

Firmware v1.0.2 update instructions:

- Optimize the resistance touch screen calibration logic to improve accuracy;
- Modify the color of the "SWEEP POINTS" mark to yellow;

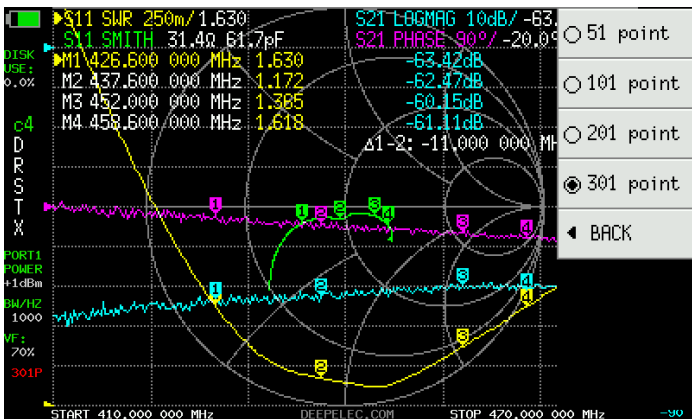
[Download NanoVNA-F FW v1.0.2 for HW2.2.zip](#)

[Download NanoVNA-F FW v1.0.2 for HW2.3 HW3.1.zip](#)



Firmware v1.0.0 and 1.0.1 update instructions:

- Support 301 sweep points at most(unit side), improve the sweep speed, about 101 points per second;
- Support setting arbitrary scanning points by using nanovna-Saver;
- Simplified Chinese and traditional Chinese can be set;
- Support LC / match impedance matching function;
- Support bandwidth setting;
- The number of calibration slot is increased to 7, and the unit frequency information can be displayed;
- Support up to two ordinate axis display;
- Support NanoVNA-App;
- Add a button to clear all configurations;



[Download NanoVNA-F FW v1.0.0 for HW2.2.zip](#)

[Download NanoVNA-F FW v1.0.0 for HW2.3 HW3.1.zip](#)

[Download NanoVNA-F FW v1.0.1 for HW2.2.zip](#)
[Download NanoVNA-F FW v1.0.1 for HW2.3 HW3.1.zip](#)



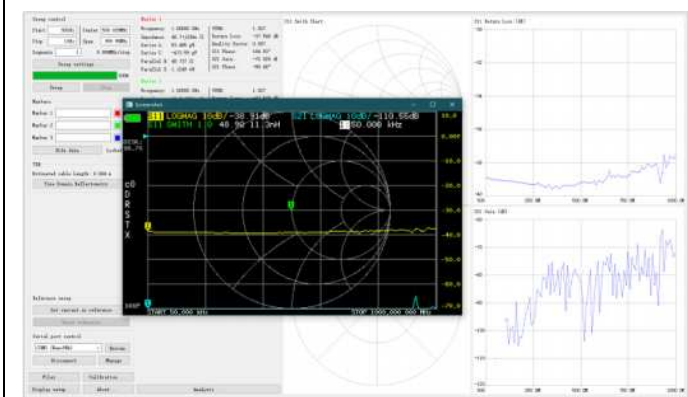
PORT1/CH0 Output Power Level (dBm)

Model	Si5351 Drive Strength	Fundamental (< 300MHz)	3rd Harmonic (300-900MHz)	5th Harmonic (900-1500MHz)
NanoVNA-F HW2.2 *NanoVNA-H Rev3.3	8mA	-8	-20	-30
	6mA	-9		
	4mA	-10		
	2mA (default)	-13		
NanoVNA-F HW2.3 NanoVNA-F HW3.1 *NanoVNA-H Rev3.4 *NanoVNA-H4 Rev4.2	8mA (default)	+1	-10	-20
	6mA	-1		
	4mA	-4		
	2mA	-10		

1. The NanoVNA-H/H4 measurement data in the table only represents the measurement results of BH5HNU and has nothing to do with the manufacturer.
2. According to the actual situation of different units, there is a certain tolerance in the power measurement results.

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Model: NanoVNA-F 4.3" HW2.3 HW3.1
Version: Firmware 0.2.0 beta - by BH5HNU
Build time: Jul 14 2020 - 11:03:57 CST
Project: <https://github.com/FLyoob/NanoVNA-F>
Based on: <https://github.com/ttrftech/NanoVNA>
More info: deepelec.com/nanovna-f
Battery: 3750mV
User info: BH5HNU, +86 0123456789, support@deepelec.com



[v0.2.1 009e560](#)

[NanoVNA-F Firmware 0.2.1](#)

- The fundamental output power can be adjusted in four levels. When measuring low resistance components, setting a small output power can prevent the mixer input from overloading;
- Display the current VF parameters in TDR and eDelay modes;
- Add the format quality factor trace display.

[NanoVNA-F APP v0.2.1 for HW2.2.zip](#)

[NanoVNA-F APP v0.2.1 for HW2.3 HW3.1.zip](#)

[v0.2.0 009e560](#)

[NanoVNA-F Firmware 0.2.0 beta](#)

Firmware v0.2.0 beta update instructions:

- Add data storage function, can save s1p, s2p files to SPI Flash in real time, which is convenient for offline analysis;
- Adapt NanoVNA-Saver screenshot function, need to use [nanovna-saver-0.3.4-bh5hnu.exe](#) compiled by BH5HNU;
- Support LCD backlight adjustment, adjustment range 1-100, default 75;
- Revise the voltage display as the power display, support 8-level power display;
- The calibration data interpolation uses the latest saved data instead of the default position of 0, which is more in line with operating habits;
- Some UI optimizations such as Marker;
- The maximum settable frequency can be expanded to 2.7GHz;
- Two different sets of gain tables are used for hardware V2.2 and hardware V2.3&V3.1, please be sure to select the corresponding firmware to upgrade, please consult your seller for how to check the hardware version;

Important hint !

This firmware is only applicable to NanoVNA-F machines manufactured by BH5HNU.

Any third-party NanoVNA-F hardware has not been tested, and any problems with third-party hardware using this firmware will not be explained by BH5HNU. Thank you for your cooperation.

[v0.1.5](#) [29e90df](#)

[NanoVNA-F Firmware 0.1.5](#)

1. Calibration data interpolation uses the latest saved data instead of the default position of 0, which is more in line with operating habits.

No new features were added compared to firmware v0.1.4.


[v0.1.4](#) [8334424](#)

[NanoVNA-F Firmware 0.1.4](#)

1. 0dBm output only supports HW v2.3 & v3.1
2. No new features were added compared to v0.1.1

[v0.1.1](#) [b779266](#)

[NanoVNA-F Firmware 0.1.1](#)

 [flyoob](#) released this Feb 3, 2020

1. Fixed SWR axis display error.
2. Fixed grid display problems.
3. Modify boot logo.

[v0.1.0](#) [b779266](#)

1. Add TDR feature
2. Add marker tracking feature & dynamic update of frequency and other information when the mark moves
3. Add ordinate display
4. Support to 10kHz frequency
5. Some font, color, and layout optimizations
6. suggestions from groups.io/nanovna-f & facebook group members and much more, thank you for your feedback
(1) a beep to the end of each standard

NanoVNA-F

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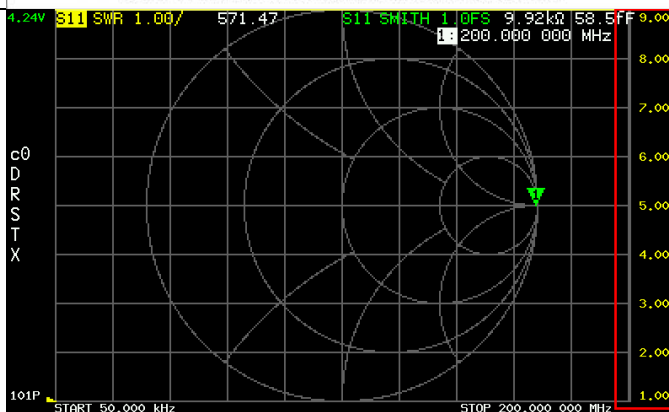
Version: Firmware 0.1.5 - by BH5HNU
 Frequency: 10k ~ 1.5GHz
 Build time: Apr 17 2020 - 09:34:17 CST
 Project: <https://github.com/flyoob/NanoVNA-F>
 Based on: <https://github.com/ttrftech/NanoVNA>
 More info: deepelec.com/nanovna-f
 User info: BH5HNU, +86 0123456789, support@deepelec.com

NanoVNA-F

NanoVNA-F Hardware Release Notes www.deepelec.com

Hardware version	V2.2 PCB with "by BH5HNU" mark	V2.3 PCB with "by BH5HNU" mark	V3.1 PCB with "by BH5HNU" mark
Release date	2019.09	2020.03	2020.03
Firmware compatibility	Compatible with latest firmware	Compatible with latest firmware	Compatible with latest firmware
Characteristic	1. thumbwheel switch 2. RF bridge -13dBm output (Fundamental frequency)	1. thumbwheel switch 2. optimized RF bridge 0dBm output (Fundamental frequency), more accurate reflection measurement. 3. lower standby power consumption	1. push-button switch & larger power switch, better operation 2. optimized RF bridge 0dBm output (Fundamental frequency), more accurate reflection measurement. 3. lower standby power consumption
	Sold out	Normal supply	Normal supply

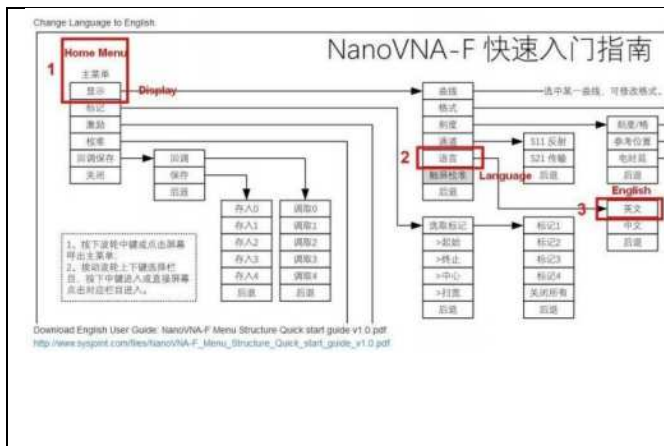
Any other version is not produced by us, please be careful to identify. Deepelec.com



NanoVNA-F

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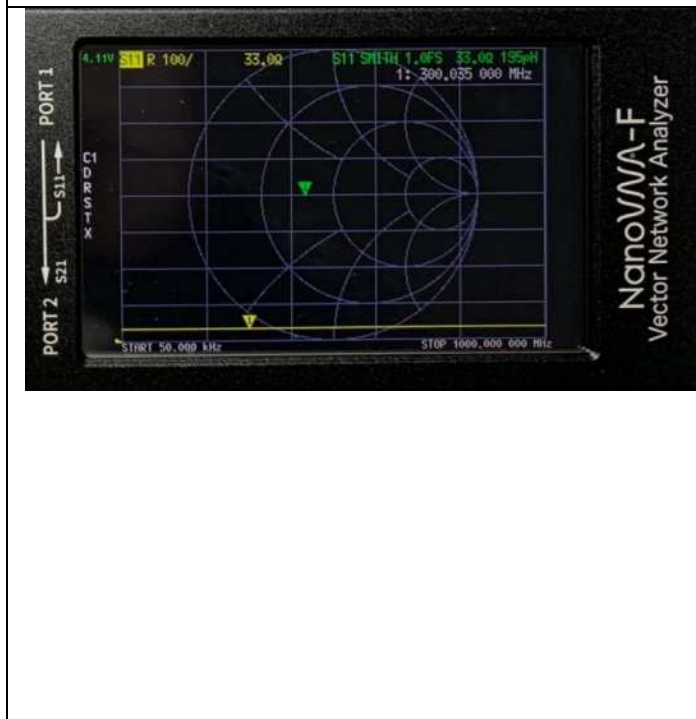
Version: Firmware 0.1.0 - by BH5HNU
 Frequency: 50k ~ 1.5GHz
 Build time: Feb 2 2020 - 21:33:41 CST
 Project: <https://github.com/flyoob/NanoVNA-F>
 Based on: <https://github.com/ttrftech/NanoVNA>
 More info: deepelec.com/nanovna-f
 User info: BH5HNU, +86 0123456789, support@deepelec.com



measurement in calibration
 (2) call sign.txt not limited to call sign display, can display your phone and email address, etc.

The startup information is not displayed for a long time at present, you can call it up in the menu. Just into the menu: CONFIG -> ABOUT

DISPLAY->TRACE->LANGSET->ENGLISH



v0.0.5 - [Support measurable frequency to 1.5 GHz](#)

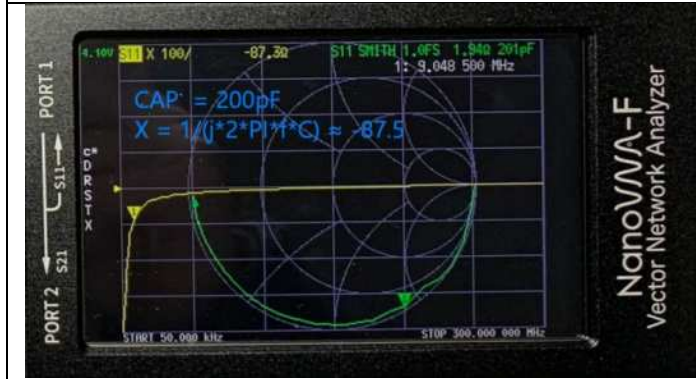
flyoob released this on Dec 30, 2019

support measurable frequency to 1.5 GHz, default setting 1 GHz, accurate measurement up to 1.35GHz.

1. fix: unexpected 0.3dB offset of s21 in thru
2. fix: mark all off bug
3. fix: clutter display when standing wave ratio is infinite
4. add version & info command
5. add REAL IMAG R X trace format

more details :

http://deepelec.com/2019/12/30/nanovna-f-0_0_5/



v0.0.4 - [Display call sign at startup](#)

flyoob released this on Oct 30, 2019

- Can display call sign
- fix BUG: 100MHz frequency does not output / fix BUG: CW = 100MHz do not output
- Optimize Chinese translation



v0.0.3 - [support NanoVNA's PC software](#)

flyoob released this on Oct 7, 2019

change command prompt from "nanovna-F>" to "ch>" to support NanoVNA's PC software.

1. Freq < 100M, Si5351 only use PLL_A as output. Increase delay when si5351 reset pll.
2. Add beep on boot.

v0.0.2 - [First release.](#)



[flyoob](#) released this on Aug 29, 2019

NanoVNA-F APP First release.

[NanoVNA-F APP_v0.0.2.zip](#)