Velleman HPG1MK2 - User manual and info

INFO

Features:

- DDS type generator (Direct Digital Synthesis)
- sweep function with bi-direction option
- OLED screen
- operates on 4 x 1.5V AAA batteries (not included)
- signature white back casing

Specifications:

- DAC resolutions: 10 bits
- frequency range: from 1 Hz to 1.000.000 Hz (± 0.01 %)
- frequency steps: 1 Hz, 10 Hz, 100 Hz, 1 kHz and 10 kHz
- waveforms: sine, square and triangle
- output voltage: max. 8 Vpp
- real output level measurement: dBm / Vrms or Vpp readout (± 3 %)
- typical sine wave distortion (THD): < 0.1% @ 1 kHz / 0dB / 600 Ohm
- square wave rise/fall time: typ. 0.2 µs
- output impedance: 50 Ohm
- dimensions: 114 x 68 x 22mm / 4.48 x 2.67 x 0.86"
- power consumption: 70 mA max
- battery life: about 15 hours on quality alkaline batteries

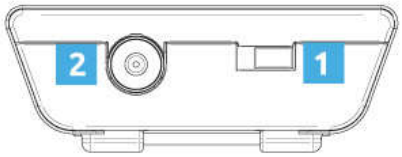
What's in the box

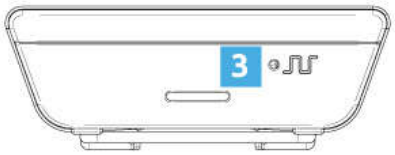
- handheld pocket generator
- getting started manual
- BNC male to RCA female
- BNC male to 2x4mm banana plug

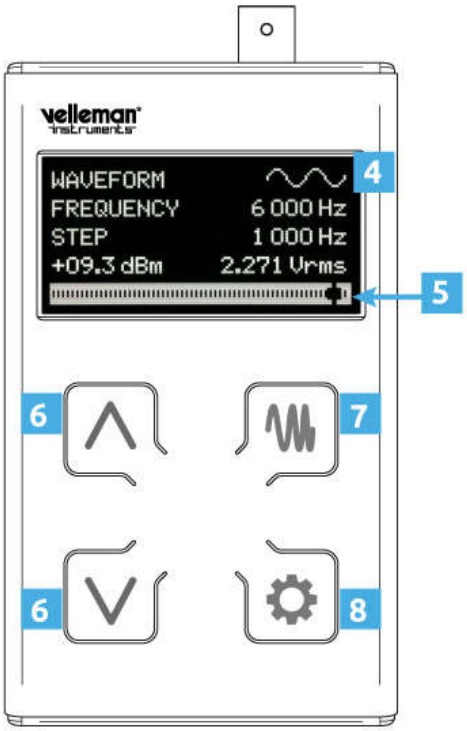
Option:

Optional Velleman instruments protective pouch (HPSP1)

CONNECTIONS AND CONTROLS



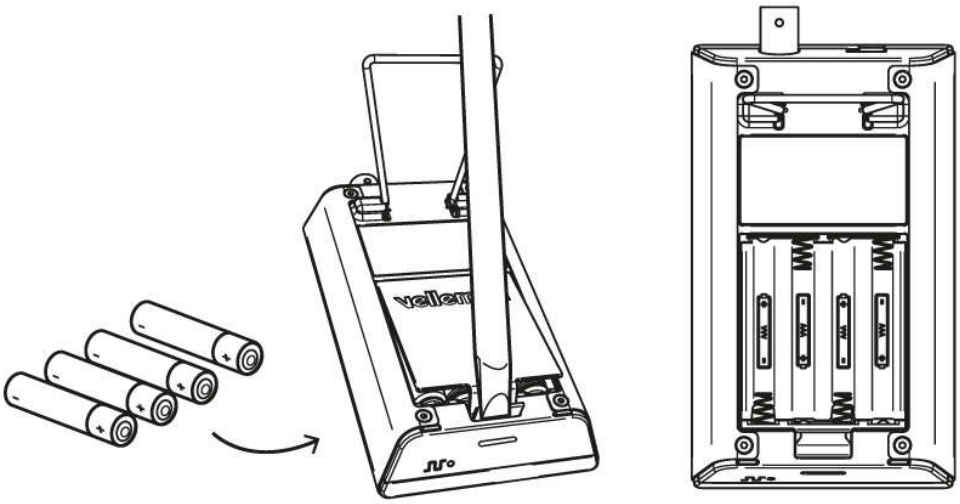




1. on/Off switch
2. BNC output connector
3. calibration output
4. signal and menu display
5. output level indicator
6. up and down set buttons
7. menu button / menu selection up
8. settings menu button / menu selection down

CHANGING THE BATTERIES

Use 4 x AAA 1,5V batteries and **note the polarity!**



FUNCTION GENERATOR SETUP

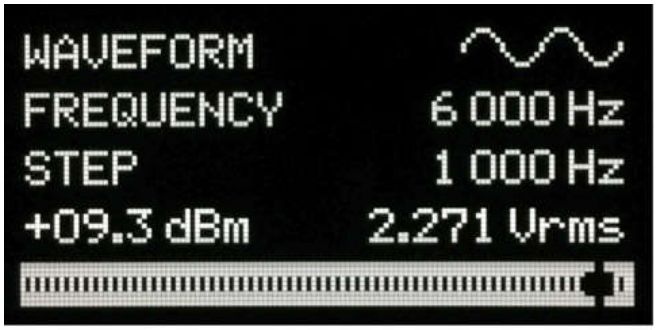
Access the setup menu by keeping the **settings button pressed in.**

You can:

- change the user interface language
- adjust the display contrast or reverse the display (white with black dots)
- change the way the frequency is changed if you keep the up/down button pressed (Log. will make the frequency change faster)
- start or Stop the DEMO mode (useful for demonstration or testing)
- press and hold the **setting menu button (8)** or the **menu button (7)** to leave the menu and store the settings

WAVEFORM MENU

This view is shown when **sweep** is off (check the next chapter).



Select the desired **waveform**.
(sine, square or triangle)

Select the desired **frequency**.
(1Hz, ..., 1.000.000Hz)

Select the desired **frequency step**.
(1Hz, 10Hz, 100Hz, 1kHz or 10kHz)
This setting is used for above frequency change.

Select the desired **output level**.
(dBm/Vrms or Vpp depens on signal)

SWEEP MENU

A sweep generator generates a frequency which changes with respect to time and is a practical device for recording frequency characteristics, or to make automated measurements.

Minimum or start frequency at which the signal starts.

Maximum or start frequency at which the signal stops.

Select the desired frequency step (1Hz, 10Hz, 100Hz, 1kHz or 10kHz) this setting is used for above frequency change.

Selection of the loop sweep function of the signal:

Lin.: linear from minimum to maximum, then restart from min to max.

Log: logarithmic from minimum to maximum, then restart from min to max.

Bi-lin: linear from minimum to maximum and back to minimum ...

Bi-log: logarithmic from minimum to maximum and back to minimum ...

Speed at which the signal sweeps from minimum to maximum or turn the sweep function off.

Waveform screen if **Sweep** is on.
(inverse)