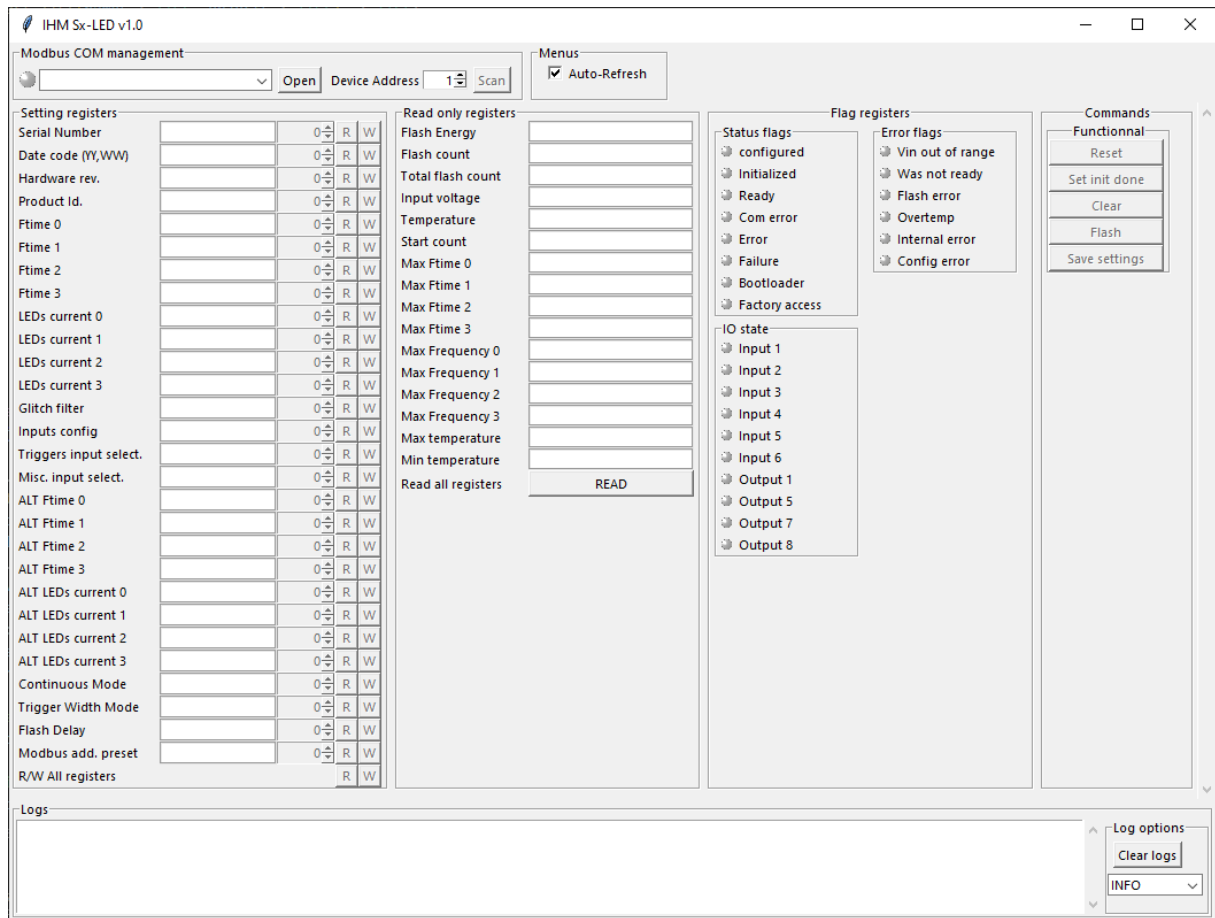
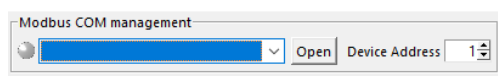


Sx-LED Test software manual



Opening the com port:

Leave the default address 1, choose the COM port corresponding to the RS-485 interface of the flash and click on Open



The interface is updated as follows:

IHM Sx-LED v1.0

Modbus COM management

USB Serial Port (COM6)

Close

Device Address

1

Scan

Menus

☒ Auto-Refresh

Setting registers

Serial Number		0	R	W
Date code (YY,WW)		0	R	W
Hardware rev.		0	R	W
Product Id.		0	R	W
Ftime 0		0	R	W
Ftime 1		0	R	W
Ftime 2		0	R	W
Ftime 3		0	R	W
LEDs current 0		0	R	W
LEDs current 1		0	R	W
LEDs current 2		0	R	W
LEDs current 3		0	R	W
Glitch filter		0	R	W
Inputs config		0	R	W
Triggers input select.		0	R	W
Misc. input select.		0	R	W
ALT Ftime 0		0	R	W
ALT Ftime 1		0	R	W
ALT Ftime 2		0	R	W
ALT Ftime 3		0	R	W
ALT LEDs current 0		0	R	W
ALT LEDs current 1		0	R	W
ALT LEDs current 2		0	R	W
ALT LEDs current 3		0	R	W
Continuous Mode		0	R	W
Trigger Width Mode		0	R	W
Flash Delay		0	R	W
Modbus add. preset		0	R	W
R/W All registers			R	W

Read only registers

Flash Energy	0.10J
Flash count	2
Total flash count	2
Input voltage	12.53V
Temperature	26°C
Start count	0
Max Ftime 0	10000µs
Max Ftime 1	1000µs
Max Ftime 2	3000µs
Max Ftime 3	300µs
Max Frequency 0	100Hz
Max Frequency 1	4Hz
Max Frequency 2	44Hz
Max Frequency 3	22Hz
Max temperature	26°C
Min temperature	26°C
Read all registers	READ

Flag registers

Status flags

☒ configured

☒ Initialized

☒ Ready

☒ Com error

☒ Error

☒ Failure

☒ Bootloader

☒ Factory access

Error flags

☒ Vin out of range

☒ Was not ready

☒ Flash error

☒ Overtemp

☒ Internal error

☒ Config error

IO state

☒ Input 1

☒ Input 2

☒ Input 3

☒ Input 4

☒ Input 5

☒ Input 6

☒ Output 1

☒ Output 5

☒ Output 7

☒ Output 8

Commands

Functional

Reset

Set init done

Clear

Flash

Save settings

Logs

2025-07-17 16:26:23,632 - INFO : Connected to COM6

Log options

Clear logs

INFO

3 interface panels are available:

- a. Read/write parameter registers :

Setting registers				
Serial Number		0	R	W
Date code (YY,WW)		0	R	W
Hardware rev.		0	R	W
Product Id.		0	R	W
Ftime 0		0	R	W
Ftime 1		0	R	W
Ftime 2		0	R	W
Ftime 3		0	R	W
LEDs current 0		0	R	W
LEDs current 1		0	R	W
LEDs current 2		0	R	W
LEDs current 3		0	R	W
Glitch filter		0	R	W
Inputs config		0	R	W
Triggers input select.		0	R	W
Misc. input select.		0	R	W
ALT Ftime 0		0	R	W
ALT Ftime 1		0	R	W
ALT Ftime 2		0	R	W
ALT Ftime 3		0	R	W
ALT LEDs current 0		0	R	W
ALT LEDs current 1		0	R	W
ALT LEDs current 2		0	R	W
ALT LEDs current 3		0	R	W
Continuous Mode		0	R	W
Trigger Width Mode		0	R	W
Flash Delay		0	R	W
Modbus add. preset		0	R	W
R/W All registers			R	W

Reading the registers is done by pressing the “R” button for all the registers or individually. Writing is done by pressing the “W” button. Please note that these settings are not saved automatically, the “Save Settings” command must be used to do this.

Setting registers				
Serial Number	20	20	R	W
Date code (YY,WW)	w26 2025	6426	R	W
Hardware rev.	C.00	768	R	W
Product Id.	1129U	1129	R	W
Ftime 0	2000µs	2000	R	W
Ftime 1	1000µs	1000	R	W
Ftime 2	3000µs	3000	R	W
Ftime 3	300µs	300	R	W
LEDs current 0	1000mA	1000	R	W
LEDs current 1	6000mA	6000	R	W
LEDs current 2	3000mA	3000	R	W
LEDs current 3	5000mA	5000	R	W
Glitch filter	10µs	10	R	W
Inputs config	0b0	0	R	W
Triggers input select.	IN1 IN2 IN3 IN5	21281	R	W
Misc. input select.	IN6	6	R	W
ALT Ftime 0	100µs	100	R	W
ALT Ftime 1	100µs	100	R	W
ALT Ftime 2	100µs	100	R	W
ALT Ftime 3	100µs	100	R	W
ALT LEDs current 0	2000mA	2000	R	W
ALT LEDs current 1	2000mA	2000	R	W
ALT LEDs current 2	2000mA	2000	R	W
ALT LEDs current 3	2000mA	2000	R	W
Continuous Mode	0	0	R	W
Trigger Width Mode	0	0	R	W
Flash Delay	0µs	0	R	W
Modbus add. preset	0	0	R	W
R/W All registers			R	W

Description of the registers:

- Ftime X : Flash pulse duration in us for trigger X
 - LEDs Current X : LEDs Current in mA for trigger X
 - Glitch filter : Glitch filter for all trigger in us (min. value 10us)
 - Inputs Config : Configure level and polarity of each input.
- Double click on the green dial to access the configuration details

Inputs config

Detailed register's values

Input 1 Polarity

Active low / Falling edge

Input 2 Polarity

Active low / Falling edge

Input 3 Polarity

Active low / Falling edge

Input 4 Polarity

Active low / Falling edge

Input 5 Polarity

Active low / Falling edge

Input 6 Polarity

Active low / Falling edge

Input 1 buffer

12V levels (2.0V / 8.0V schmitt trigger)

Input 2 buffer

12V levels (2.0V / 8.0V schmitt trigger)

Input 3 buffer

12V levels (2.0V / 8.0V schmitt trigger)

Input 4 buffer

12V levels (2.0V / 8.0V schmitt trigger)

Input 5 buffer

12V levels (2.0V / 8.0V schmitt trigger)

Input 6 buffer

12V levels (2.0V / 8.0V schmitt trigger)

Compiled register's value

Inputs config

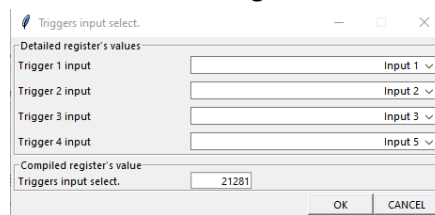
0

OK

CANCEL

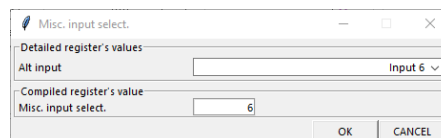
After validating the parameters in this window, do not forget to write them with the "W" command in the main window.

- Triggers input select. : Assign trigger on inputs
Double click on the green dial to access the configuration details



After validating the parameters in this window, do not forget to write them with the "W" command in the main window.

- Misc. input select. : others input configuration
Double click on the green dial to access the configuration details



After validating the parameters in this window, do not forget to write them with the "W" command in the main window.

- ALT Ftime X : Alternative Flash pulse duration in us for trigger X (when ALT input is active)
- ALT LEDs Current X : Alternative LEDs Current in mA for trigger X (when ALT input is active)
- Continuous Mode : Continuous mode activation with an intensity setting from 1 to 20 (0 = off). Continuous mode produces a continuous light (strobe at 100Hz) which can be superimposed on flash use
- Trigger with mode : set to 1 to activate this mode, 0 otherwise. when this mode is enabled, the flash duration is equal to the duration of the trigger signal, otherwise to the duration of the Flash Time parameter
- Flash Delay : added delay between trigger signal and start of flash in us
- Modbus add. Preset : Software Modbus address configuration

b. Read only registers :

Read only registers	
Flash Energy	0.10J
Flash count	0
Total flash count	2
Input voltage	12.53V
Temperature	26°C
Start count	0
Max Ftime 0	10000µs
Max Ftime 1	1000µs
Max Ftime 2	3000µs
Max Ftime 3	300µs
Max Frequency 0	100Hz
Max Frequency 1	4Hz
Max Frequency 2	44Hz
Max Frequency 3	22Hz
Max temperature	26°C
Min temperature	26°C
Read all registers	READ

Read-only registers are refreshed every second when Auto-Refresh is checked

Description of the registers:

- Flash Energy : Last Flash energy
- Flash Count : Number of flashes produced since last boot
- Total flash Count : Number of flashes produced since its manufacture
- Input voltage : supply voltage measured by the Flash
- Temperature : Internal temperature of the Flash
- Start Count : Number of starts performed by the flash since its manufacture
- Max Ftime X : maximum pulse duration allowed for the chosen current setting of trigger X
- Max Frequency : maximum operating frequency allowed for the chosen current setting of trigger X
- Max. temperature : Maximum internal temperature measured
- Min. temperature : Minimum internal temperature measured

c. Commands

Commands
Functionnal
Reset
Set init done
Clear
Flash
Save settings

The list of available commands is as follows:

- Reset : Flash software reset
- Set init done : Set Initialized flag to '1'
- Clear : Clear error flags
- Flash : generation of a flash
- Save Settings : save settings