



Programming of LED drivers ComfortLine Prog S-100 V 1–10 V IP with iProgrammer Streetlight 2

Ref. No.: 187125

# iProgrammer Streetlight 2 Software

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#### GENERAL INFORMATION

The "iProgrammer Streetlight 2 Software" with its matching "iProgrammer Streetlight 2" programming device enables simple and quick configuration of operating parameters as well as data transfer (programming) to the driver, for which purpose the driver must be disconnected from any voltage supply.

The iProgrammer Streetlight 2 is made for offline programming. The USB port connects the PC and the other end connects the dimming line of the LED driver.

The configuration of the software as well as programming itself can be carried out only offline after disconnection from mains voltage. The ability to save several configuration profiles makes the system highly flexible, which in turn lets manufacturers quickly respond to customer requirements.

The configuration of operating parameters such as output current (mA), CLO or dimming levels is effected using Vossloh-Schwabe's "iProgrammer Streetlight 2 Software". The iProgrammer Streetlight 2 device is connected to the driver via a USB drive and a PC with two data lines.

# iProgrammer Streetlight 2 Software





Up to four operating parameters can be individually set and saved.

## Output

Individual control of output current (Output) in mA.

## Dimming Function (0–10V or 5-step dimming)

The driver can be operated with two different dimming settings: either with a 0-10 V interface or with a 5-step timer.

## Constant Lumen Output (CLO)

The lumen output of an LED module decreases gradually over the course of its service life. To guarantee a constant lumen output, the output of the control gear must be gradually increased over the course of the module's service life.

#### TECHNICAL DETAILS AND NOTES

#### iProgrammer Streetlight 2

iProgrammer Streetlight 2	187125
Dimensions (LxWxH)	165 x 43 x 30 mm
Temperature range	0 to 40 °C (max. 90% r.h.)
Function	Sending and receiving settings

#### **Safety Information**

- Please check the device for damage prior to using it. The device must not be used if the casing is damaged. The device must then be disposed of in an appropriate manner.
- The USB port is solely designed to operate the iProgrammer Streetlight 2 device (USB 1/USB 2). Inserting non-USB cables or conductive objects is not permitted and can damage the device. Never use the device in environments that are humid or pose a risk of explosion.
- Never use the device for any purpose other than the one for which it was designed, namely to configure VS control gear.
- The device must be disconnected from mains voltage during programming.

#### OVERVIEW OF SYSTEM SETUP



#### INTRODUCTION

#### Software operating environment

#### 1. Hardware environment

CPU: 2 GHz and above 32-bit or more RAM: 2 GB and above HD: 20 GB and above I/O: mouse, keyboard

#### 2. Software environment

Operating system: Windows XP, Win 7, Win 10 or above Component: Microsoft.NET Framework 4.0 or above

#### 3. Download the Software

The iProgrammer Streetlight 2 Software can be downloaded via the following link: www.vossloh-schwabe.com

#### 4. Software packages

The programming software contains the files listed below. The "Driver" folder contains the installation files of the softwaredrivers.

Name	Date modified	Туре	Size
USB Driver	2020/5/28 9:44	File folder	
📳 package	2020/6/4 12:16	Windows Installer	1,244 KB
readme	2020/5/28 9:53	Text Document	1 KE
70 setup	2020/6/4 12:16	Application	418 KB

Figure 1: List of files



Double click **setup.exe** to install software.

#### 1. Welcome

Welcome to the iProg Wizard	rammer Stree	etlight 2 Setur	
The installer will guide you through th computer.	ic stops required to insta	all iProgrammer Street	ight 2 on your
WARNING: This computer program is Unauthorized duplication or distributio or criminal penaltics, and will be prose	s protected by copyrigh an of this program, or an acuted to the maximum	t law and international y portion of it, may res extent possible under	treaties. ult in severe civil the law.
	Lancel	< Back	Nevt >

Click **Next** to enter next step.

#### 2. Select installation folder

詞 iProgrammer Streetlight 2	
Select Installation Folder	5
The installer will install iProgrammer Streetlight 2 to the following folder. To install in this folder, click "Next". To install to a different folder, enter it helow o Folder:	r dick "Browse"
C:\Program Files (x88)\VS\iProgrammar Streetlight 2\	Drowse Disk Cast
Uancel ( <u>B</u> ack	Next >

Figure 3: Select installation folder

After selected installation folder click **Next** to enter next step.

#### 3. Confirm and complete installation

iProgrammer Streetlight 2				×
Confirm Installation				5
The installer is rearly to install iProgramm Click "Next" to start the installation.	er Streetlight 2 on yr	uur computer		
	Cancel	< Back	Ne	ext >
Figure 4: Confirm installation				
🙀 iProgrammer Streetlight 2				×
Installation Complete				5
iProgrammer Streetlight 2 has been succ	essfully installed.			
Click "Close" to exit				
Please use Windows Update to check fo	r any critical update	s to the .NET Frame	work.	
	Cancel	< Back	Clo	ose

Figure 5: Complete installation

After clicking on "Close" the installation is completed and this shortcut icon will appear on your desktop.





Open USB driver folder.

Name	Date modified	Туре	Size
CDM20824_Setup (XP).exe	2018-11-21 17:16	Application	1,703 KB
CDM21228 Setup.exe	2017-09-19 17:04	Application	2,393 KB

Figure 6: List of USB driver files

For Windows XP please install CDM20824\_Setup (XP).exe. For Win 7 please install CDM21228\_Setup.exe.

# 

First insert the "USB programmer" into the USB port of the computer, and connect the other end to the LED driver dimming line. Open software and click "Connect" to connect the software to the LED driver, as shown in the figure below.



Figure 7: Connect to LED driver – Working area

If the connection is successful, the prompt "Succeed" will be displayed at the top of the interface. Product type and corresponding default setting will be automatically read by the software. At the same time, the U-I curve of the corresponding driver is displayed on the left. The curve displays the

- working area (grey dotted box),
- programming working area (orange area),
- constant power curve (red dotted line),
- output voltage range (V\_min. ~ V\_max.),
- full power voltage range and
- other information.

The programming working area changes acc. to the set current.

#### DESCRIPTION OF FUNCTION BUTTONS

Model	Read Default
10/005	Import
Set Current I Max 1050 mA	Save
I Set 700 mA	Programming
Select Dimming Mode Signal Dimming Timer Dimming	Download to offline programmer

#### Figure 8: Function buttons

• Read:	Reading driver configuration parameters and display to the U-I
• Default:	Restoring the UI parameters to the factory default values
Import:	Importing the saved parameter values from a file and display them on the U-
• Save:	Saving the interface display parameter values to a file
<ul> <li>Programming:</li> </ul>	Writing the configured parameters to the driver
<ul> <li>Download to offline</li> </ul>	
programmer:	Write the configured driver parameters to the offline programmer

**Note**: The offline programmer is a programming tool kit that can complete driver programming without relying on a computer. The kit is easy to use and quick to program. The offline programming device is in preparation and will be available in the near future. For detailed information about this product, please consult your VS sales team.

#### PROGRAMMING INSTRUCTIONS

#### Programming – Set lout

I<sub>max.</sub> is fixed, depends on the driver design, customer cannot change it.

 $I_{\text{SET}}$  should be defined based on customer's needs. To change the  $I_{\text{OUT},}$  just input the values, click "Programming", when "Succeed" shows up, it means current setting was done.

The blue operation range changes while the  $I_{\text{SET}}$  is done. The maximum  $V_{\text{OUT}}$  is shown at the right corner in red.



Figure 9: Current setting

#### **P**rogramming – Dimming

#### 1. Set signal dimming mode

For signal dimming (analogue dimming) you have the choice between "Set Dimmer Voltage" which is 1–10 V or O–10 V, and "Set Reverse Dimming".



Figure 10: Signal dimming

#### 2. Timer dimming

After selecting "Timer Dimming" you can set the timing dimming related to parameters. This software supports three timer dimming settings.

Select Dimming Mode	-
Signal Dimming	
Timer Dimming	

Figure 11: Timer dimming

#### 2.1 Traditional timing

After the power supply is powered on, it works according to the set "work step" time and output power. In this mode, the number of steps, steps time and output power are always the same. When in use, configure the steps in the orange box as shown below.



Figure 12: Traditional timing

## 2.2 Self-adapting percent

Click "Self Adapting-Percent" and select the reference period. This function is to adapt to the case that the night time also changes with the season, and the time length parameter of the timing dimming also changes accordingly.



Figure 13: Self-adapting percent

To use this function, you need to set the parameters in "Reference period" first. The software will calculate the night time of today tonight according to the night time (reference days) of the previous days.

Assuming "reference days" is set to 7 days, the average of the night time for the first 7 days is taken as the night time for tonight. Then automatically adjust (according to the proportion of steps) the working time of each step (except step 0) according to the night time of this evening.

**Example**: Assume that the parameters of each step are:

- Step 1 is 2 hours and 30 minutes and the power is 100%;
- Step 2 is 3 hours and 30 minutes and the power is 80%;
- Step 3 is 2 hours and 0 minutes and the power is 50%.
- The total length of the three steps is 8 hours.
- According to the average of the night time in the previous 7 days, the night time is 10 hours.
- Then the duration of step 1 will be automatically adjusted to (2 hours and 30 minutes) × 10 ÷ 8 = 150 minutes × 10 ÷ 8 = 3 hours and 7.5 minutes;
- Similar to this calculation, the duration of step 2 will be automatically adjusted to 4 hours 22.5 minutes, the duration of step 3 is automatically adjusted to 2 hours and 30 minutes.
- The initial night time is the traditional timed programming time.

#### 2.3 Midnight function-self adapting

Click "Midnight function-self adapting" and set the reference period, midnight point, and initial duration.

This dimming profile is referenced to the average middle of the night, calculated based on the average operation time over the defined reference period.

	Referen	nce :	schedu	le			Self Adapting Percent
	Step0 §	0	5 🛊	Second	100	\$ %	
			Hour	Minute	Pow	er	Reference period 1 0 days
	Step1	2 (	2 😳	0 😳	100	÷ %	Midnight function-self adapting
	Step2 §	0	3 🛊	0 🔹	70	* %	
	Step3 §	0	2 🛊	0 🛊	50	÷ %	Reference period 7 🔮 days
	Step4 8	0	3 📮	0	80	÷ %	Midnight time 00:00 ~
	Step5 §	0	2 📮	0 🜻	100	• %	Initial duration 12 v h 00 v
	Step6 (		0 🛊	0 🛊	0	• %	Actual duration 20h 0m
	Step7 (		0 🖨	0 🖨	0	۵ s.	
		Step2 Step2 Step2 Step2 Step5 Step5 Step5 Step5	Step1 2 Step1 2 Step2 2 Step5 2 Ste	Step1         2         2           Step5         2         2           Step5         2         2           Step5         2         2           Step5         2         0           Step7         0         2	Step 2         C <td>Original of the local state         Original state</td> <td>Output         O</td>	Original of the local state         Original state	Output         O

Figure 14: Midnight function - self-adapting

- Reference period: Same as "Self-adapting Percent", the night time of the previous few days.
- Midnight time: Actual calculated center point in the operating period. It is the aligned time point with a red vertical line.
- Initial duration: It is the preset lighting duration and the red horizontal line in the time axis.
- Actual duration: Actual calculated lighting operation time and the orange horizontal line in the time axis.

After the LED driver is turned on, it works according to the adaptive (actual time) step and time and output power.

Note: Unlike the other two timing modes, the Midnight function steps use relative time settings. The start time of step 1 is 15:00 o'clock, and the other steps are arranged in order.

## Programming – Constant Lumen Output (CLO)

Select "Enable", configure the operation time and the corresponding output level, and click "Programming".



Figure 15: Constant lumen output

Output level is the set current percentage, maximum 100%. The time unit is 1K hours and the maximum is 100kh, which must be arranged in ascending order.

## Programming – Read product data record

Click "Read" to read the driver work log.

- Current tc: Current driver's casing temperature (tc) • Historical tc max.: The highest tc temperature recorded in history • Previous time tc max.: Record the highest tc temperature during the previous use Record the highest tc temperature
- This time to max.:
- Total working time:
- Firmware Ver.:

Record the total working time Driver's firmware version

during this use

Signal Dimming Timer Dimming	Constant Lumen Output	Data Record
Current temp < 50 °C	Historical T_max. Previous time T_max.	< 50) °C < 50) °C
Firmware Ver. 5.1	This time T_max. Total working time	< 50 °C 2 Hours
	Read	



Whenever an electric light goes on around the world, Vossloh-Schwabe is likely to have made a key contribution to ensuring that everything works at the flick of a switch.

Headquartered in Germany, Vossloh-Schwabe counts as a technology leader within the lighting sector. Top-quality, highperformance products form the basis of the company's success.

Vossloh-Schwabe's extensive product portfolio covers all lighting components: LED systems with matching control gear units, highly efficient optical systems, state-of-theart control systems (Blu2Light and LiCS) as well as electronic and magnetic ballasts and lampholders.

The company's future is Smart Lighting.

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