



Shenzhen SOSEN Electronics Co.,Ltd.

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China 518104

SosenDmxProgrammer User Manual

V1.1



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1. Preface

1.1. Objective

Helps users proficiency in using SosenDmxProgrammer programming software, programmer (SS-PROG-LINK) connection, and quickly set up LED driver functions.

1.2. Programmable LED driver product family

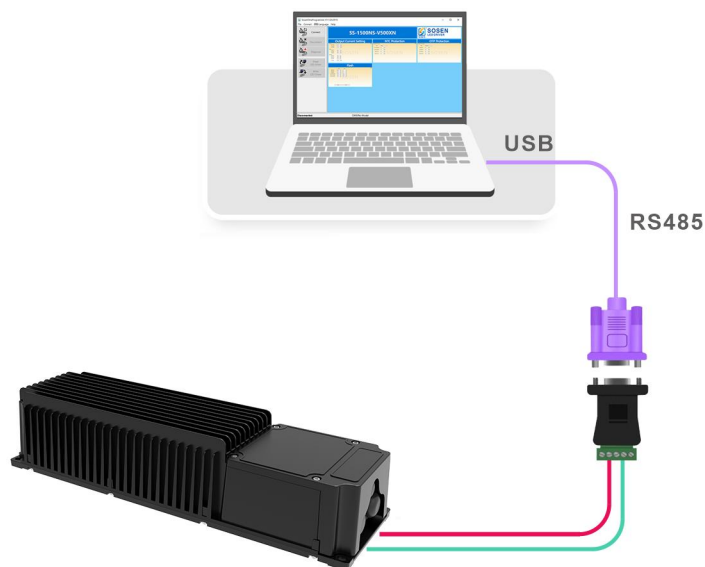
NS series.

2. Introduction to programmer hardware and software

2.1. Introduction to the Programmer

The Programmer software connects directly to the LED driver via an RS485 adapter.

2.2. The programmer is wired to the LED driver



Dimming colors may change, and it is best to distinguish the wiring order according to the label of the RS485 and LED driver:

“RS485: A line” is connected to “LED driver: D+” .

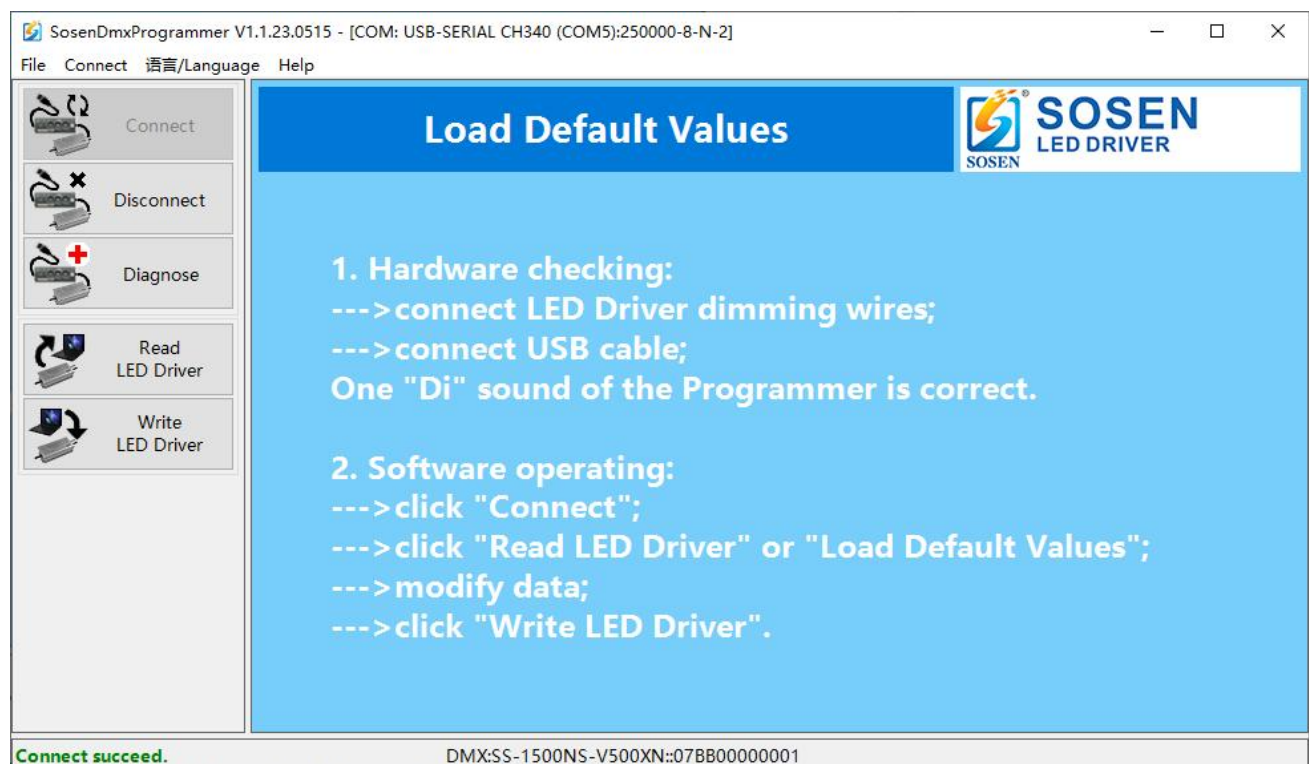
"RS485 : B line" is connected to "LED driver: D-" .

The programmer is connected to the computer's USB port, and the programmer recognizes the LED driver.

Please confirm that the above operation steps are correct, and then perform the following operations.

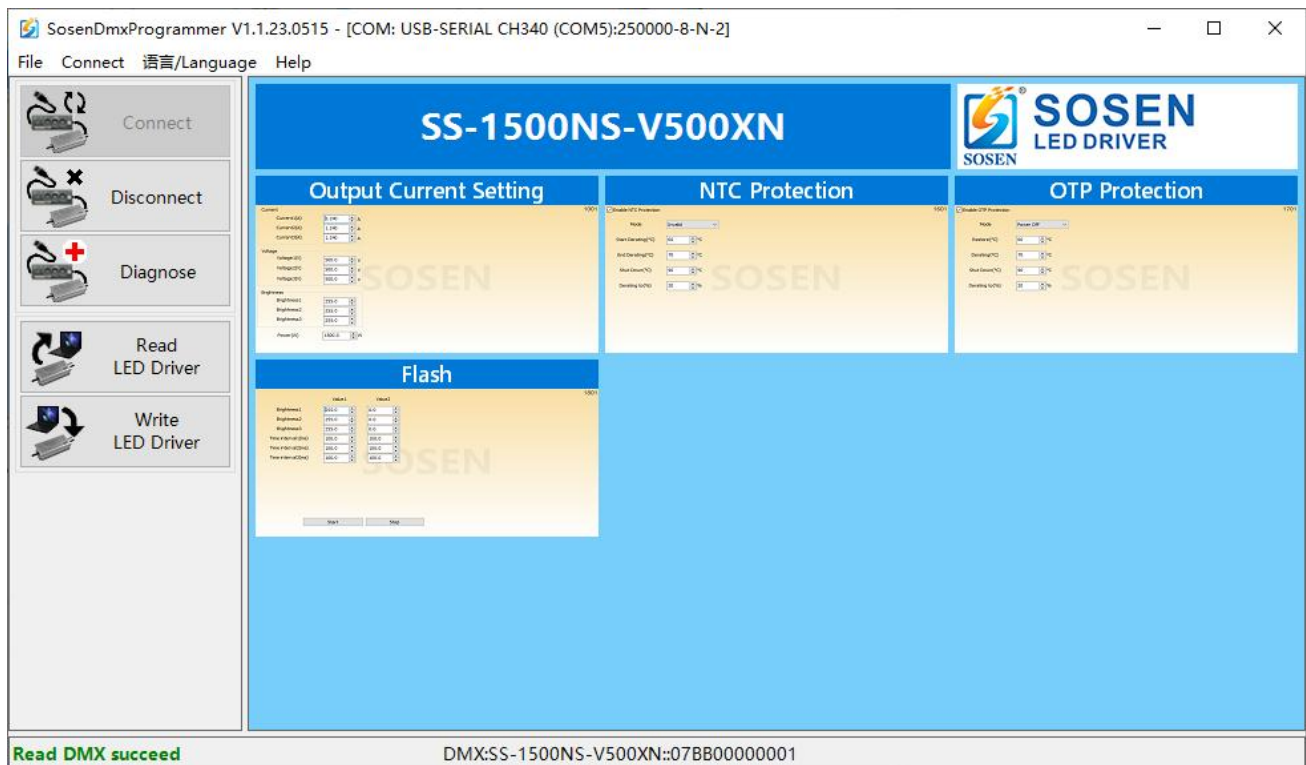
2.3 Connect the Programmer with the LED driver

Connect the RS485 to the USB port of the computer, click the "Connect" button of the software, and display "Connect succeed.", indicating that the LED driver connection is successful.



Click the software "Read LED Driver" button, and display "Read DMX succeed.",

indicating that the LED driver reading is successful.



3. Software installation and use

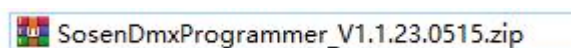
3.1. Operating system requirements

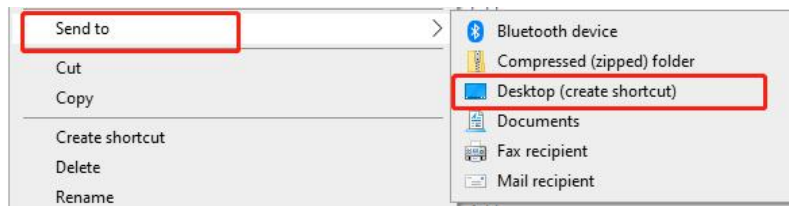
Supports Windows 7, Windows 8, Windows 10, Windows 11.

3.2. Software installation

3.2.1. Software decompression

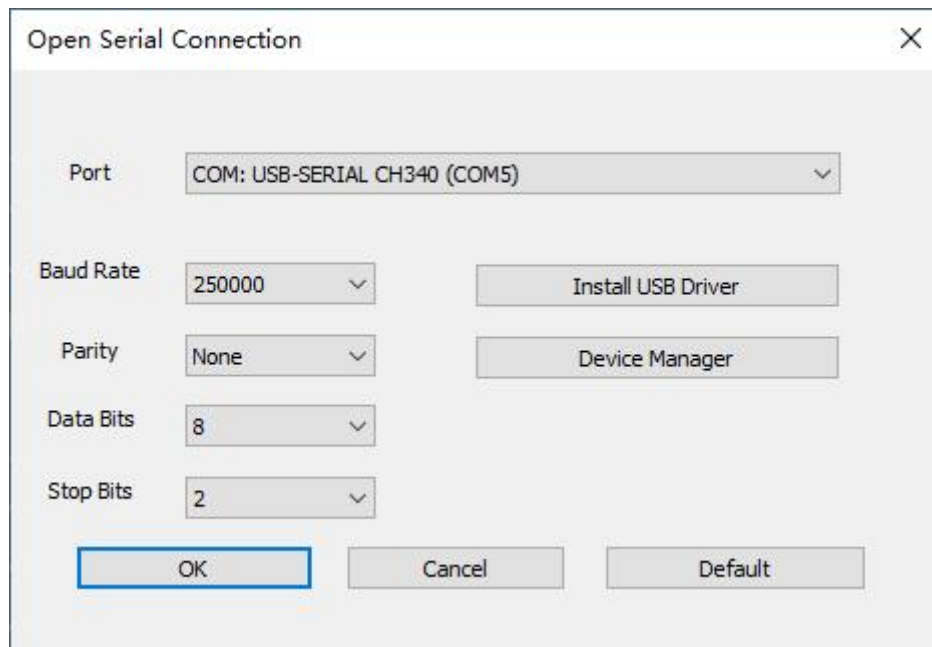
Extract the software package to the appropriate location, go to the software folder and send the shortcut to the desktop.





3.2.2. Driver installation

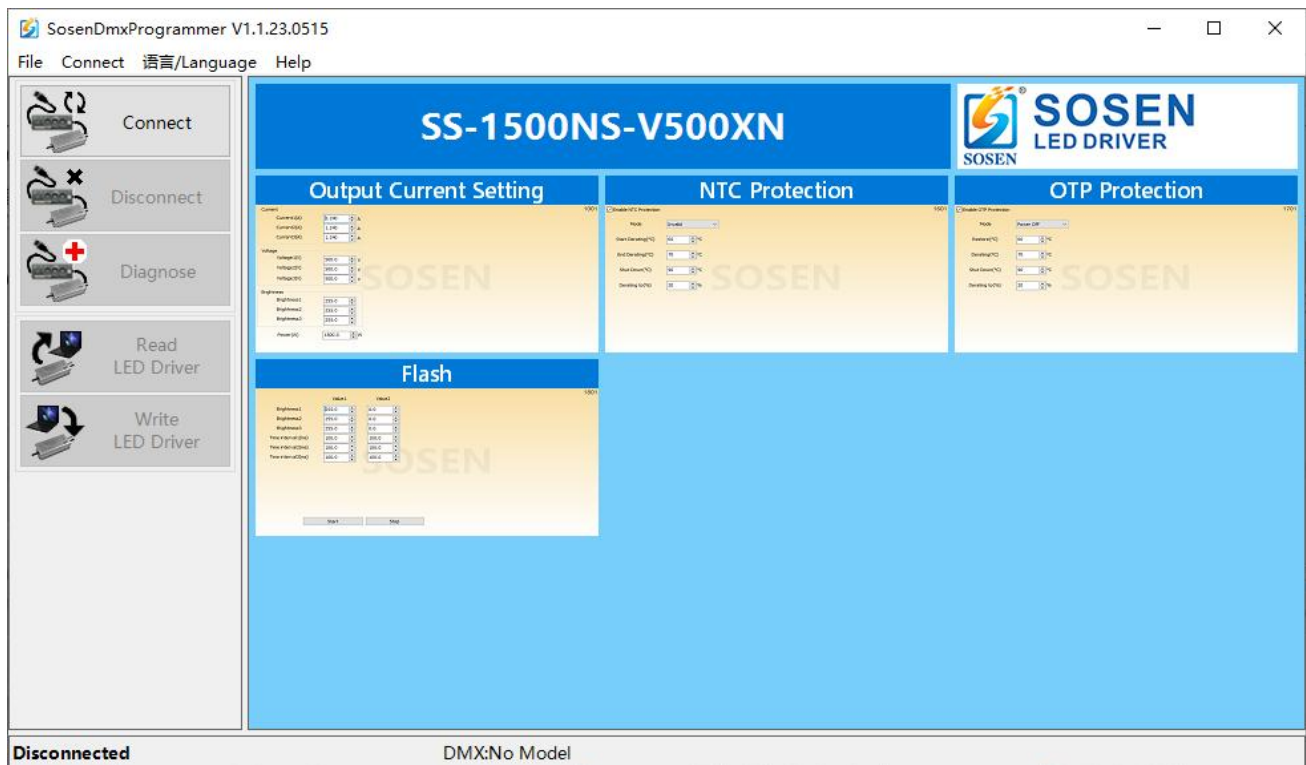
Open the SosenDmxProgrammer software and click Connect. When the USB Serial Port (COM x) is not displayed at the port, click "Install USB Driver" and the USB driver will be installed.



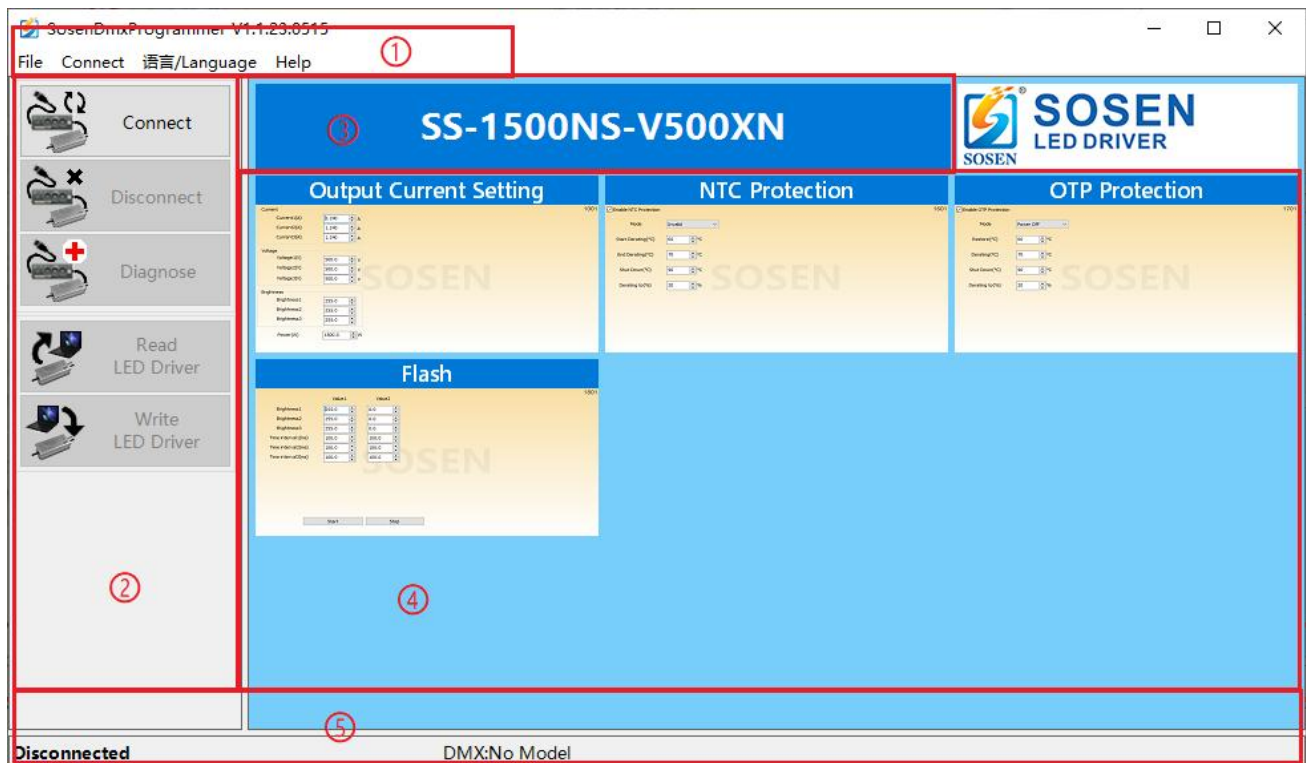
3.3. Functional description of the software

3.3.1. Software main interface

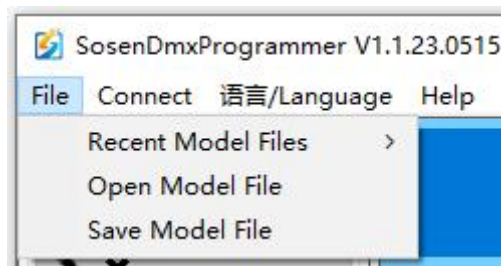
After "Read LED Driver" or "Load Default Values". Displays the features that the model has, orange for the functions that have been enabled, and gray for the functions that are not enabled.



3.3.2. Window area description



① Menu bar: With the function of saving and opening the model data file, switching languages, opening the user manual, upgrading software and so on.



Open Model File: Loads the saved model file from a folder.

Save the model file: Save the loaded model as a data file, and the next time you can directly load the saved data by "Opening Model File".

② Operation bar: Operates the programmer and LED driver.

③ Load default values and display model names: Left mouse button opens the model list and displays the model name.

④ Function Settings: Set the parameters of the current page of this model.

⑤ Model name display: Displays the operating status, the model saved by the current programmer and the model of the LED driver access.

3.4. Online programming

When writing to the LED driver, make sure that the model selected is the same as the model of the connected LED driver. If the model is different, the programmer will refuse to program and report an error.

3.4.1. Online programming

Online programming operation method: **Open "SosenDmxProgrammer" -> Connect -> Read LED Driver / Load Default Values -> modify data -> Write LED Driver**

Connect: Click "Connect", the serial connection dialog box will pop up, select the



correct COM port (USB Serial Port (COM x)).

Read LED Driver: Reads all data from the connected LED driver and refreshes the SosenDmxProgrammer software interface.

Load Default Values: If you want to restore the default parameters of the model, you can click "Load Default Values", select the correct model, and load the default data into the software interface.

Write LED Driver: Write the set working current data, 3in1 dimming, timer dimming and other parameters to the LED driver.

Note: When writing to the LED driver or reading the LED driver, do not set the SosenDmxProgrammer software parameters, there may be incorrect parameters written or read.

4. Introduction to programmable LED driver functions

4.1. Programmable LED driver functions

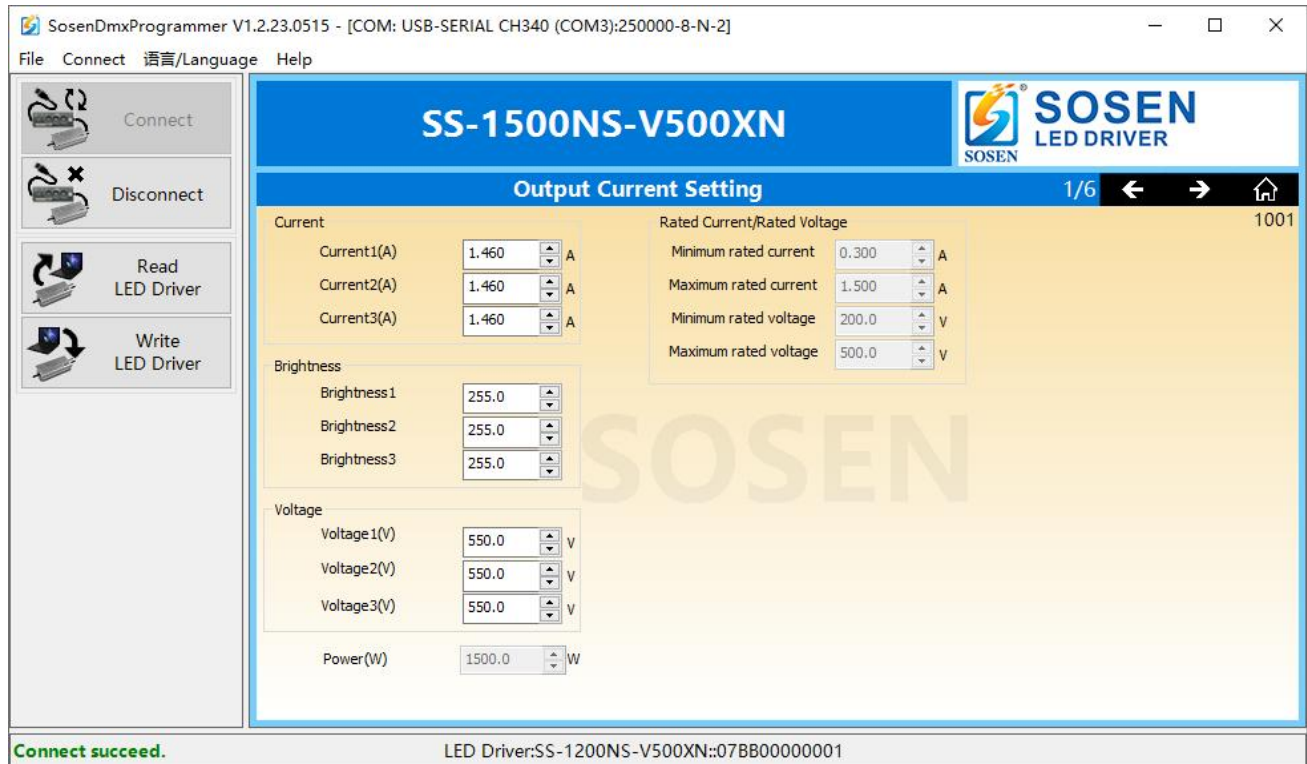
- (1) Work Current Setting (Current and voltage can be set)
- (2) NTC Protection (LED module over-temperature protection function)
- (3) OTP Protection (LED driver over-temperature protection function)

4.2. Programmable LED driver functions explained in detail

4.2.1. Work Current Setting

The output current of the LED driver can be freely adjusted, and the parameters obtained by the LED driver are read by the programmer and displayed on the programming software interface. Modify the current parameter at the set operating current to change the output current of the LED driver. Modifying the parameters at

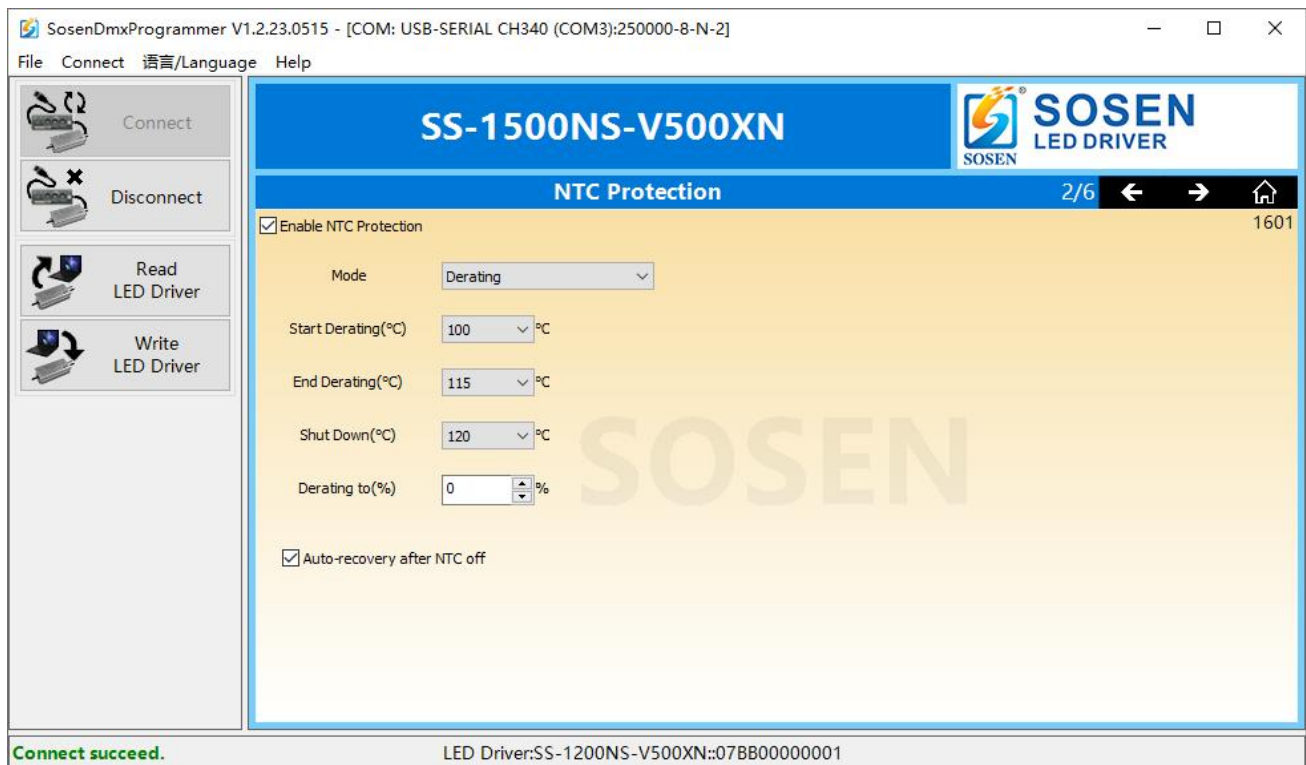
the set operating voltage can reduce the operating voltage of the LED driver.



4.2.2. NTC Protection

At the LED driver end, a wire is connected to the NTC temperature control switch sensor to feed the temperature on the LED module to the internal controller of the LED driver.

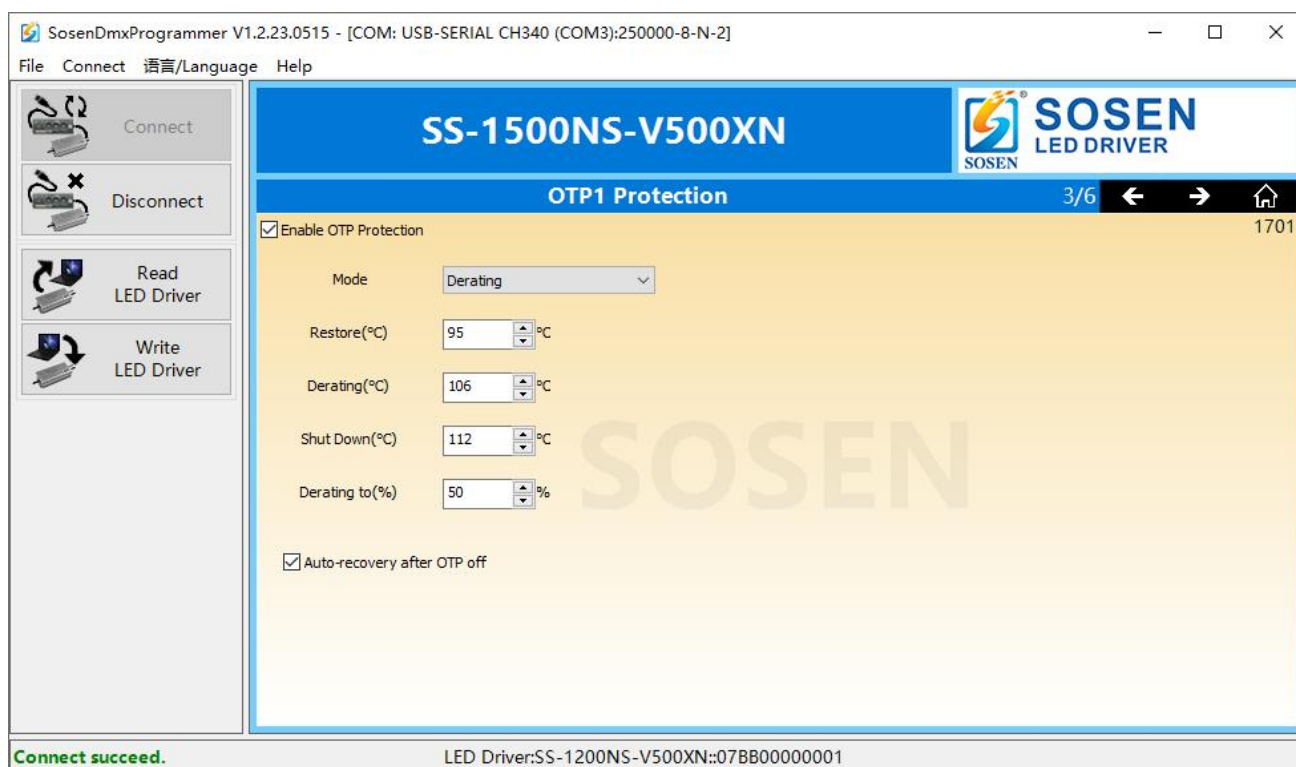
Note: The LED driver hardware must support NTC functionality.



4.2.3. OTP Protection

There is a temperature sensor inside the LED driver that detects the internal temperature of the LED driver. The internal temperature protection point of the LED driver can be set via the programming interface.

Note: The LED driver hardware must support OTP functionality.



4.2.4. Flash

On this page, you can start the strobe function, set the brightness level and time interval, and click the start button to start the strobe function.



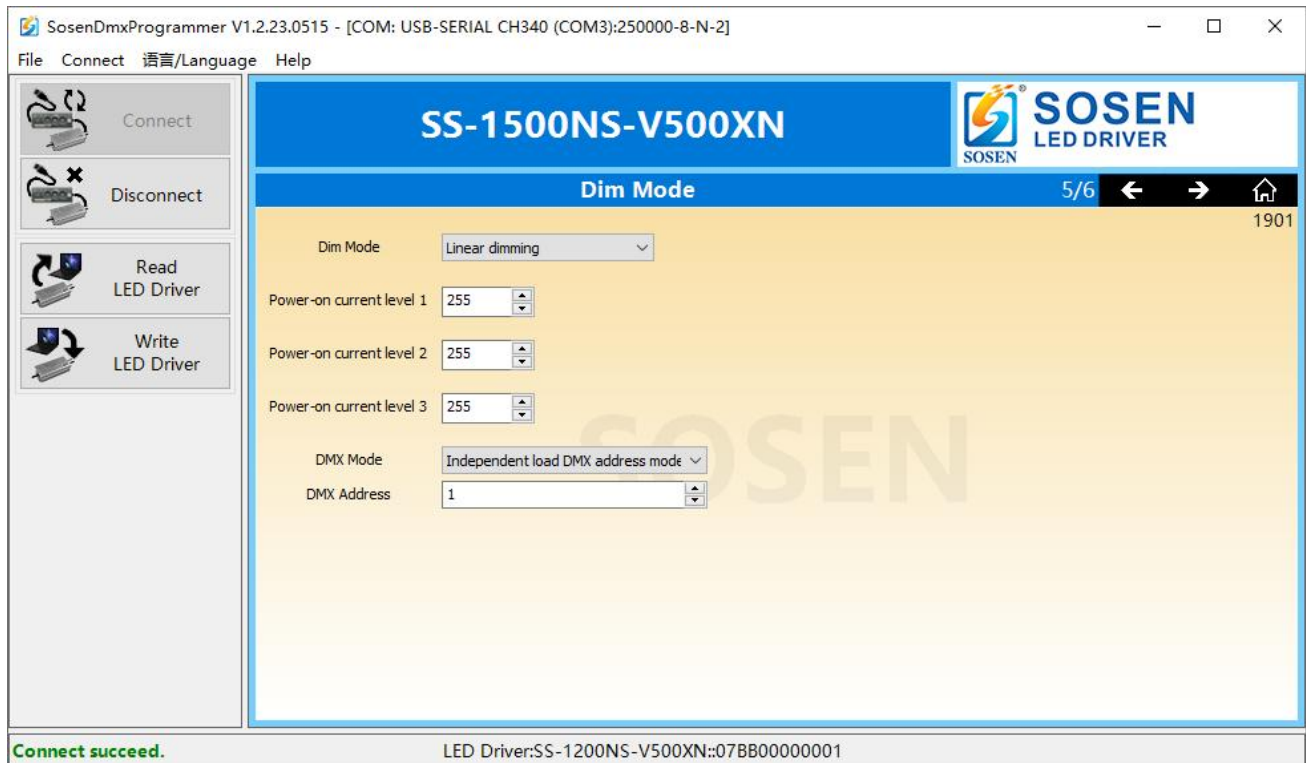


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4.2.5. Dim Mode

On this page you can set the parameters such as LED driver dimming mode, DMX mode and DMX address.



Versions	Date	Description
V1.0	2023/02/11	Initial release
V1.1	2023/5/16	Version updates



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