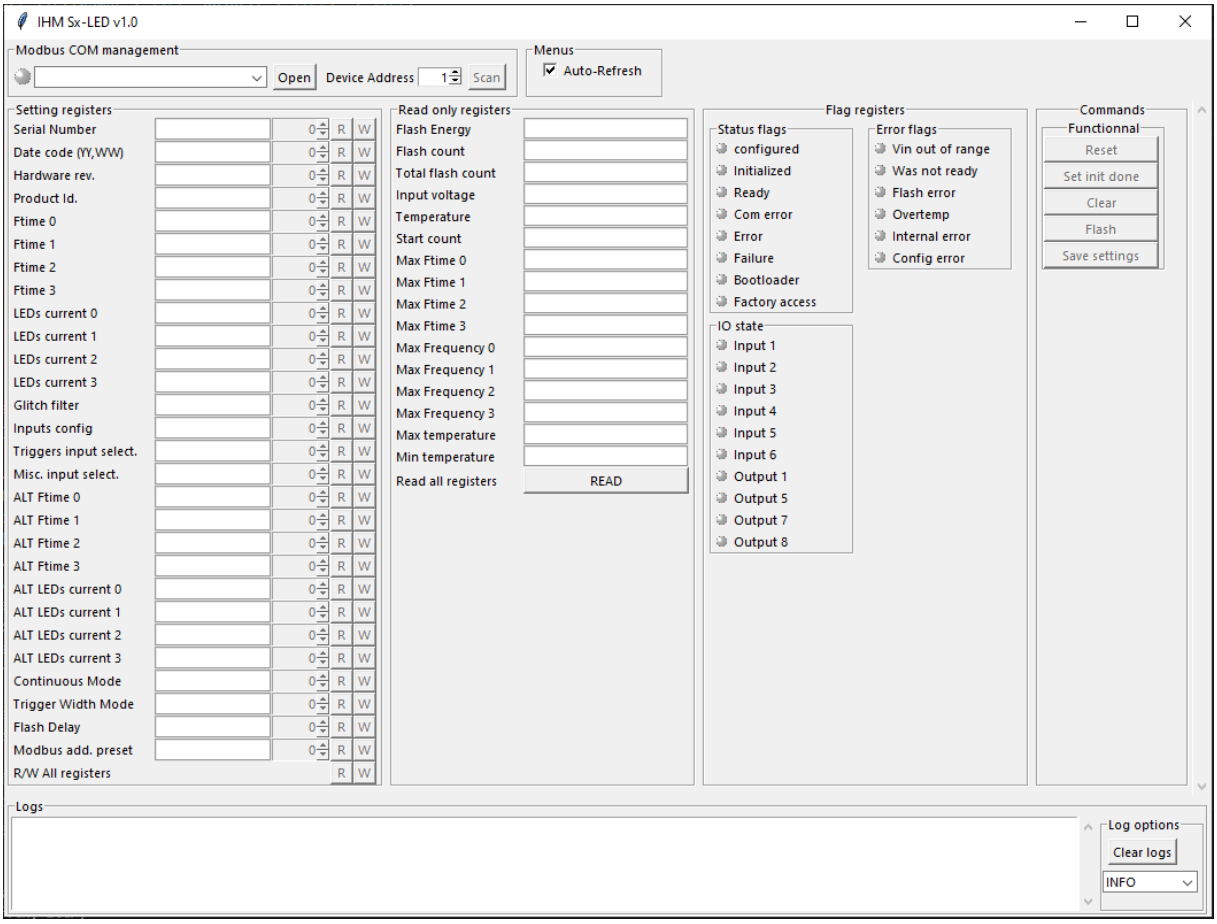
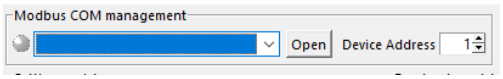
Sx-LED Test software manual

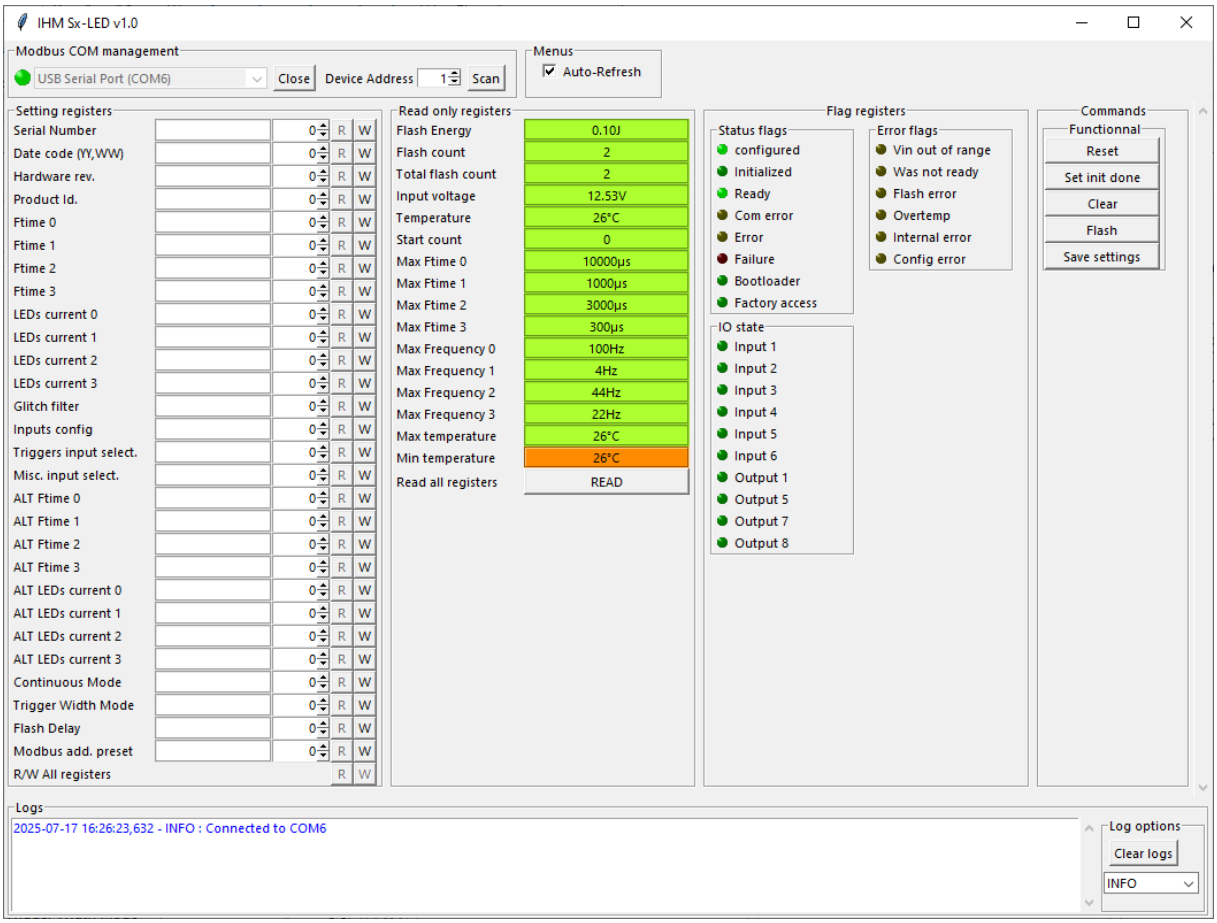


Opening the com port:

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

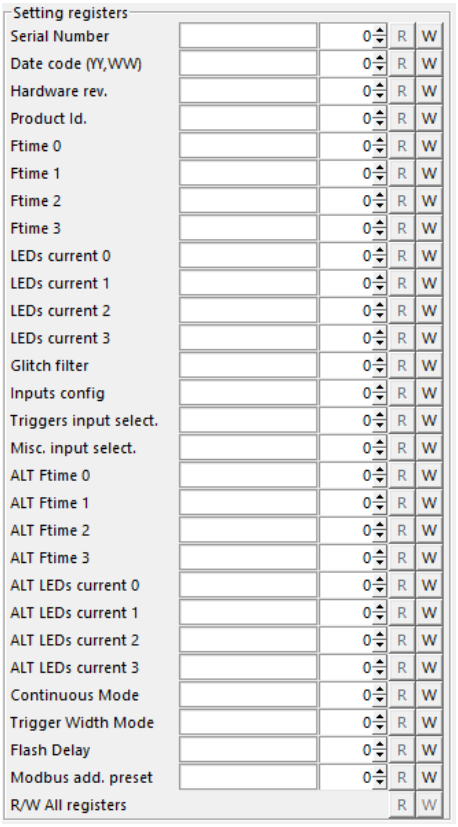


The interface is updated as follows:

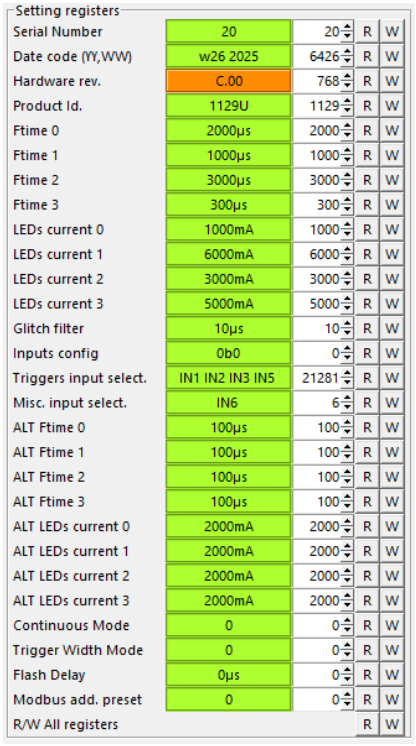

IHM Sx-LED v1.0
Modbus COM management
USB Serial Port (COM6)
Close
Device Address
1
Scan
Menus
Auto-Refresh
Setting registers
Serial Number
Date code (YY,WW)
Hardware rev.
Product Id.
Ftime 0
Ftime 1
Ftime 2
Ftime 3
LEDs current 0
LEDs current 1
LEDs current 2
LEDs current 3
Glitch filter
Inputs config
Triggers input select.
Misc. input select.
ALT Ftime 0
ALT Ftime 1
ALT Ftime 2
ALT Ftime 3
ALT LEDs current 0
ALT LEDs current 1
ALT LEDs current 2
ALT LEDs current 3
Continuous Mode
Trigger Width Mode
Flash Delay
Modbus add. preset
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
Functionnal
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 :

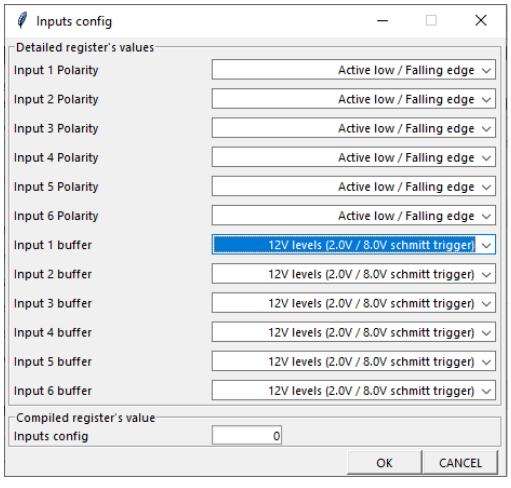


Reading the registers is done by pressing the “R” button for all the registers or individually. Writing is done by pressing the “W” button. Please note that these settings are not saved automatically, the “Save Settings” command must be used to do this.



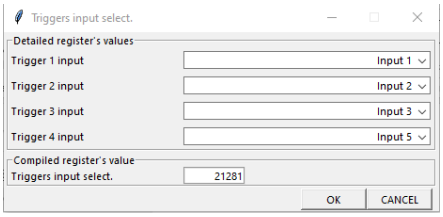
Description of the registers:

- 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



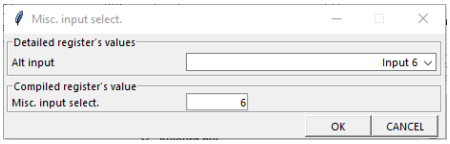
After validating the parameters in this window, do not forget to write them with the "W" command in the main window.

- 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.

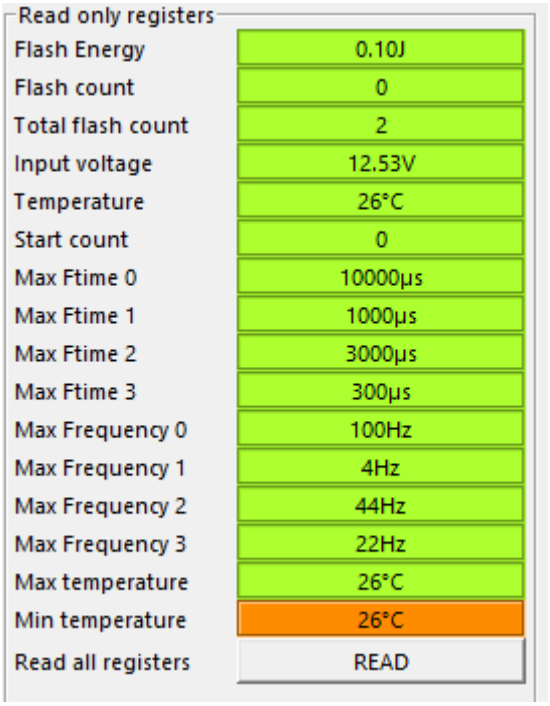
- Misc. input select. : others input configuration
  Double click on the green dial to access the configuration details



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 :

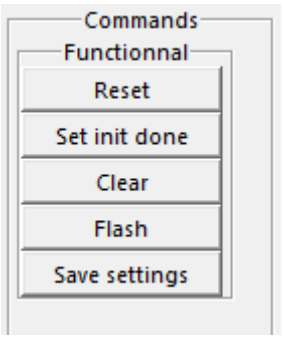


Read-only registers are refreshed every second when Auto-Refresh is checked

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



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