User manual

CE

LIMIT VALUE SWITCH
LSP-LVS

LEVTECH

Limit Value Switch
LSP-LVS

Brief description

The LSP-LVS is a limit switch with a 0-10V or 0-20mA analog input. Depending on the settings, the 2 output relays can turn on and off separately when the input signal reaches a certain setpoint.

Functioning

This is a limit switch that can convert analog signals, such as the standard 0-10V or 0-20mA, into digital values using relays. We can set the input type, output type and the limit values using the WiFi communication and the web interface of the device. Both outputs can be Normally Open and Normally Closed, independently of each other. The output relays can switch up to 2 Amps, thus offering a simple solution for both industrial and home use. It can switch both DC and AC voltage up to 220VDC and 250VAC. The device has a web user interface, so it does not require application installation. It can be accessed from any phone or laptop with WiFi. The module is supplied from 18-30VDC.

Features

- Web interface
- Standard 0-10V or 0-20mA intputs
- Wide range of switchable voltage
- Selectable output types
- Overvoltage protection
- Reverse polarity protection
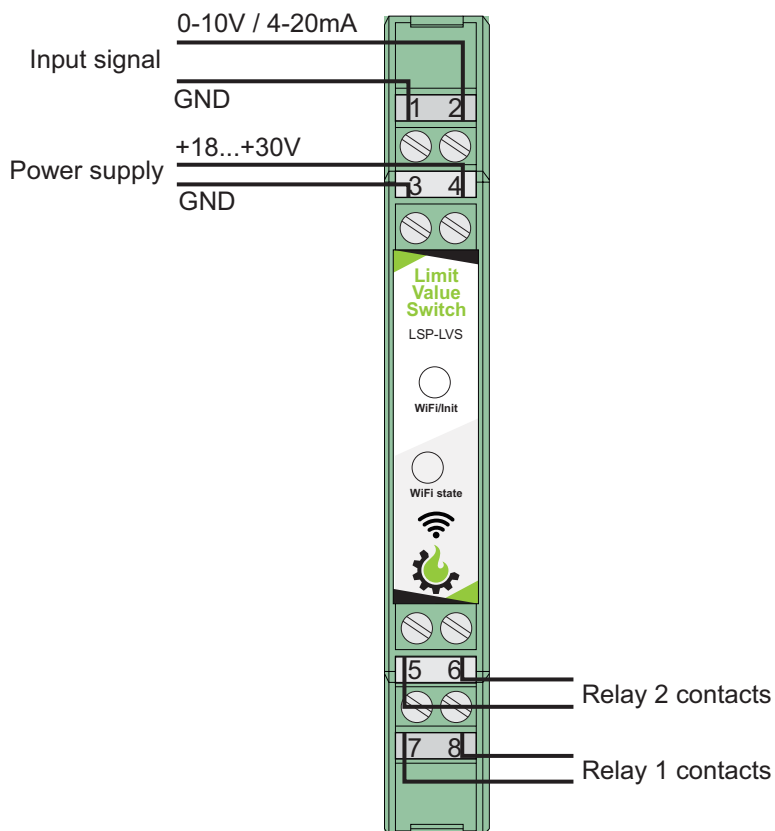- Status LED
- DIN TS-35 rail mountable

LEVTECH

Connector description
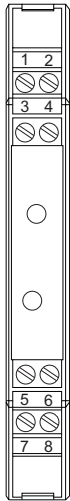
Pin nr.	Signal
1	GND
2	Signal input (0-10V / 0-20mA)
3	Power supply GND
4	18 - 30VDC
5	Relay contact (Output 2)
6	Relay contact (Output 2)
7	Relay contact (Output 1)
8	Relay contact (Output 1)

Connector description

Wiring diagram

Input signal — 0-10V / 4-20mA — GND

Power supply — +18...+30V — GND

Limit Value Switch

LSP-LVS

WiFi/Init

WiFi state

Relay 2 contacts

Relay 1 contacts

Configuration via web interface

After wiring the limit switch and powering it up, we can setup it by accessing the user interface. The settings easily can be modified by following the steps below.
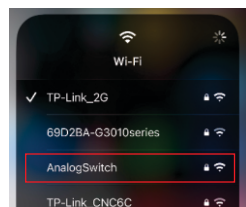
Step 1

Turn on the WiFi access on the transmitter by pushing the **WiFi/Init** button.

Step 2

After the **WiFi state** LED turns from red to blue, we can find the device in our connection list. Connect to the **Analog Switch** network. The password is: **123456789.** In the case of 2 minutes of inactivity, the WiFi turns off automatically.
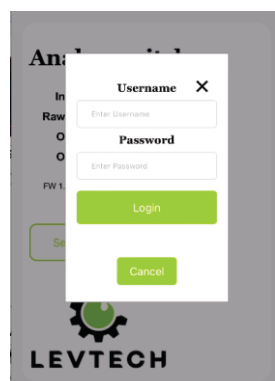

Step 3

If the connection was successful, let's open a browser and type in your searching line the **192.168.4.1** IP address. There will appear the first page.
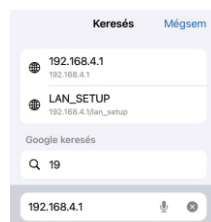
Step 4

In order to access the setup page, we need to log in. After clicking on the **Setup** button, we need to give the username and the password.

Username: **admin**
Password: **password**

Configuration via web interface

As we logged in the setup page, we can modify on **Measuring parameters**, **Out 1** and **Out 2 parameters.**

SETUP PAGE

Measuring parameters:

Input Type	0-10 V	ⓘ
Filter	50Hz	ⓘ
Limits in	Unit	ⓘ

Input Type: we can choose between 0-10V or 0-20mA, depending on how we want to use it.

Filter: here, select the frequency of the network used to filter out interference
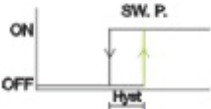- 50Hz
- 60Hz

Limits in: means how we would like to specify the limits where the relays should switch
- Unit (0-10V type: 0-10 or 0-20mA type: 0-20)
- Percentage (0-100% of the 0-10V or 0-20mA ranges)

Lueta Nr. 319, Romania
+40761318594
office@levtech.ro
www.levtech.ro

LEVTECH
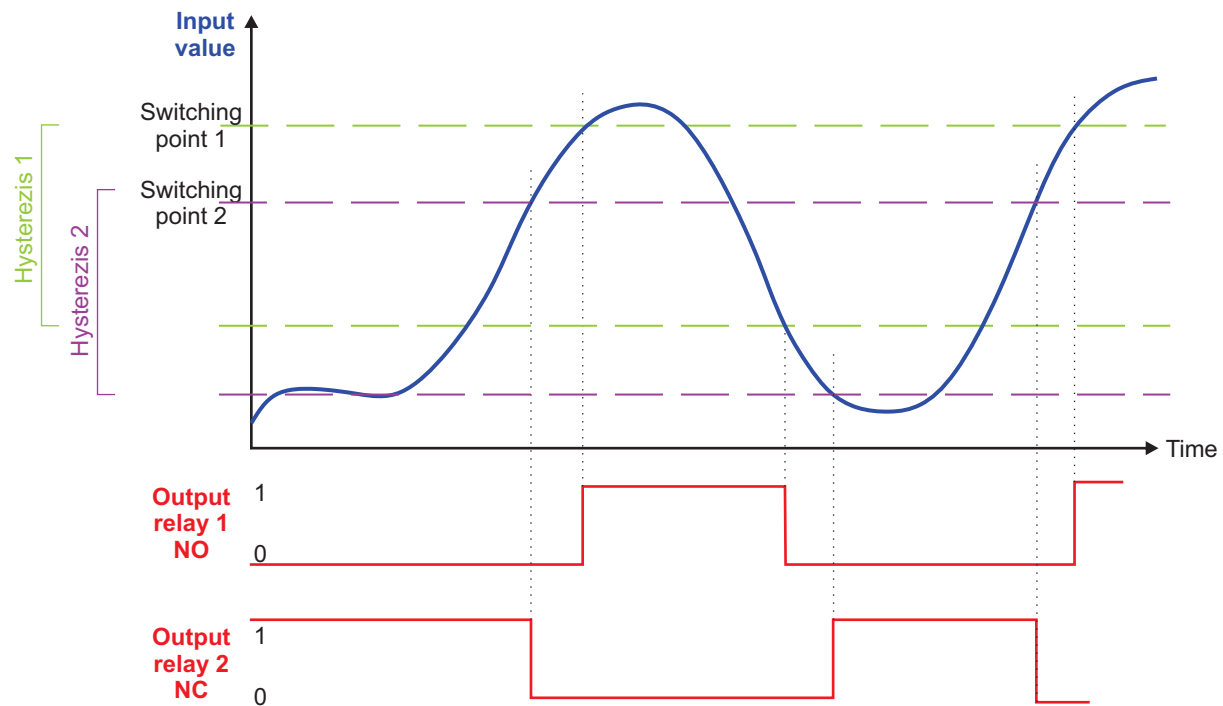
Configuration via web interface
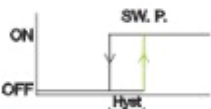
Out 1 and Out 2 parameters

Switching point: the output will switch at the value set here

Hysteresis: at this value will reactivate the output again

Switching mode: it refers to the initial state of the relays

LEVTECH

Operational diagram

Technical data

Power supply voltage	18-30VDC
Power loss	<1W
Current consumption	max 27mA@24,2V
Number of inputs	1
Input voltage	0-10VDC
Voltage input impedance	10 kΩ
Input current	0-20mA
Current input impedance	500 Ω
Number of outputs	2
Output types	Relay contacts (NO and/or NC)
Max output loads	2A / 30V DC
Dimensions	99 × 114 × 12,5 mm
Weight	100 g

LEVTECH

Dimensions

12,5 mm

114 mm

99 mm

1 2
3 4

Limit Value Switch

LSP-LVS

WiFi/Init

WiFi state

5 6
7 8

LEVTECH

Input	0-10V or 4-20mA
Output 1	Relay output, up to 2A/30V DC (max 220VDC/250VAC)
Output 2	Relay output, up to 2A/30V DC (max 220VDC/250VAC)
Supply	From 18 to 30VDC

Serial No.: LVS01001012307

Levtech Service & Production SRL
www.levtech.ro