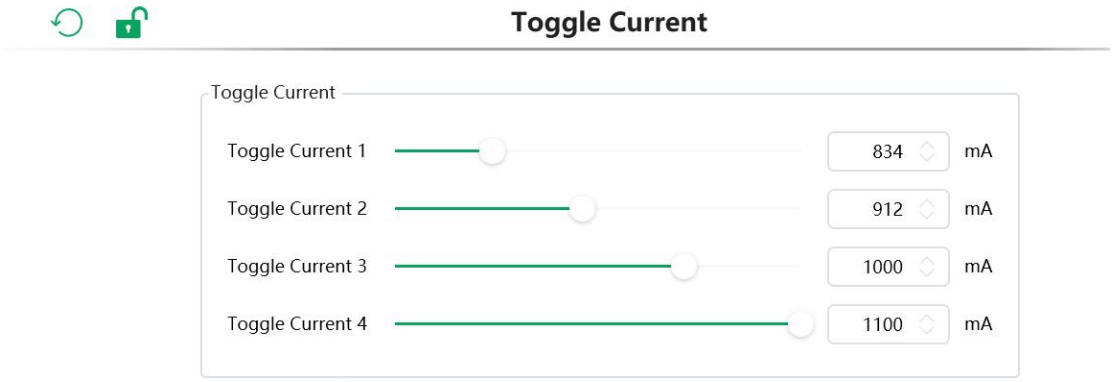
5.2.4 Operating power

Change the output power of the LED driver to output the value directly.



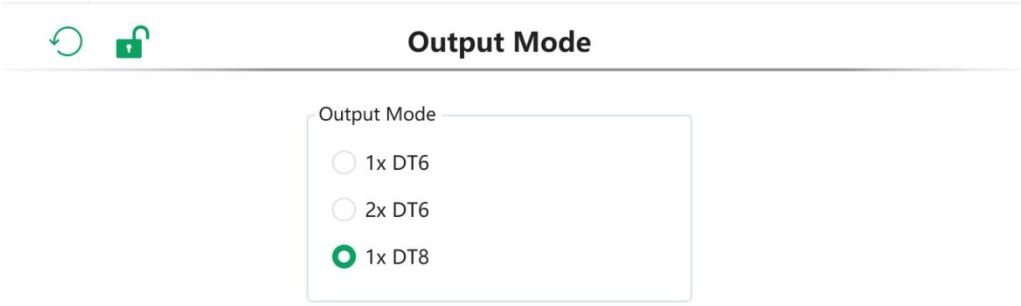
5.2.5 Toggle current

For LED driver that supports toggle to change the current. Three toggle current levels are currently supported.



5.2.6 Output mode

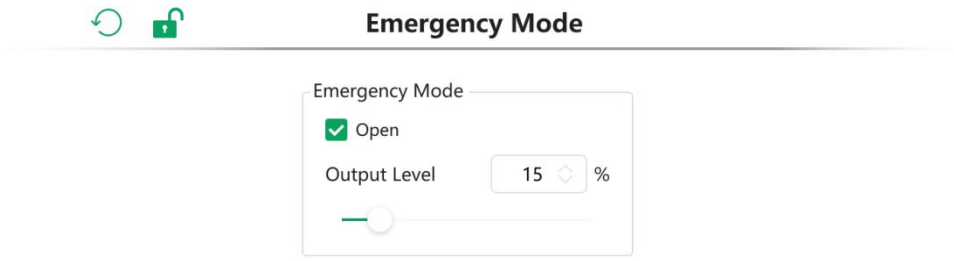
DALI DT8 models can be set to different output modes.



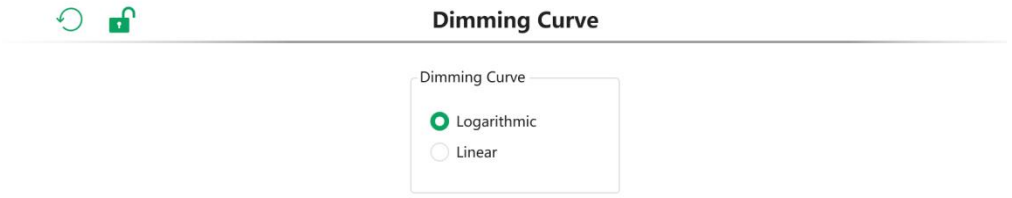
5.2.7 Emergency mode (EL)

You should click “Open” to change the parameters. When the emergency mode is open, you can adjust the output level in emergency mode through the slider or directly input a value.

Open indicates that emergency mode is open. Open indicates that emergency mode is closed.

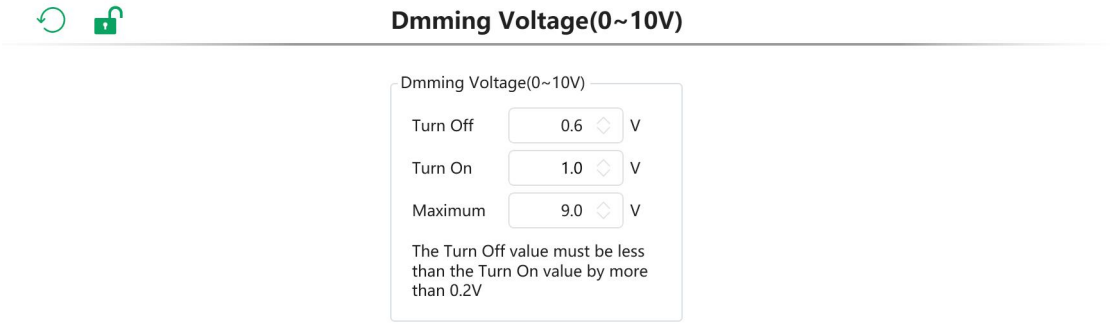


5.2.8 Dimming curve



5.2.9 Dimming voltage (0-10V)

You can set turn on voltage, turn off voltage, and maximum voltage ranging 0-10V.

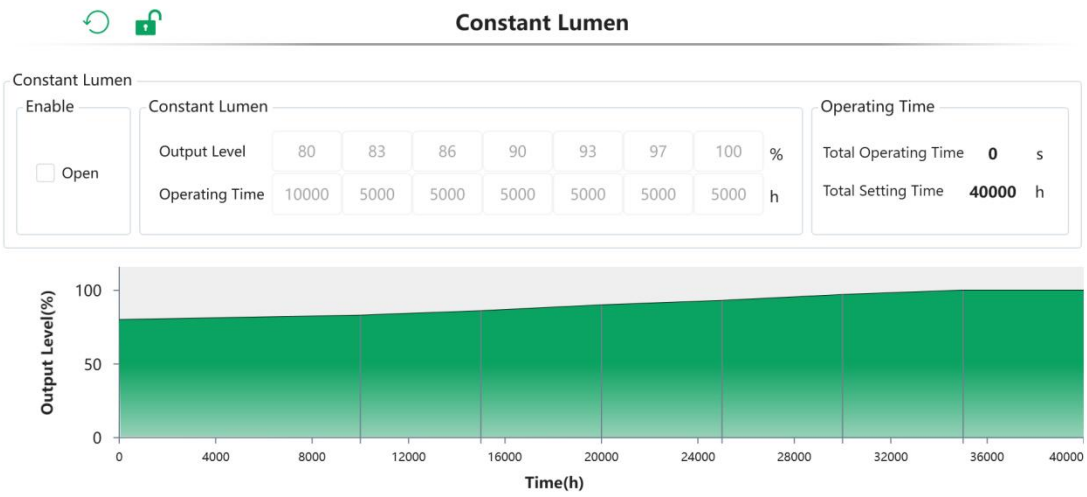


5.2.10 Constant lumen (CLO)

The light output of an LED luminaire reduces over the course of its lifetime. With this function the light output of the LED module can be kept equal over the lifetime by constantly increasing the output current of the LED driver.

You should click “Open” to enable the CLO function and then change the parameters. Each step can set the operating time and output level.

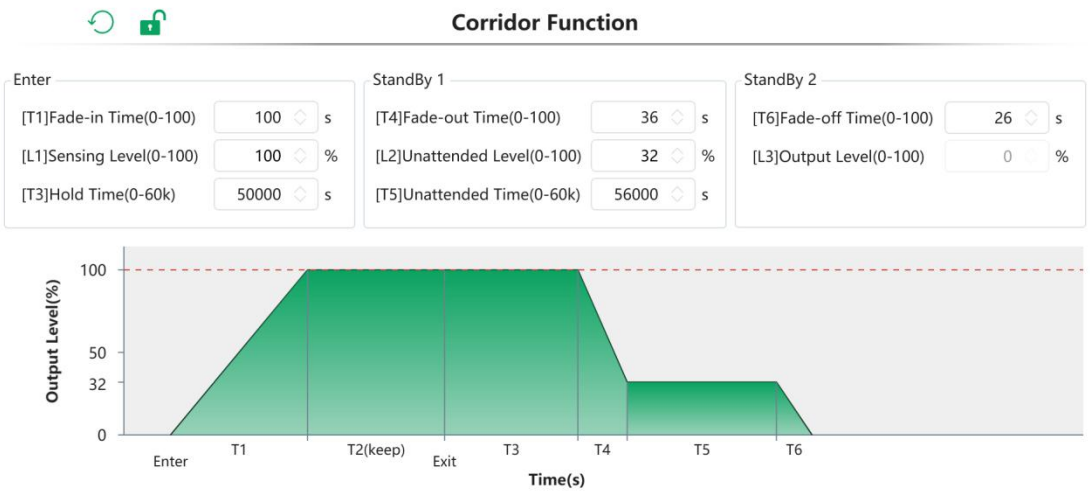
Open indicates that CLO mode is open. Open indicates that CLO mode is closed.



5.2.11 Corridor function

With a relay motion detector, it can output the preset brightness when a person is detected. After the person left, the brightness dims slowly to a smaller value or switches off completely.

The maximum value of the standby hold time is 60,000s.



5.2.12 Time dimming

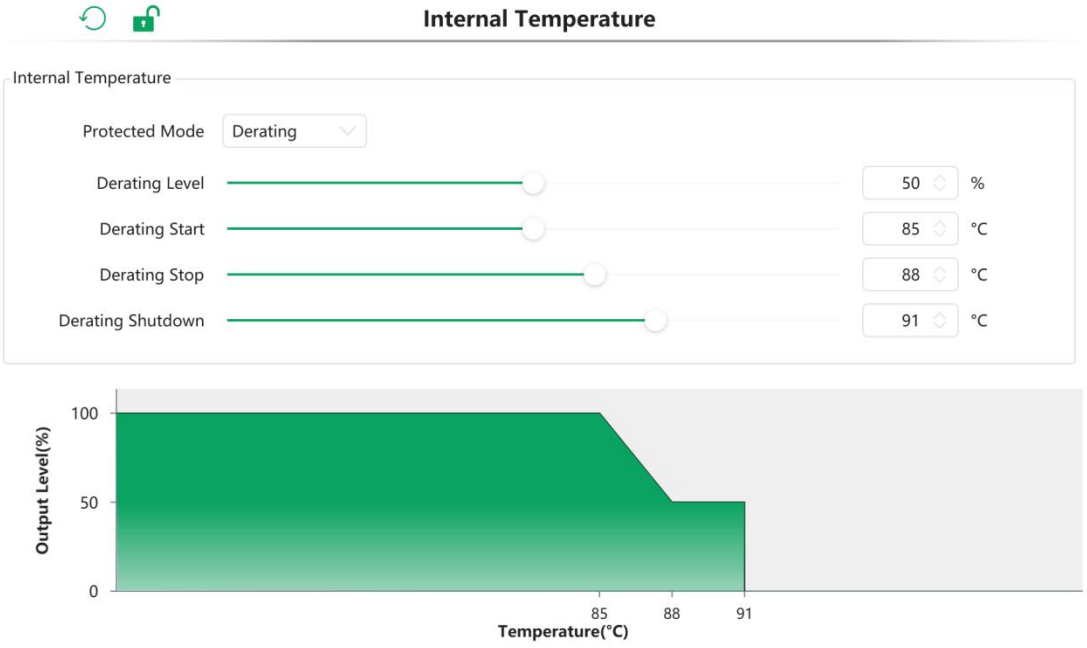
The time dimming function can be turned off by not clicking “Open”and be turned on by clicking “Open”. It has 3 modes: Traditional Timer, Self Adapting-Midnight and Self Adapting-Percentage. Enable the function to enter the Traditional Timer mode by default. There are 6 steps in each mode, and you can set the brightness of each step, the operating time of the first to fifth

steps, and the fade time between the 2 steps.

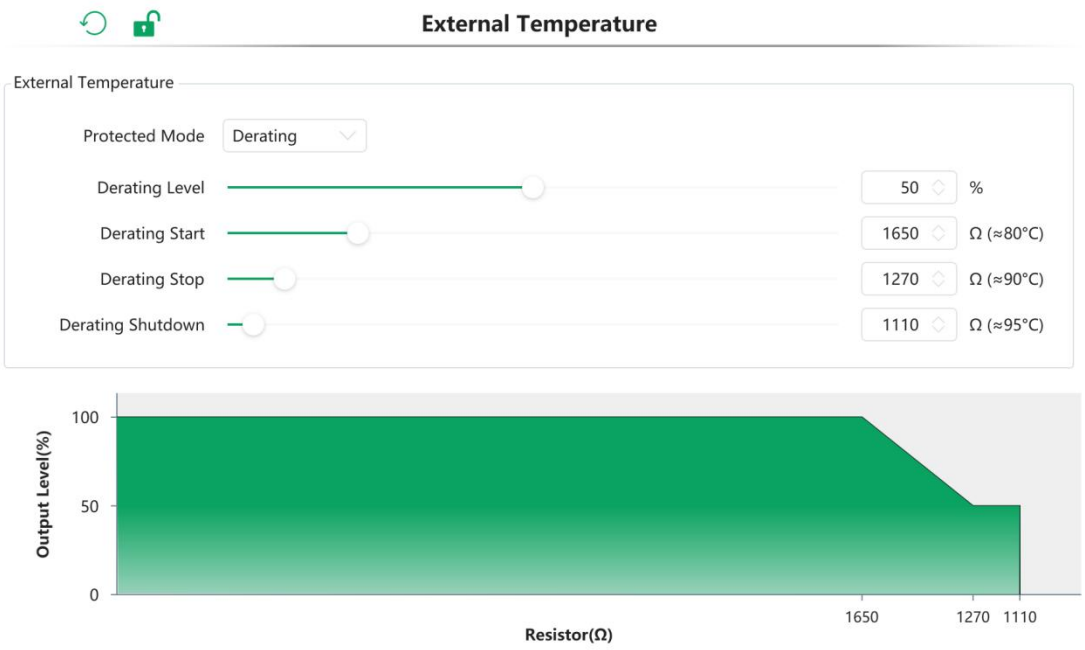
☑ Open indicates that time dimming mode is open. ☐ Open indicates that time dimming mode is closed.

5.2.13 Overtemperature protection

Internal temperature protection



External temperature protection



Protected Mode: you can set 2 protected modes, derating and shutdown.

Derating Level: the level of brightness that reaches the stop point of derating.

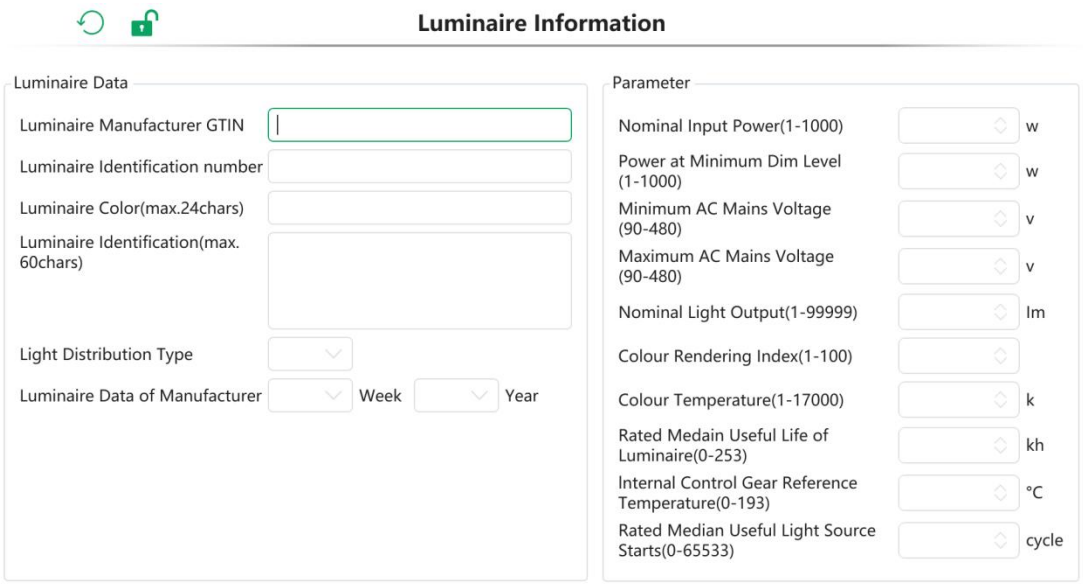
Derating Start: the temperature/resistance at which derating starts overtemperature protection.

Derating Stop: the temperature/resistance at which derating suspends overtemperature protection.

Derating Shutdown: the temperature/resistance at which the power is turned off.

5.2.14 Luminaire information (DALI Part 251)

Edit the corresponding luminaire information according to the actual needs.

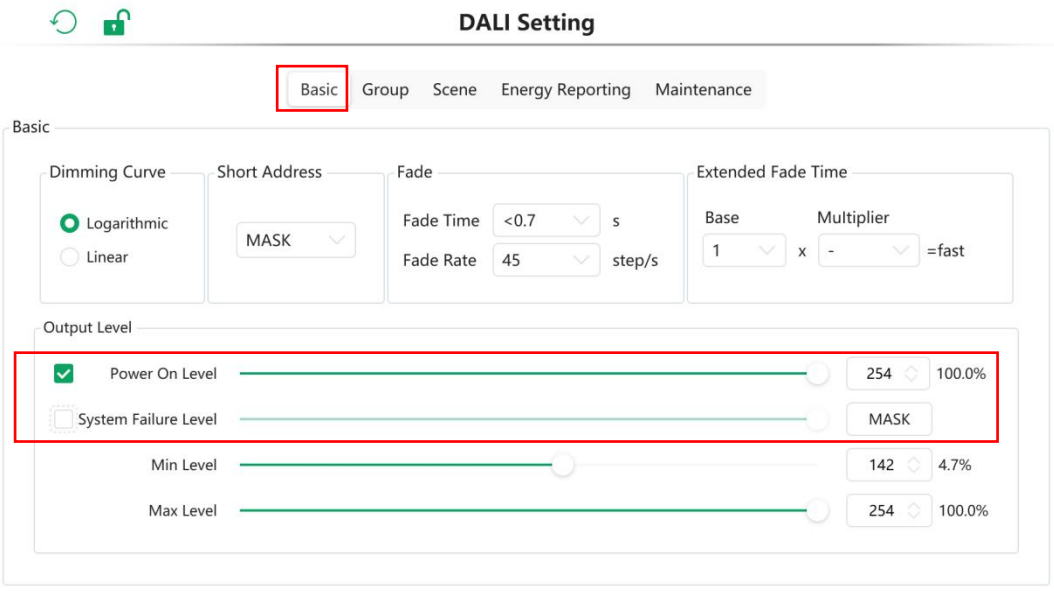


5.2.15 DALI setting

The DALI setting interface includes basic parameters, color temperature, group, scene, energy reporting, and maintenance,

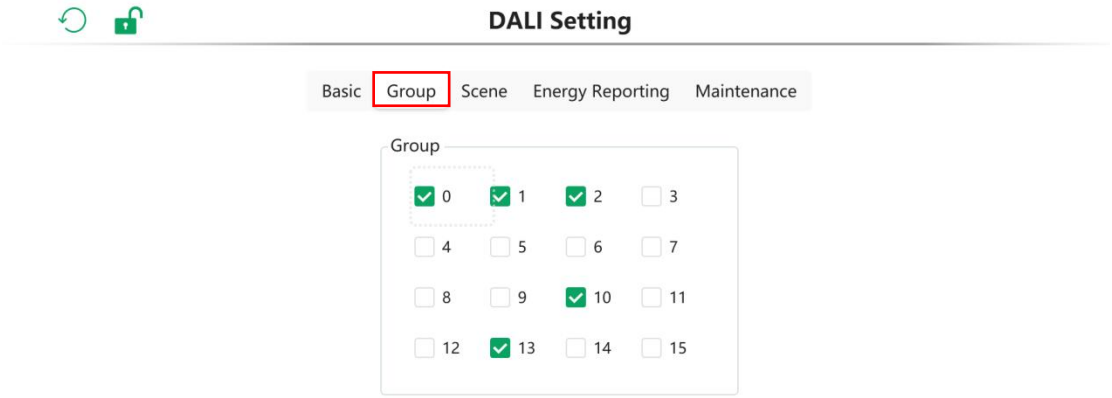
① **Basic parameters:** including dimming curve, short address, fade time and rate, extended fade time, power on/system failure level and max/min brightness level.

Uncheck the button in front of power on level/system failure level, then it will be set to MASK, and you can set the corresponding brightness level only if you check it.



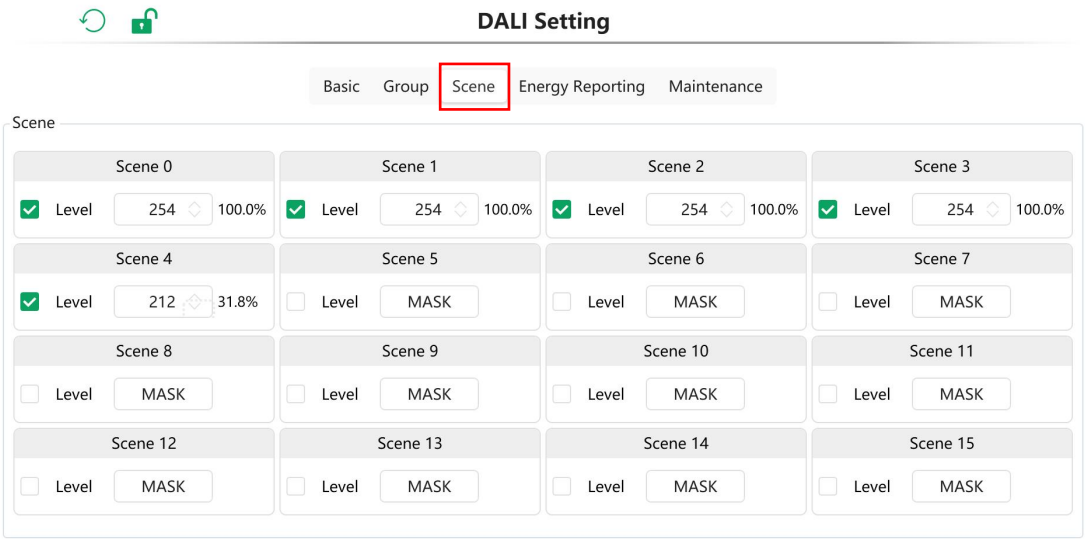
② DALI group

Each driver can be a member of up to 16 groups. Checking the corresponding group means the LED driver is added to this group, and if it is not checked, the LED driver is removed from this group.



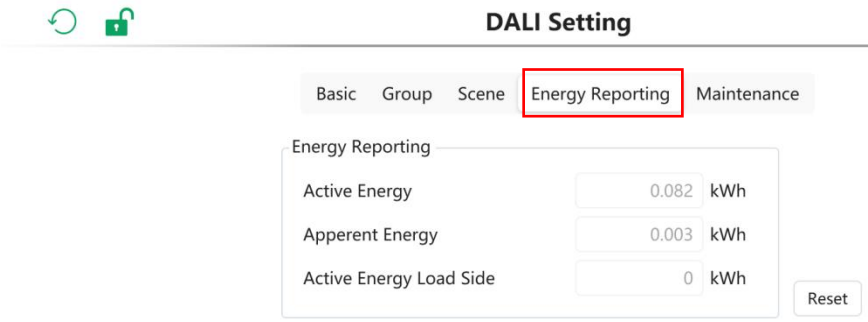
③ DALI scene:

Up to 16 scene values can be stored in each driver. The brightness level can be set only after the scene is checked. The unchecked will be set to MASK.



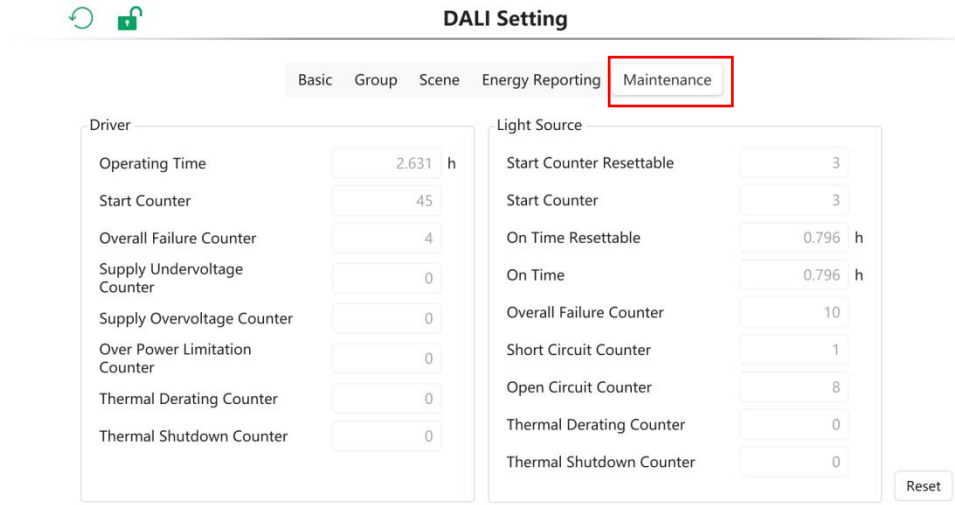
④ Energy reporting (DALI Part 252)

Not editable, reset only.



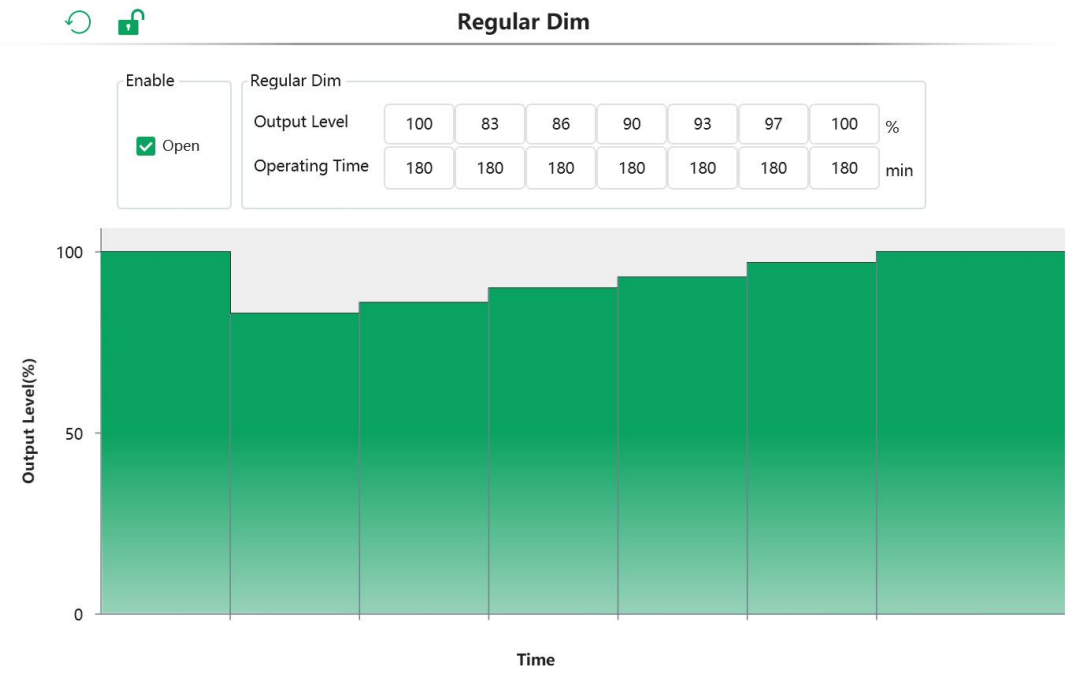
⑤ **Maintenance:**

Not editable, reset only. Click “Reset” to clean the recorded data as 0.



5.2.16 Regular dim

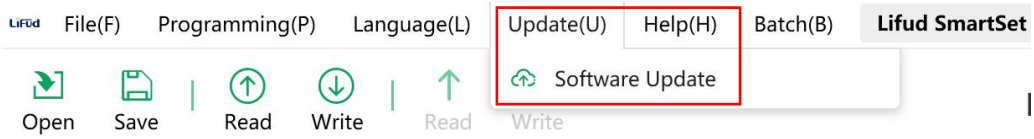
You can set a total of 7 periods of regular dim, and the maximum output level is 100%, while the maximum operating time is 180 minutes.



5.3 OTA software update

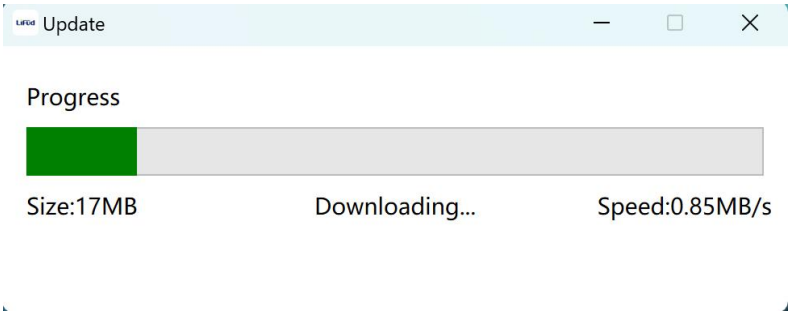
Remote software update is supported as follows.

Click “Update (U)”, and select “Software Update”.



The update interface will be displayed if update is needed,

Click “Update” and the installation package will be downloaded automatically.



After the update is complete, the latest version will be displayed in the lower right corner of the interface.