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## 1. INSTALLATION & SETUP

**Requirement:**

- Windows 10 Operating system, minimum version 1803;
- Windows app installation program must be present on the computer; if not present (usually by default) you can download it for free from here:

<https://apps.microsoft.com/detail/9nd3jq1s0tw?rtc=1&hl=it-it&gl=IT>

- 1- Click on “Download the App” Button:



## DeveLed Suite

Versione 1.0.48.0

DeveLed Suite

Scarica l'app >

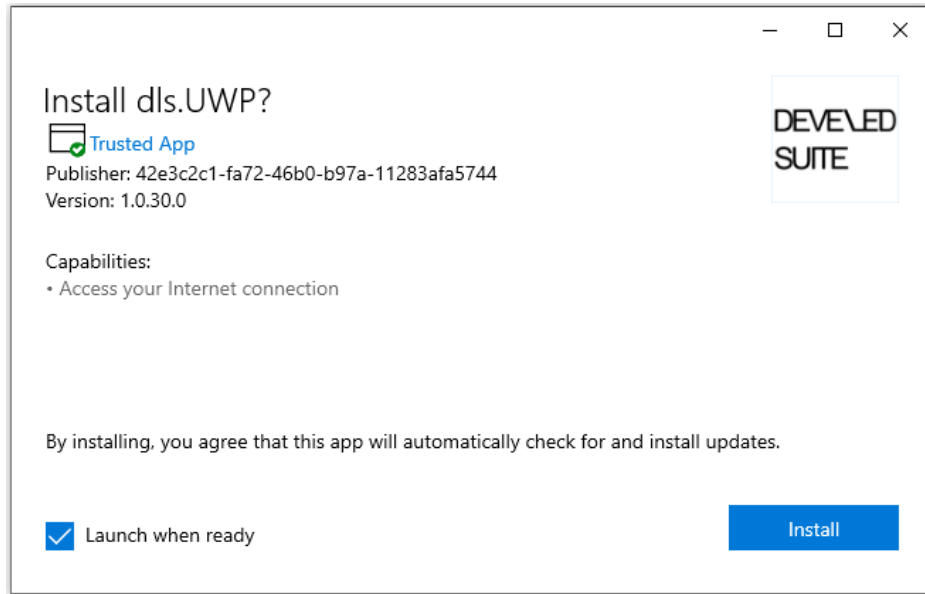
[Risoluzione dei problemi di installazione](#)

### Informazioni sull'applicazione

<b>Versione</b>	1.0.48.0
<b>Sistema operativo richiesto</b>	10.0.17134.0
<b>Architetture</b>	x64
<b>Editore</b>	42e3c2c1-fa72-46b0-b97a-11283afa5744

Collegamenti  
aggiuntivi ▾

2- Follow the wizard instruction for completing the installation:



- 3- Connect the Led Driver device to the interface.
- 4- Connect the power-supply (24V or 48V depending on the Led Driver to be programmed) to the DLS interface and turn it on.
- 5- Connect the USB port of the DLS-interface to the computer.

It may require drivers installation. The driver can be downloaded from this link:

<https://rs3.mac-italia.com/uwpupdates/dls/driver.zip>

UNZIP the Folder and follow the route:

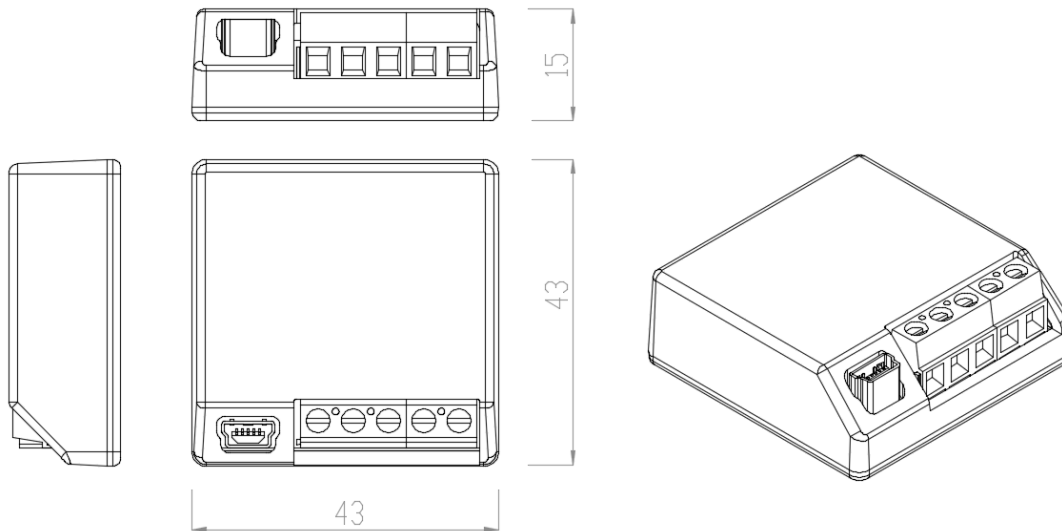
- driver
  - interface
    - official
      - CP210xVCPIInstaller\_x64 ( or "\_x86" depending on your OS )

Select "Device Manager" menu from start.

- You will find the interface "CP2102N USB to UART Bridge Controller" highlighted
- Then you should update the driver (with the right click of your mouse) by selecting it from the path of the folder you have already downloaded.

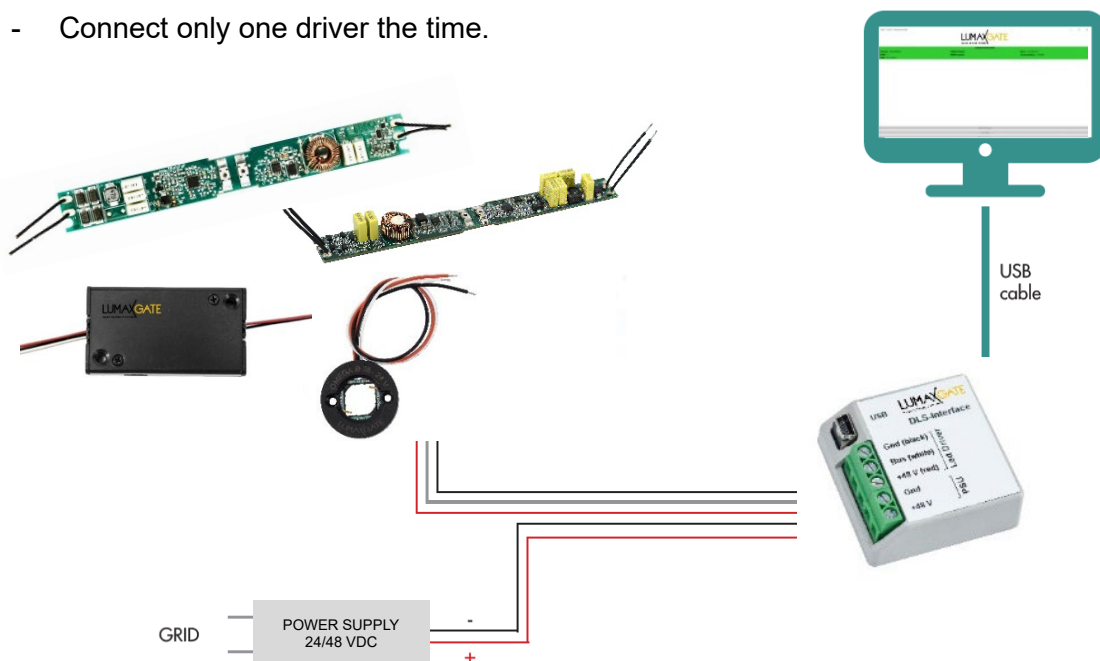
## 2. DLS INTERFACE - DIMENSIONS

Dimensions: 15mm x 43mm x 43mm (inch: 0,59 x 1,69 x 1,69)



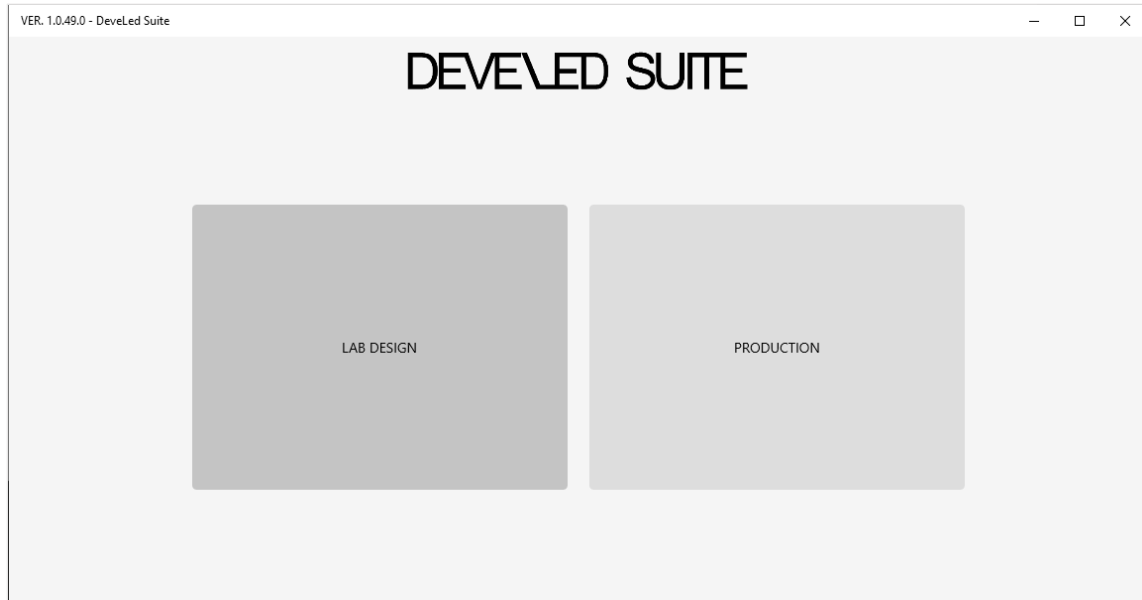
## 3. DLS INTERFACE - CONNECTIVITY

- Use Mini B Connector USB Cable.
- Connect only one driver the time.



## 4. DEVELED SUITE SOFTWARE

- Run the DEVELED Suite APP
- This is the initial Brand Page and room selection.

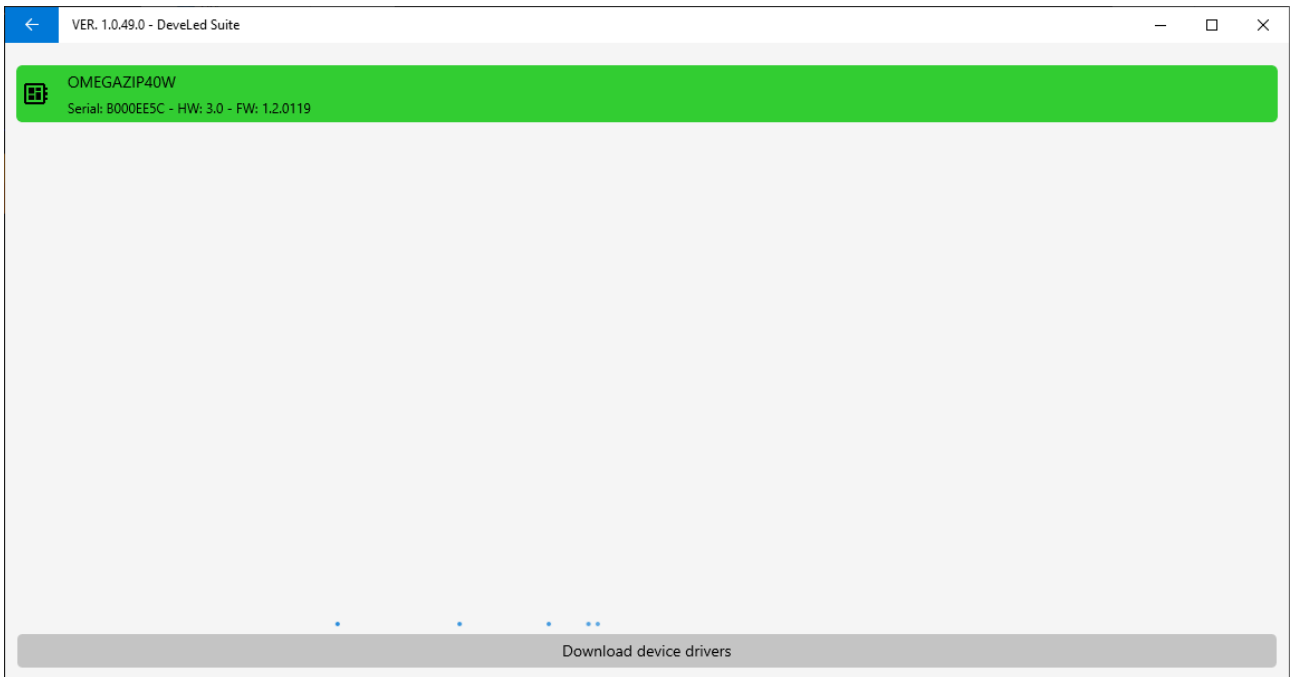


## 5. LAB DESIGN SECTION

- If you select LAB DESIGN section, a password is required.
- Ask your commercial account for the password



- The SW will search automatically the connected driver.

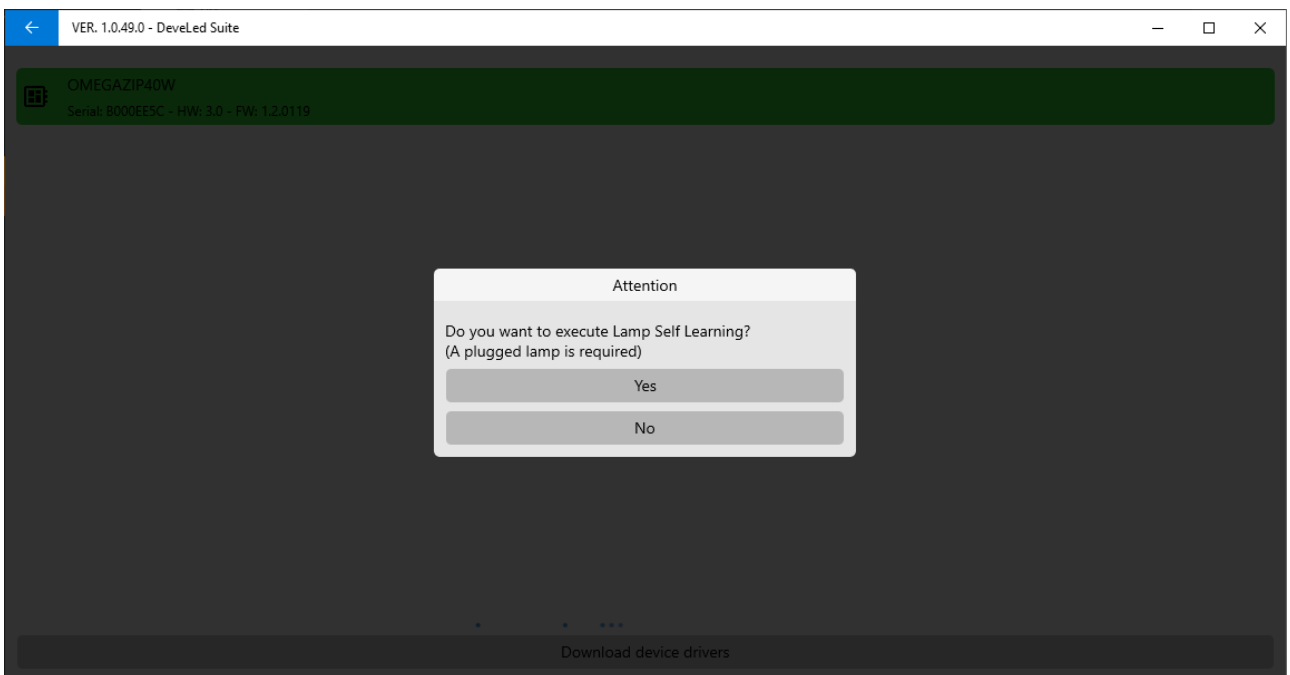


The main info showed for a short time before opening the setting parameters page are:

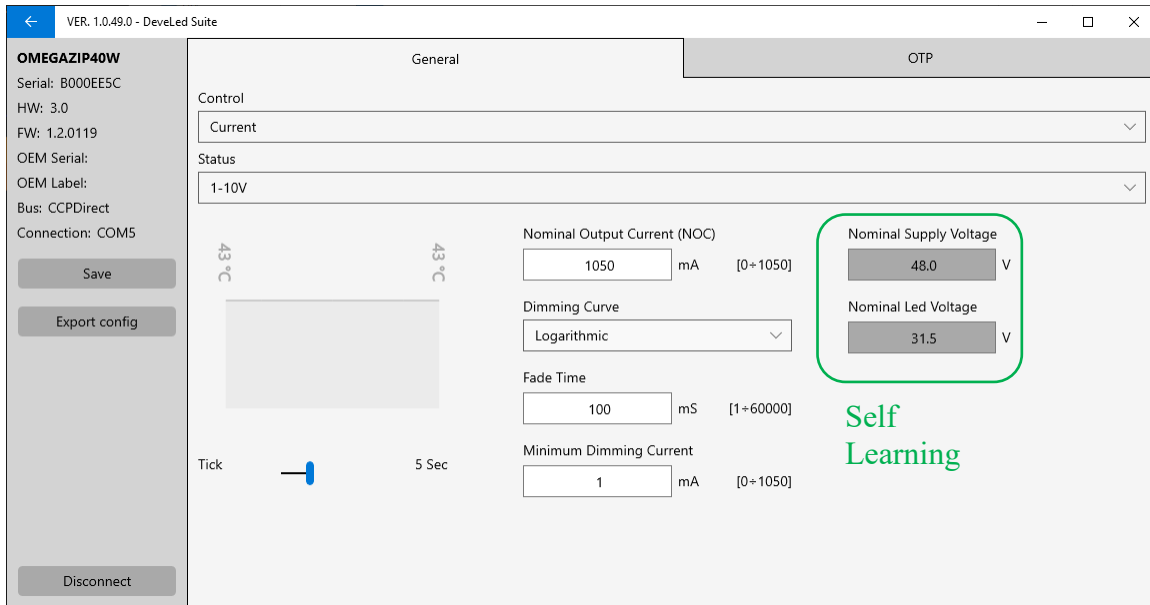
- Name/Model
- Serial Number
- HW Version
- FW Version

**NOTE:**

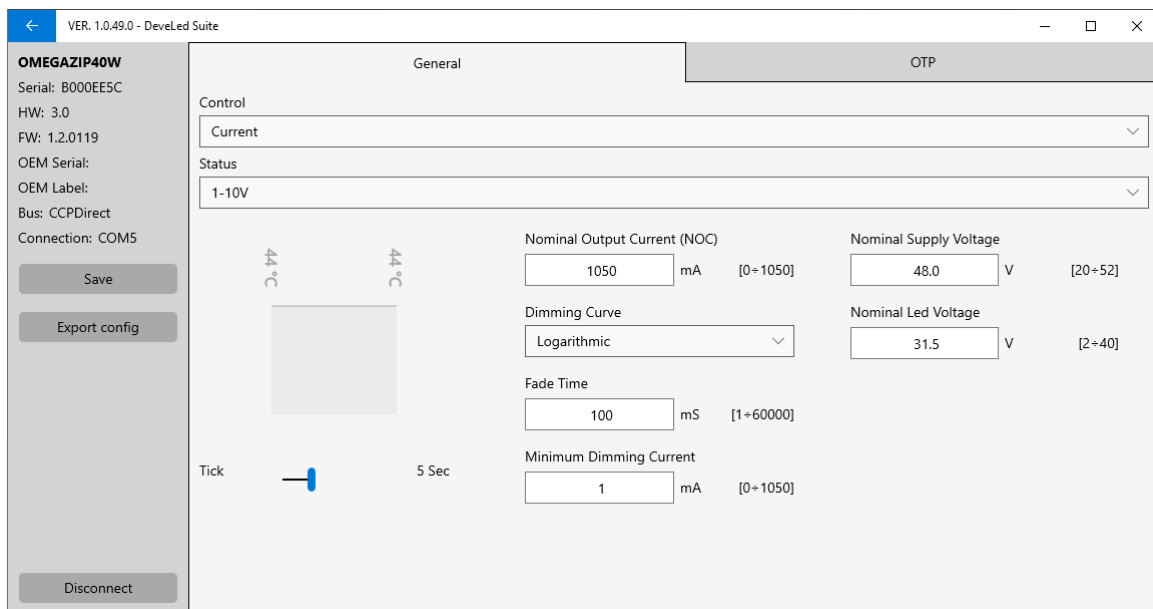
**If you have the LED DRIVER installed in the fixtures with the LED load already connected and the Power Supply, you can select the self learning mode.**



The self-learning mode, will read the Nominal Supply Voltage and the Nominal Led Voltage that fits the best with plugged lamp.



- The Main Page will appear with all the customizable parameters.
- The values are corresponding to the last configuration of the selected driver.
- There are two pages: General and OTP (Over temperature Protection)



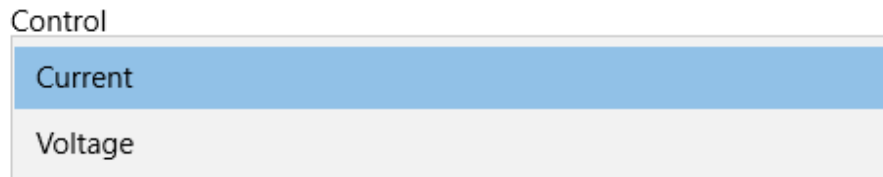
**Note: The list of the configurable parameters can be different according to the model of connected led driver and the control mode selected (Current/Voltage).**

**6. LAB DESIGN SECTION – FUNCTIONALITY**

- Control**

The Led Driver output can be configured in two modes:

- Constant Current Output
- Constant Voltage Output



**Constant Current Page:**

The Constant Current configuration page includes a graph on the left showing a constant current level over time, with temperature markers at 34 °C and a 5-second tick. The right side contains the following configuration fields:

- Nominal Output Current (NOC):** 300 mA + - [1÷1000]
- Dimming Curve:** Logarithmic (dropdown)
- Fade Time:** 200 mS + - [1÷60000]
- Minimum Dimming Current:** 1 mA + - [0÷1000]
- Nominal Supply Voltage:** 48.0 V + - [20÷52]
- Nominal Led Voltage:** 28.0 V + - [2÷40]

**Constant Voltage Page:**

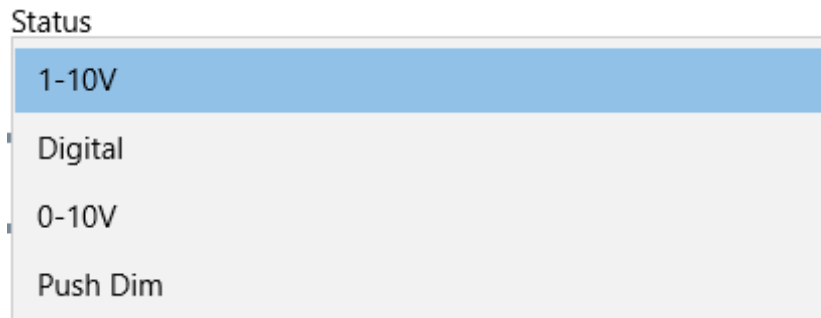
The Constant Voltage configuration page includes a graph on the left showing a constant voltage level over time, with temperature markers at 34 °C and a 5-second tick. The right side contains the following configuration fields:

- Nominal Supply Voltage:** 48.0 V + - [20÷52]
- Minimum Dim % Voltage:** 8 % + - [0÷100]
- Led Type:** MR16 Spotlight (dropdown)

- **Status**

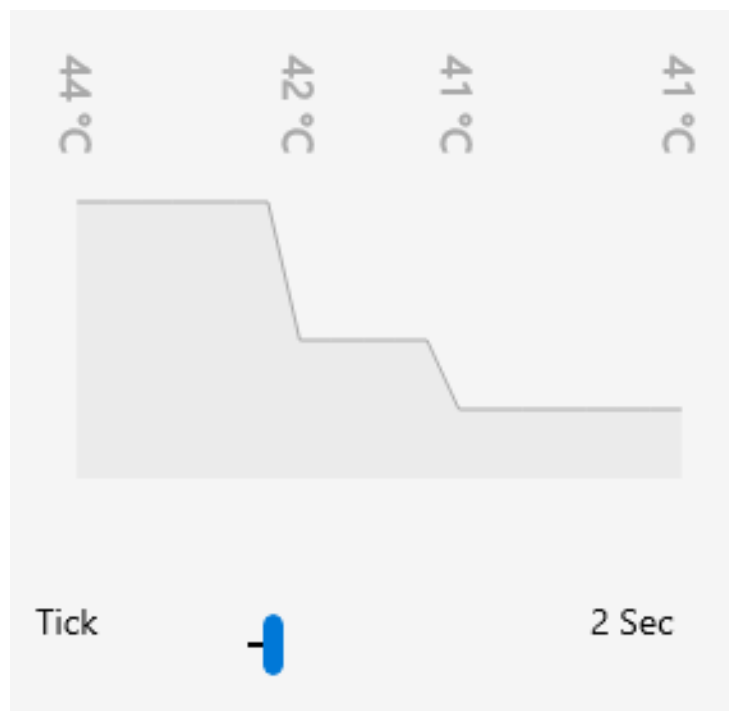
The driver could be configured in the following four different configurations:

- **1-10V:** for connecting a 100k potentiometer
- **Digital:** For connecting digital interface
- **0-10V:** for connecting an analogic control system
- **Push DIM:** for connecting a normally opened push button



- **Driver Temperature**

The graph shows the Led Driver Device Internal Tc temperature with real-time updating. Tick is the sampling time.



**7. LAB DESIGN SECTION – CURRENT CONTROL**

- **Current mode: Nominal Output Current**

Set the nominal output current (@ 100% dim) of the Led Driver Device  
The allowed values are selected within the nominal lout range of the selected driver

Nominal Output Current (NOC)

mA + - [1÷1000]

- **Dimming Curve**

The driver could be configured in the following two different dimming curves of the 1-10V protocol:

Dimming Curve

Logarithmic

Linear

- **Linear**: set the dimming curve with linear characteristic
- **logarithmic**: set the dimming curve with logarithmic characteristic [as default]

- **Fade Time**

Set the dimming variations fade time of the Led Driver device.  
The allowed values are between 1 ÷ 10000mSec.

Fade Time

mS + - [1÷60000]

- **Minimum Dimming Current**

Set the minimum dimming current value of the Led Driver device.

Minimum Dimming Current

× mA + - [0÷1000]

- **Nominal Supply Voltage**

Set the nominal supply voltage within the nominal range of the selected driver device.  
Typically 24 or 48Vdc.

Nominal Supply Voltage

V + - [20÷52]

- **Nominal Led Voltage**

Set the nominal Led lamp voltage.

Nominal Led Voltage

V + - [2÷40]

## 8. LAB DESIGN SECTION – VOLTAGE CONTROL

- **Nominal Supply Voltage**

Set the nominal supply voltage within the nominal range of the selected driver  
Typically 24 or 48Vdc.

Nominal Supply Voltage

V + - [20÷52]

- **Minimum Dim % Voltage**

Set the minimum percentage level for dimming.  
This value also depends on the electronic features of the led used.

Minimum Dim % Voltage

% + - [0÷100]

- **Led Type**

Set the kind of led lamp for voltage control.

Led Type

MR16 Spotlight
Strip 12V
Strip 24V

**MR16** for connecting GU5.3 MR16 LED SPOT;

**Strip 12V** for connecting 12V strip led;

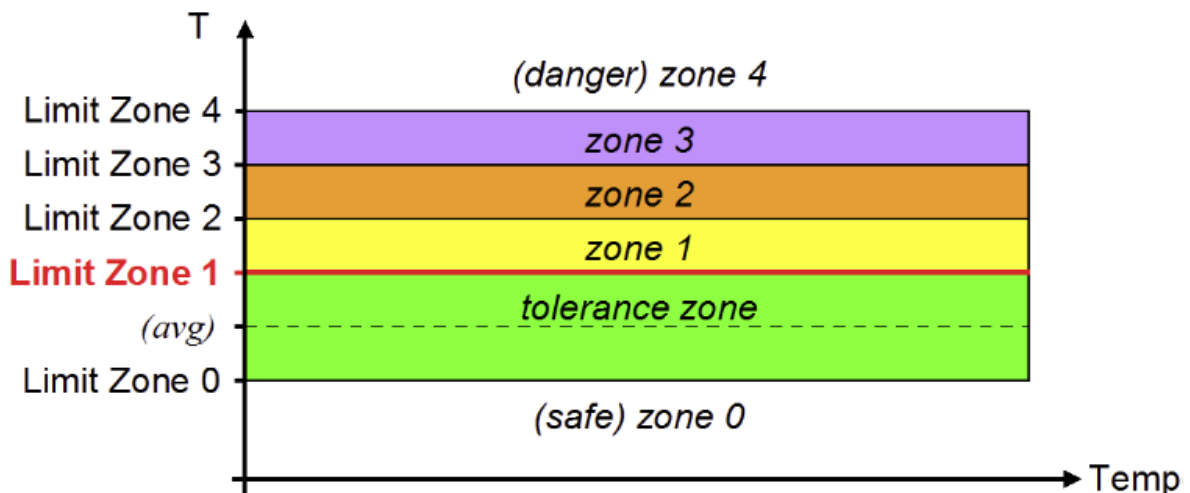
**Strip 24V** for connecting 24V strip led;

**9. OVER TEMPERATURE PROTECTION**

- **OTP page**



- This special Algorithm defines five zones of functionality.
- For each zone, it is defined as an operating Tc temperature and a Dimming level.
- When the Tc is out of the tolerance zone, this Algorithm can reduce the dimmer level to establish the tolerance zone.
- It is possible to set the Rise and Fall times and the tolerance timings for each zone.



- **Internal temperature Limit Zone**

For Zone 0 (safe), Zone 1, Zone 2, Zone 3, and Zone 4 it is possible to set the upper-temperature limit.

Internal Temperature Limit Zone 0

°C    +    -    [-40÷100]

- **Dimming Level**

For Zone 0 (safe), Zone 1, Zone 2, and Zone 3, it is possible to set a max dimming level.

Dimming Level 0 (ref NOC)

%    +    -    [0÷100]

- **Temperature Rise & Temperature Fall**

It is possible to set a hysteresis time after that it is detected the rise or fall of the temperature.

Temperature Rise Time

S    +    -    [1÷600]

Temperature Fall Time

S    +    -    [1÷600]

- **Overtemperature Zone Timings (123)**

It is possible to set a hysteresis time after that it detects the Overtemperature in Zone 1, Zone 2, Zone 3.

Overtemperature Zone Timings (123)

S    +    -    [1÷600]

- **Tolerance Zone Timings (123)**

It is possible to set a max time for permanence in Zone 1, Zone 2, Zone 3.

Tolerance Zone Timings

S    +    -    [1÷600]

- **Safe Zone Timings (0)**

It is possible to set a max time for permanence in Zone 0 (safe).

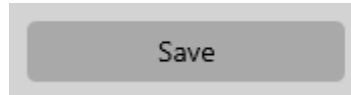
Safe Zone Timings (0)

S + - [1÷600]

## 10. SAVE CONFIGURATIONS

- **Save Button**

Download the configuration in the selected Led Driver.



After saving, the value modified will be green.

VER. 1.0.49.0 - DevelSuite

**OMEGAZIP40W**  
Serial: B000EE5C  
HW: 3.0  
FW: 1.2.0119  
OEM Serial:  
OEM Label:  
Bus: CCPDirect  
Connection: COM5

Save  
Export config  
Disconnect

General

Control: Current

Status: 1-10V

37°C 37°C

Nominal Output Current (NOC): **1045** mA [0÷1050]

Nominal Supply Voltage: 48.0 V [20÷52]

Dimming Curve: Logarithmic

Nominal Led Voltage: 31.5 V [2÷40]

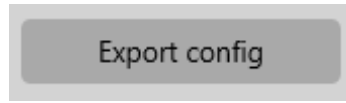
Fade Time: 100 mS [1÷60000]

Minimum Dimming Current: 1 mA [0÷1050]

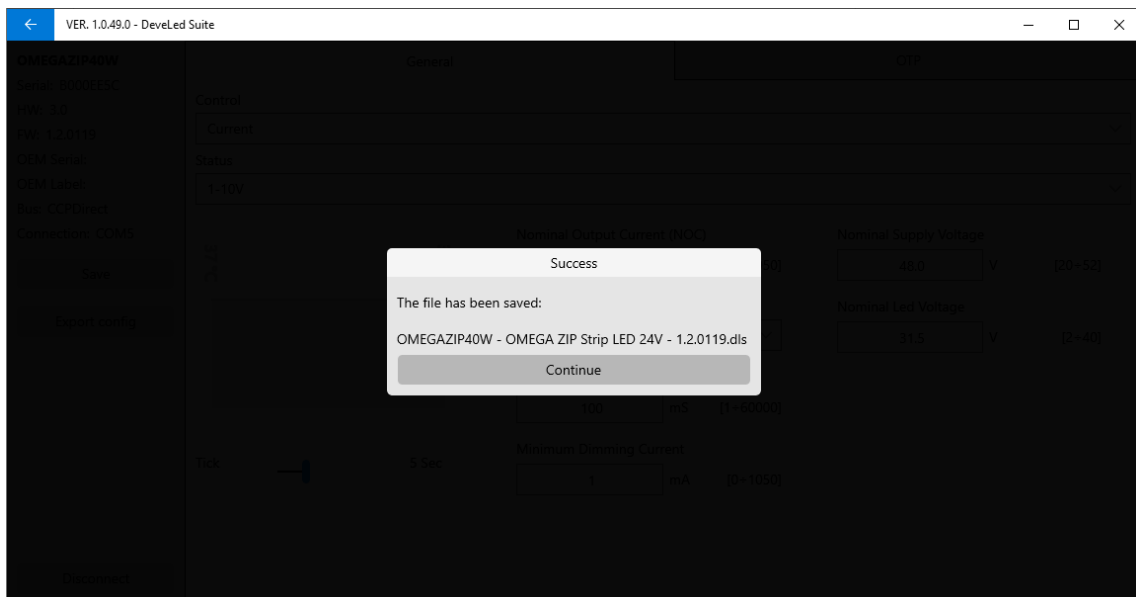
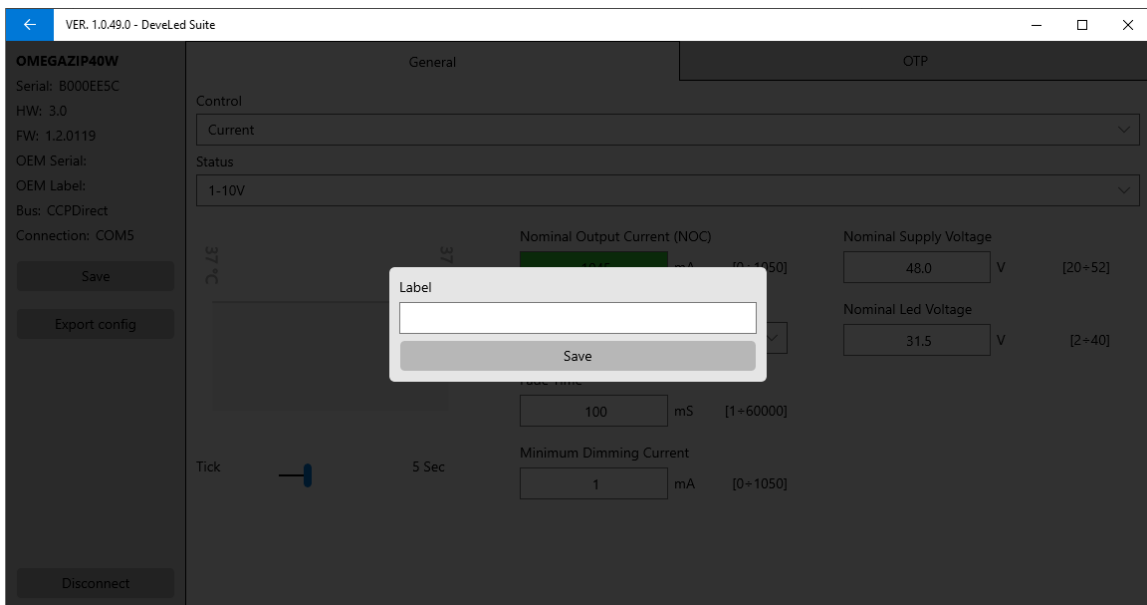
Tick: 5 Sec

- **Export Config Button**

- Download the configuration in the selected Led Driver



- The export config button will save the current configuration on file; This file can be used in the production section to program several Led Drivers in batch mode.
- The file needs to be labeled with a description.

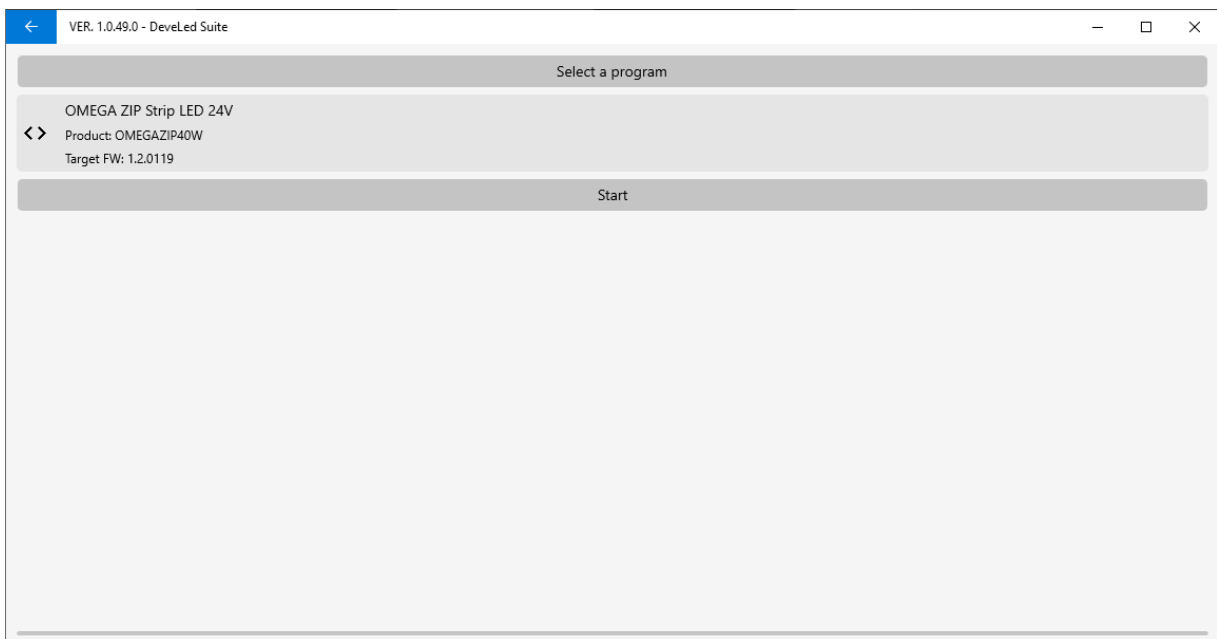


## 11. PRODUCTION SECTION

- You must select the configuration from the database, you have previously created.

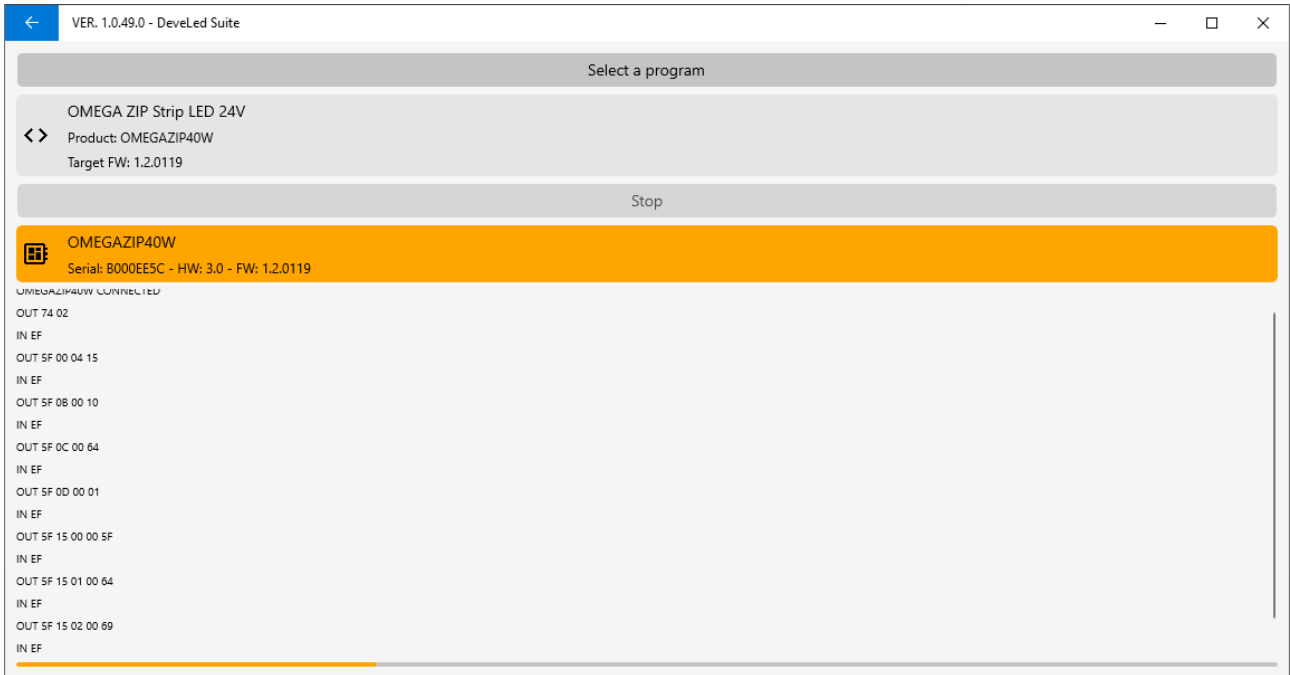


- Select in your folder one of the .dls configuration files.



- Then push start.

- The App will search for a connected LED Driver and will run the program.



- NOTE: If the driver is not compatible with the loaded configuration, an alert will be displayed.
- At the end of the process, you have to unplug the driver and plug the next one.
- Then click continue to program the next driver.

