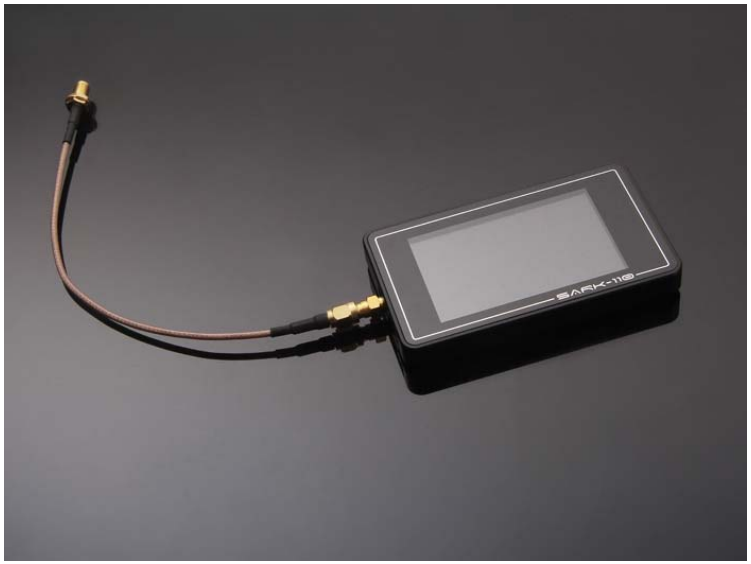
参考資料

S A R K - 110

Antenna Analyzer

EA4FRB - 2015

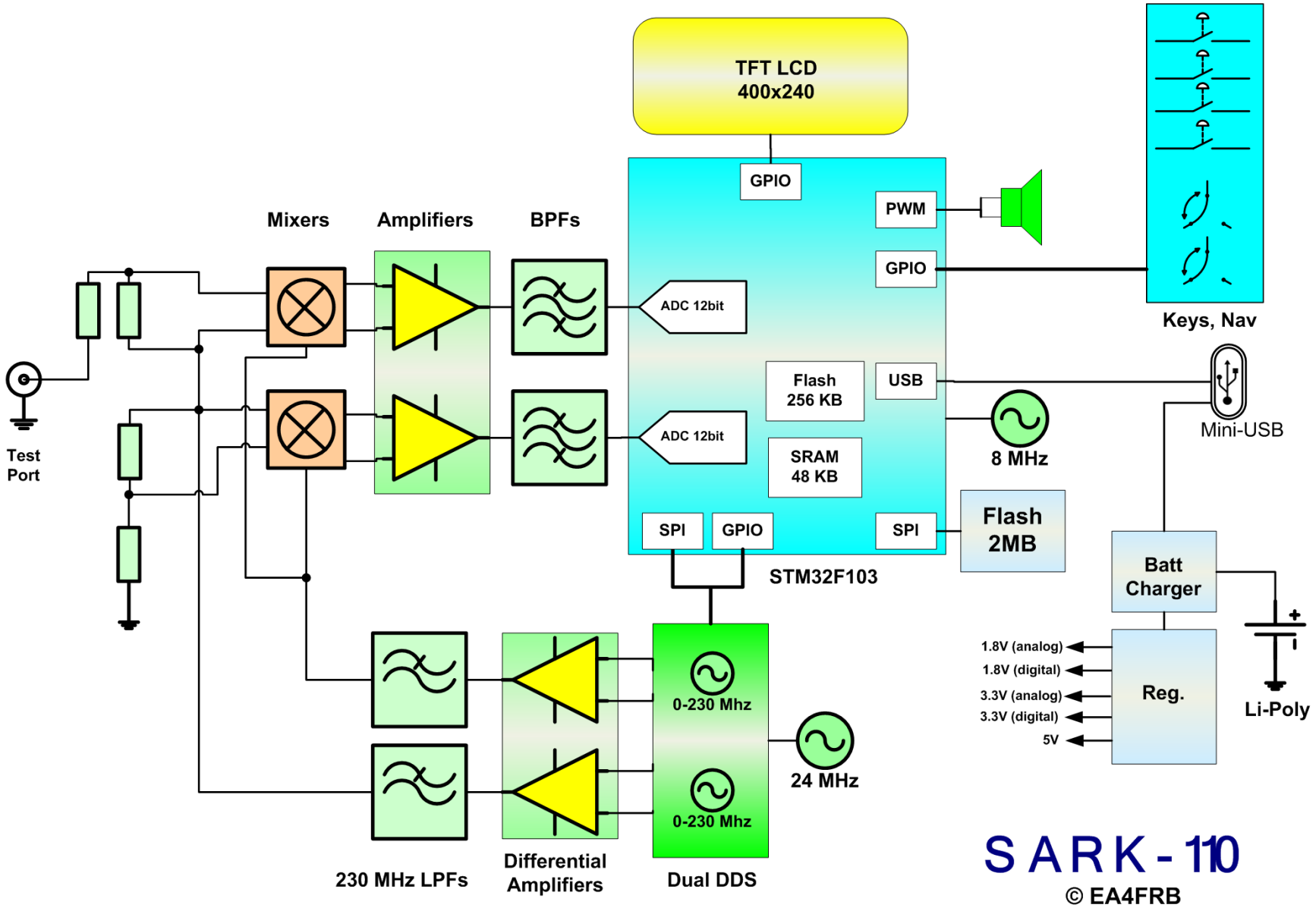
Gallery



Main Features

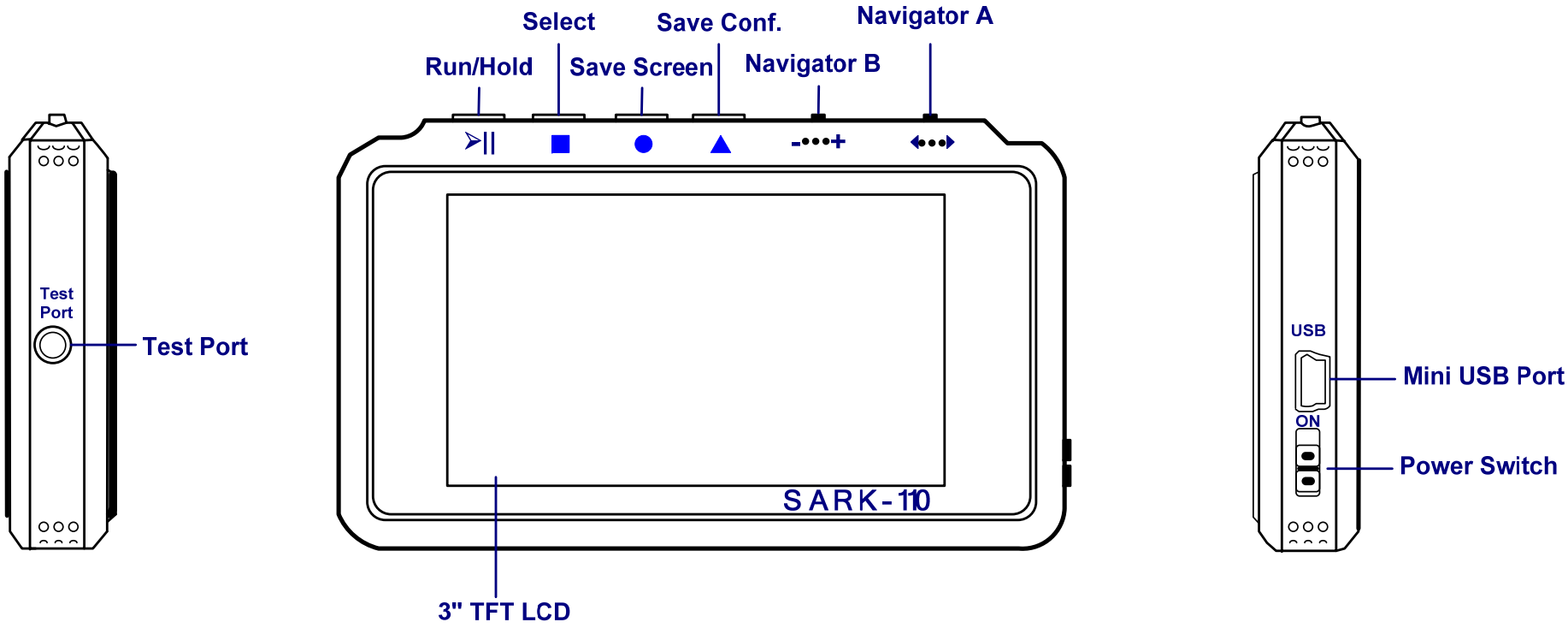
- Pocket size and lightweight
- Solid aluminum case
- 3” Color TFT display
- Intuitive and easy to use
- Frequency range 100 kHz to 230 MHz
- Superhet architecture
- Excellent accuracy over a broad range of impedances
- Resolves the sign of the impedance
- Internal disk for storage of measurements, screenshots, configuration and firmware upgrades
- USB Connection to a PC

Block diagram



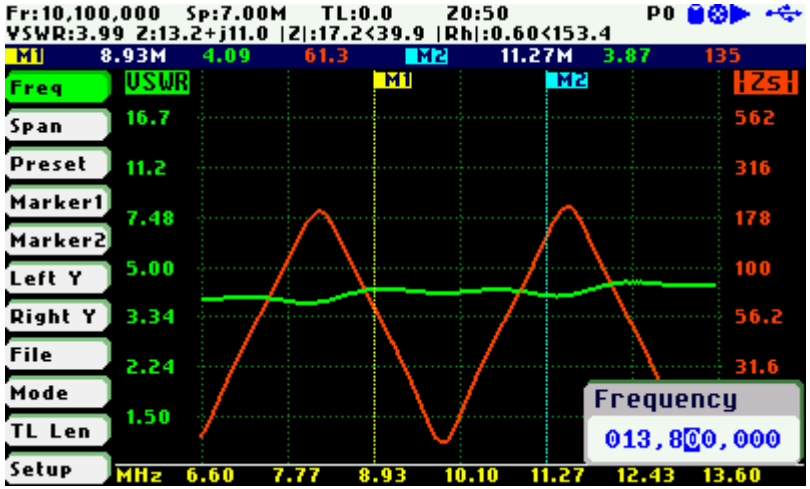
Functions

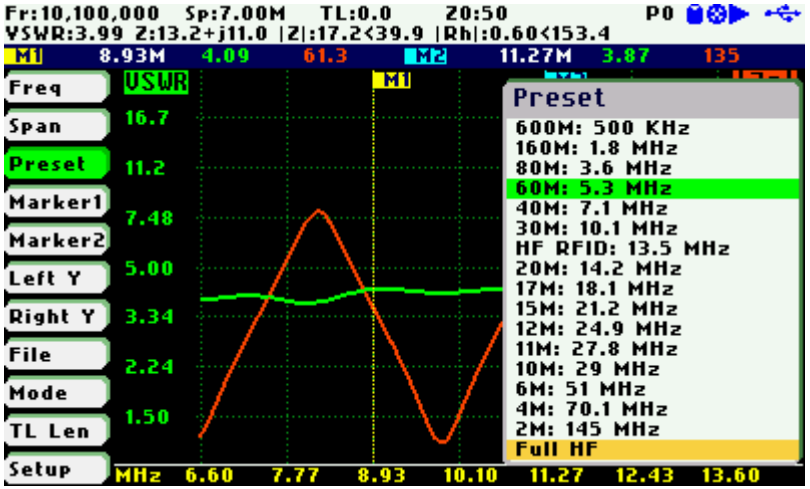
Functions are controlled by four buttons and two navigation keys.

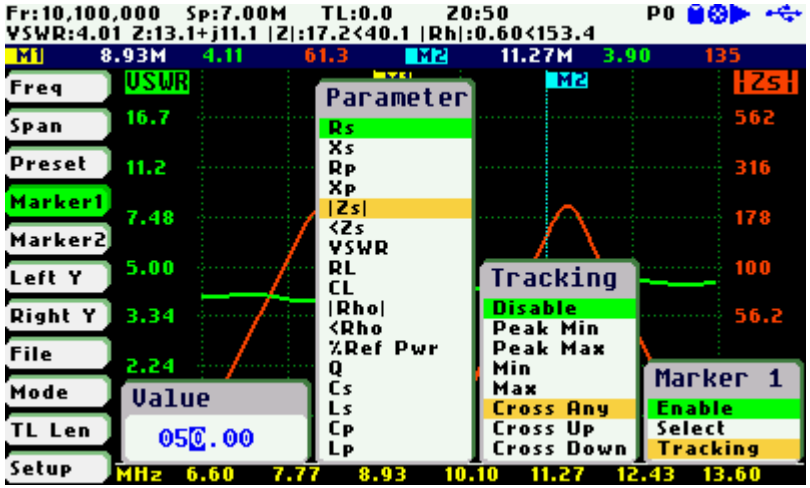


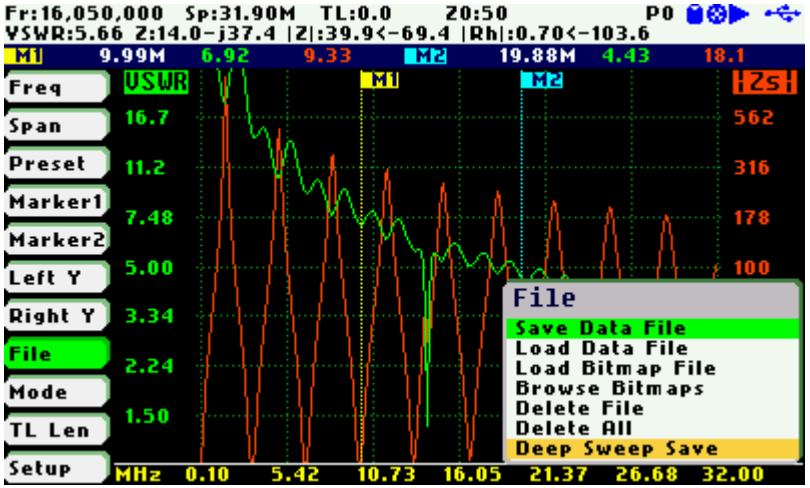
Menu System

Easy to use menu system



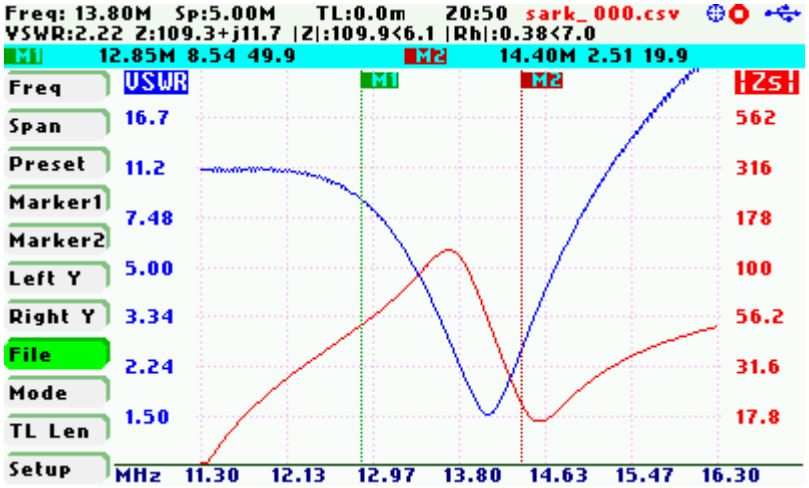


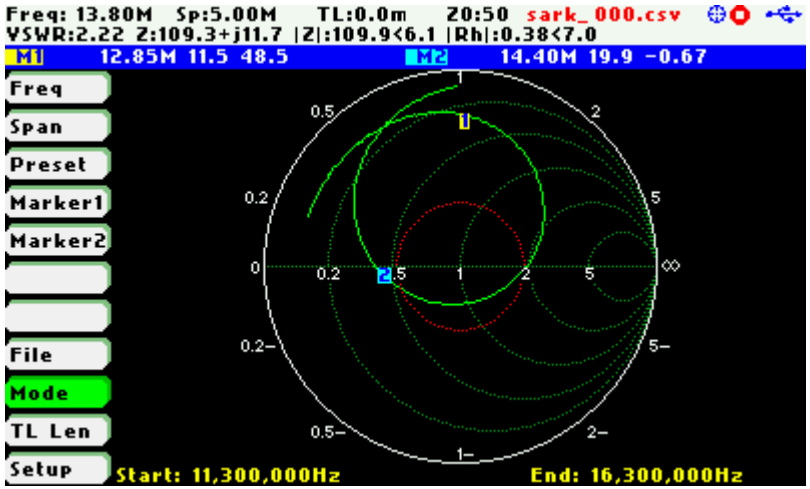


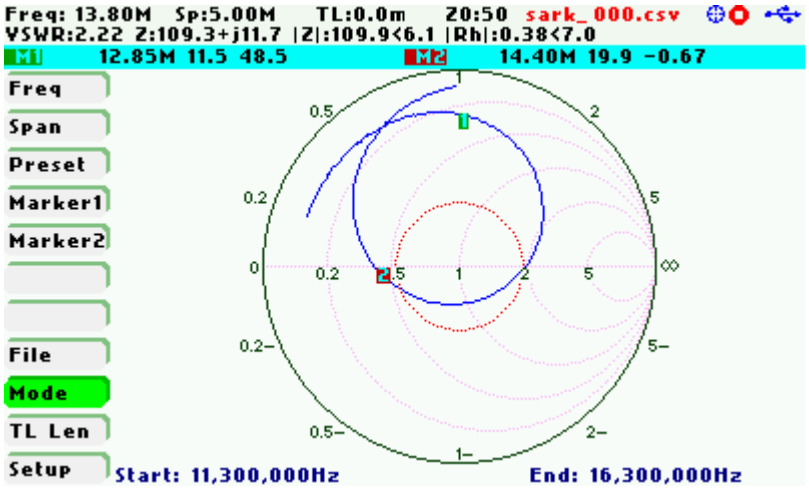


Color schemes

Black or white background

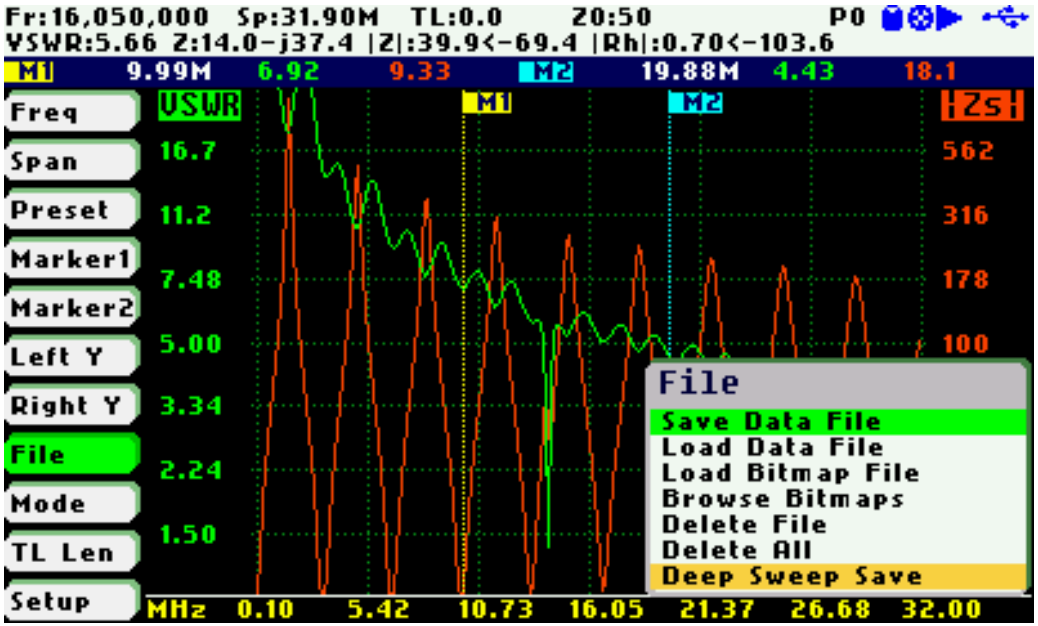






Saving and recalling measurements

- Save measurements and screenshots
- Deep Sweep Save (high-resolution) with self-timer function

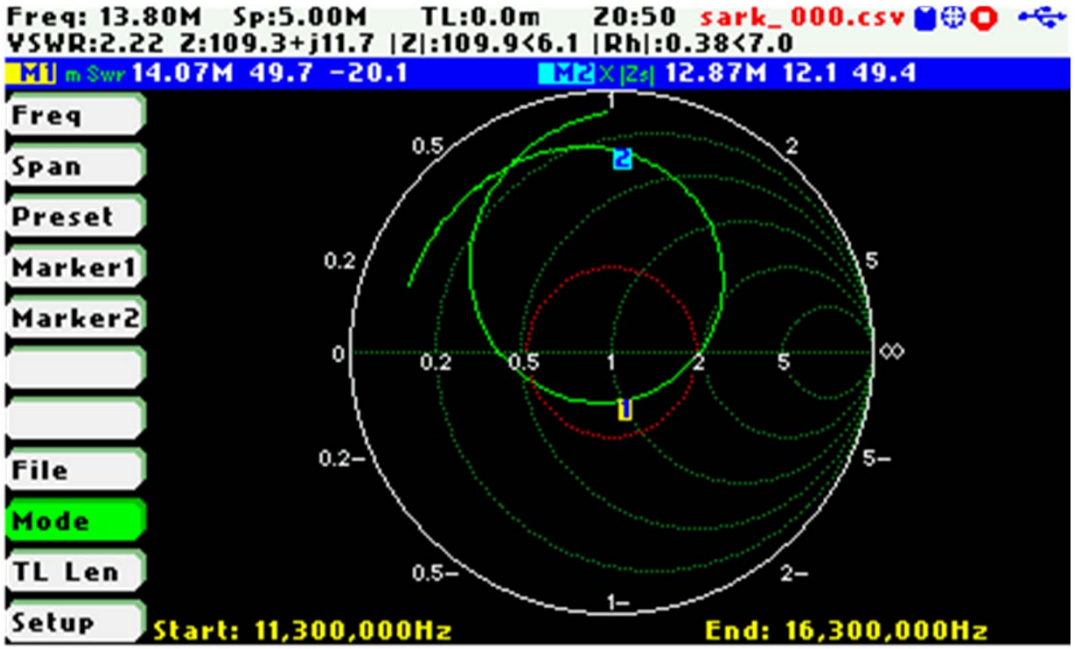


Scalar Chart Mode

- Displays two user-selectable traces:
  - Complex impedance (series and parallel) and reflection coefficient in rectangular and polar form, VSWR, return loss, cable losses, reflection power percentage, quality factor, equivalent capacitance, equivalent inductance
- Up to two markers: manual or tracking modes

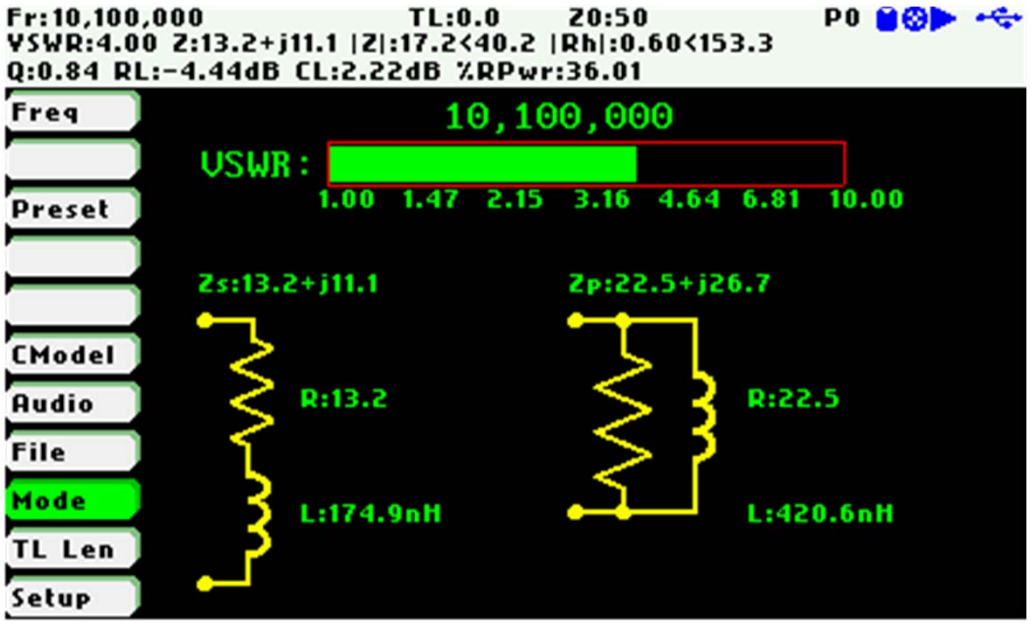
Smith Chart Mode

- Display the reflection coefficient on a Smith chart
- Up to two markers



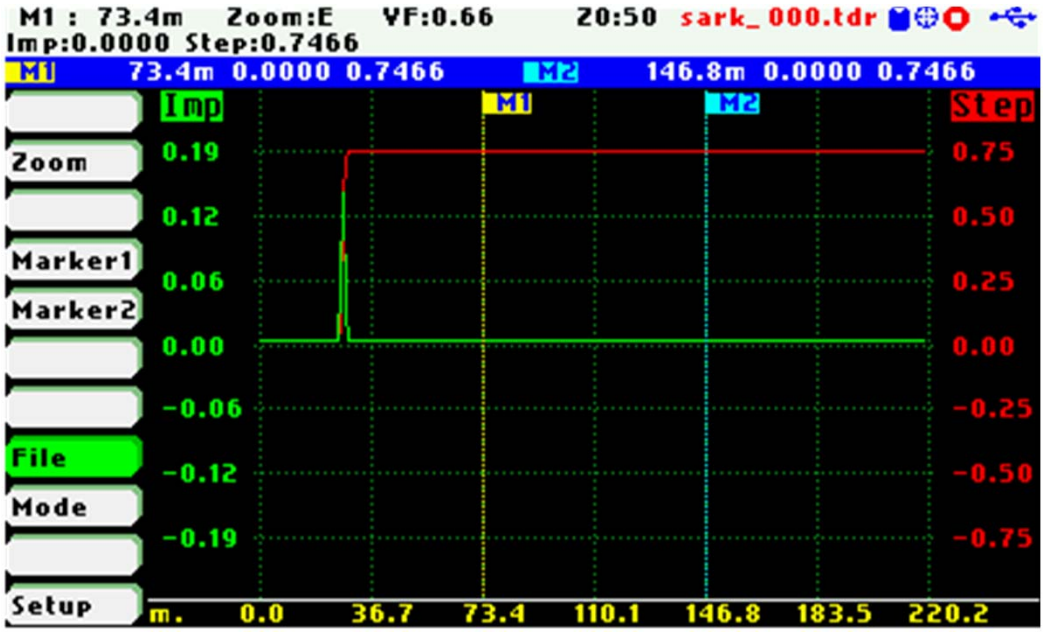
Single Frequency Mode

- Displays VSWR and impedance at a single frequency
- Two elements equivalent circuit model
- Advanced circuit models analysis (CModel)



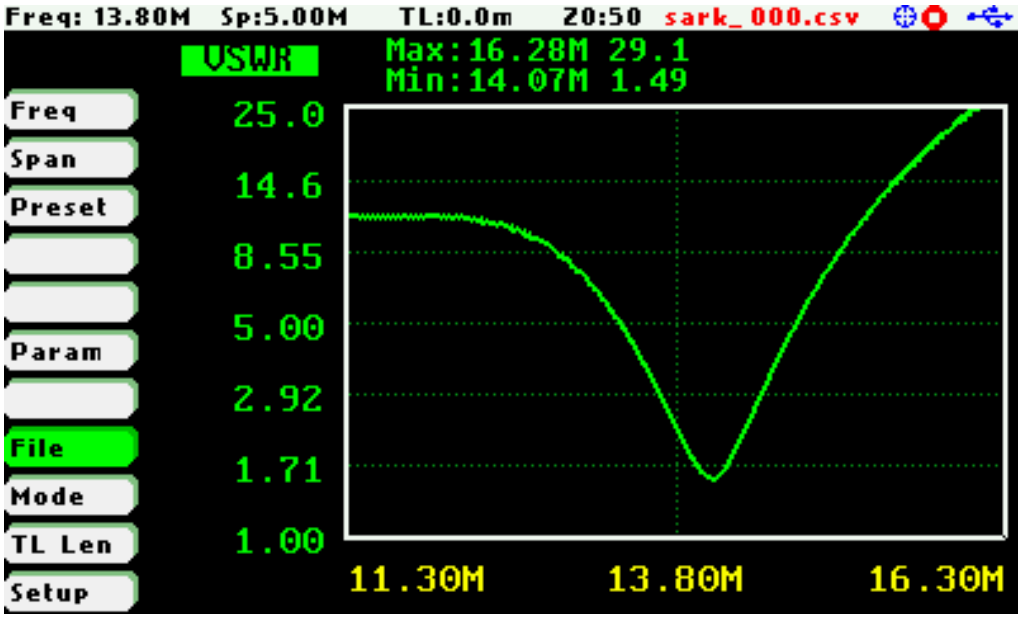
Cable Test Mode

Impulse and Step responses graph aimed to find discontinuities in transmission lines



Field Test Mode

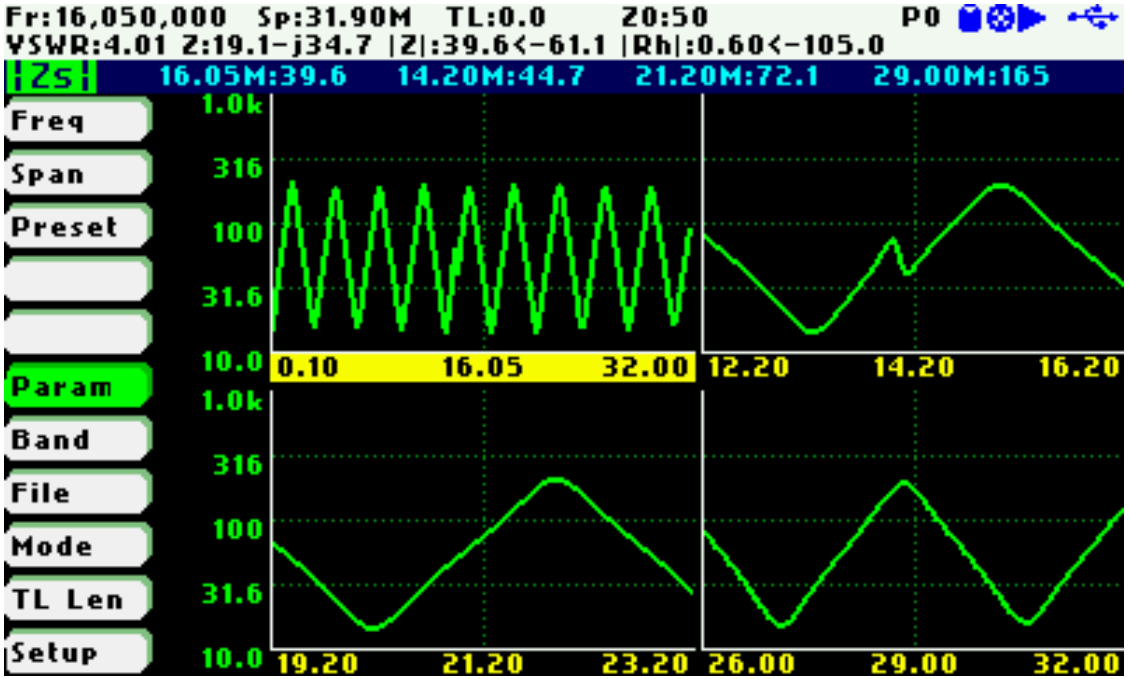
Simplied chart aimed for operation on the field



Multiband Mode

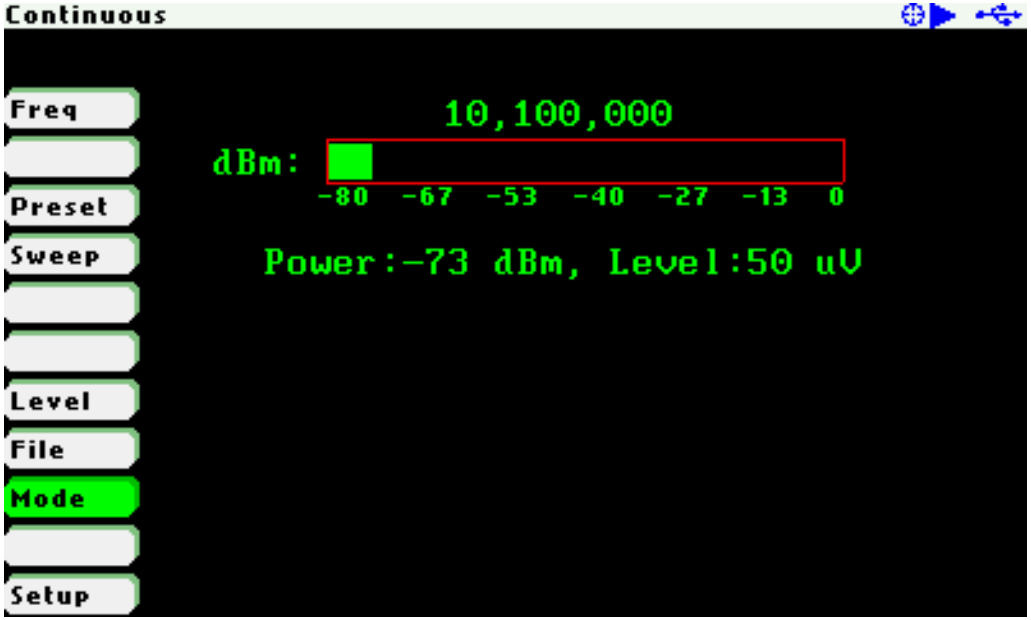
Displays four independent charts at different frequency bands.

Ideal for tuning multiband antennas.



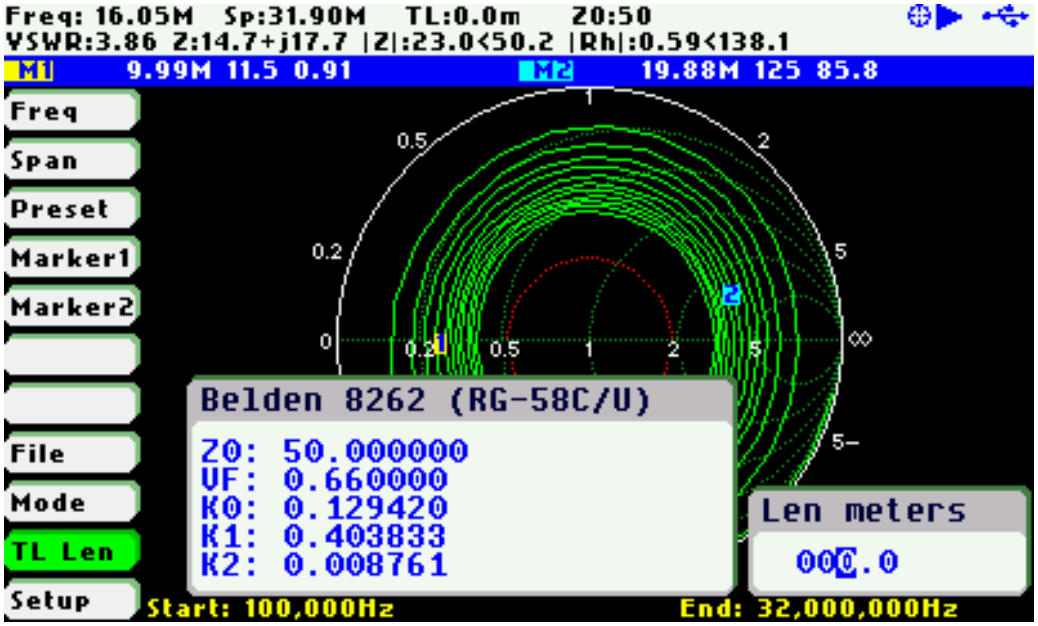
Signal Generator Mode

- Eight user selectable levels from -73 dBm to -10 dBm
- Frequency sweeps can be programmed with linear, bi-linear, logarithmic, or bi-logarithmic functions



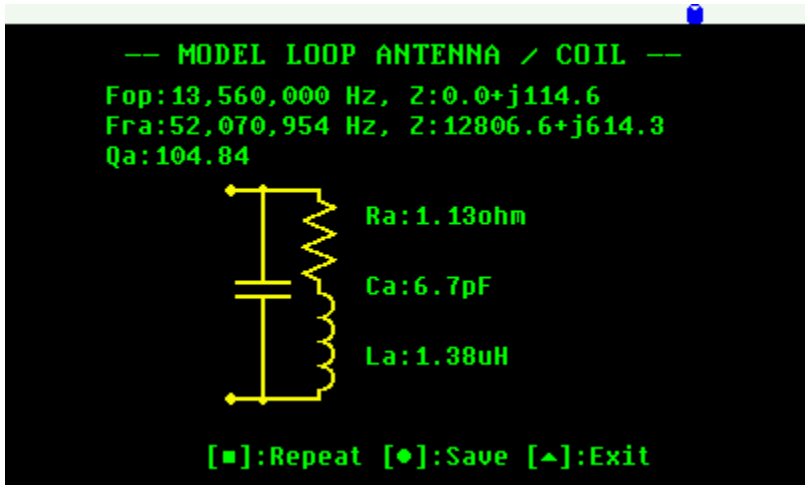
Transmission line Add/Subtract

Capability of subtracting a length of transmission line (transpose to load) or adding a length of transmission line (transpose to input)

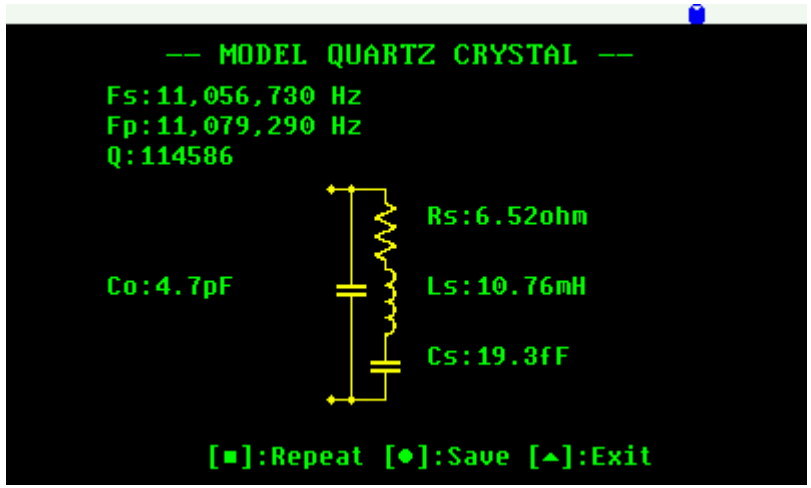


Circuit Models

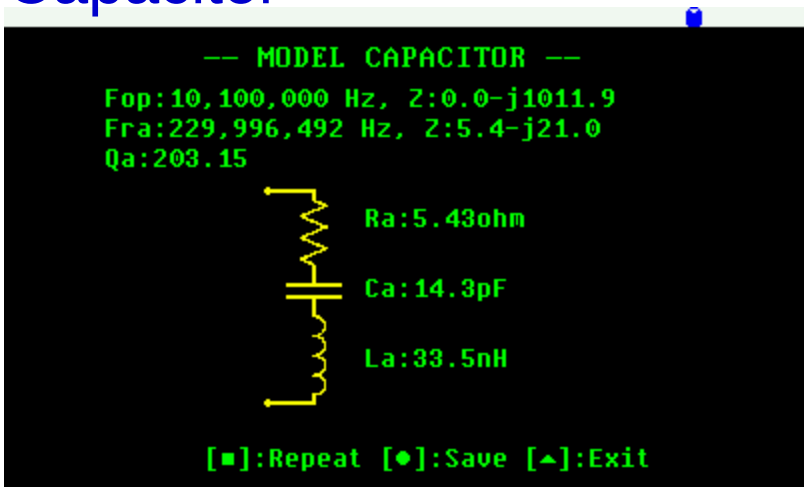
Loop Antenna / Coil



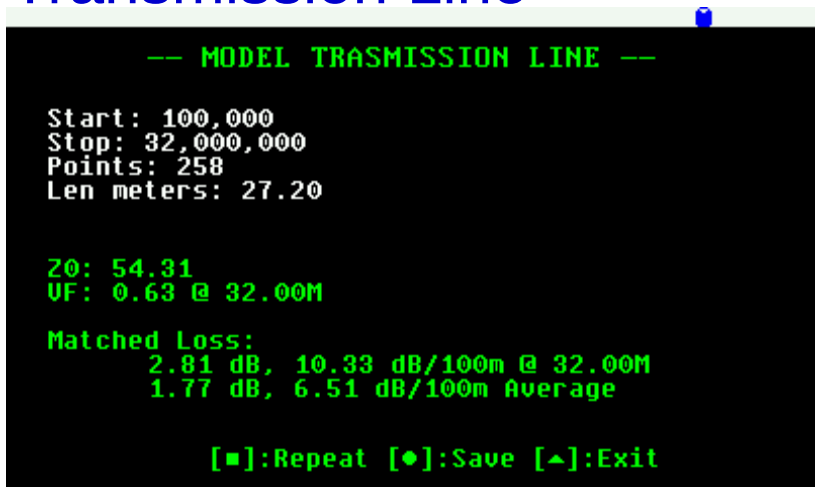
Crystal



Capacitor



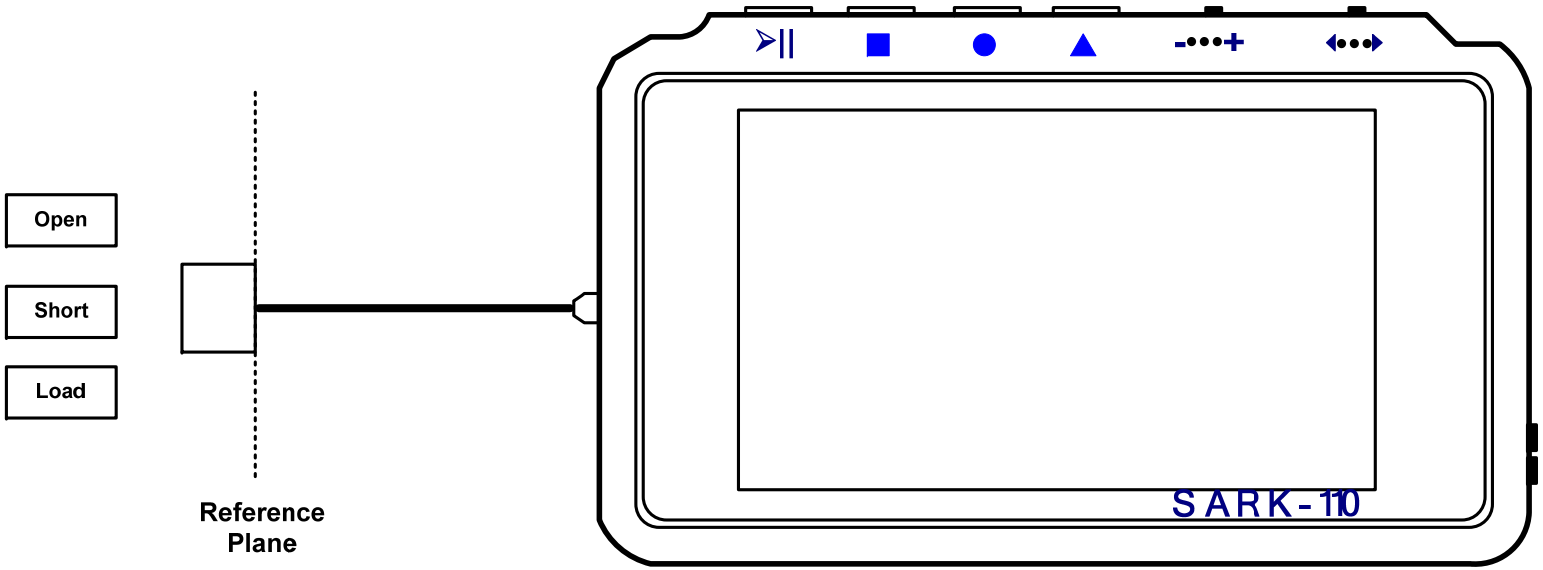
Transmission Line



Calibration

Open-Short-Load calibration to improve measurement accuracy

Up to eight calibration profiles



Computer Control Mode

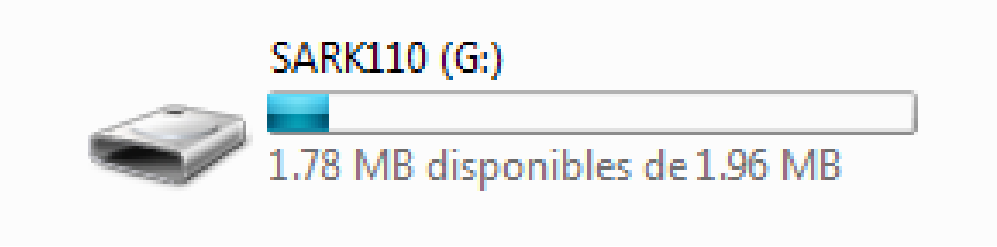
Computer controlled operation; e.g. from SARK Plots.

Internal disk

Internal disk is always accessible as a Mass Storage device

Measurements and screenshots are available as files than can be uploaded to a PC for offline analysis

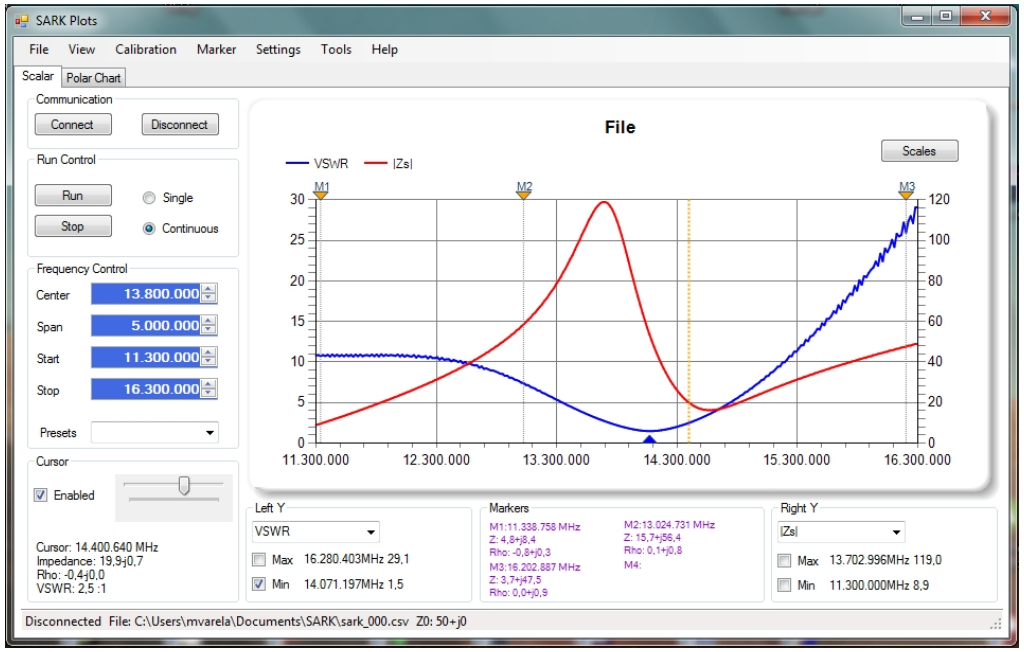
Easy firmware updates supported by downloading the file to the internal disk and follow a simple installation procedure

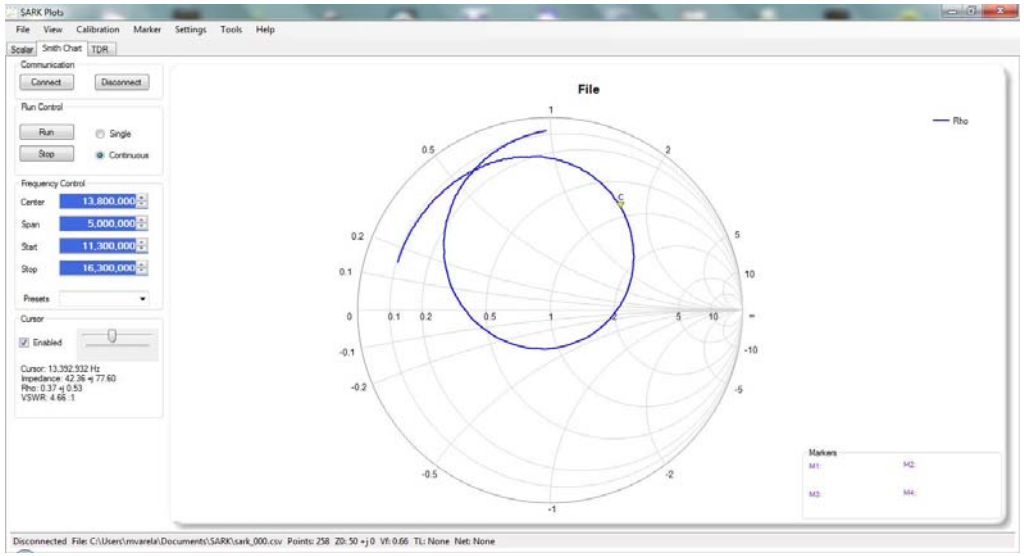


SARK Plots – Client Software for Windows

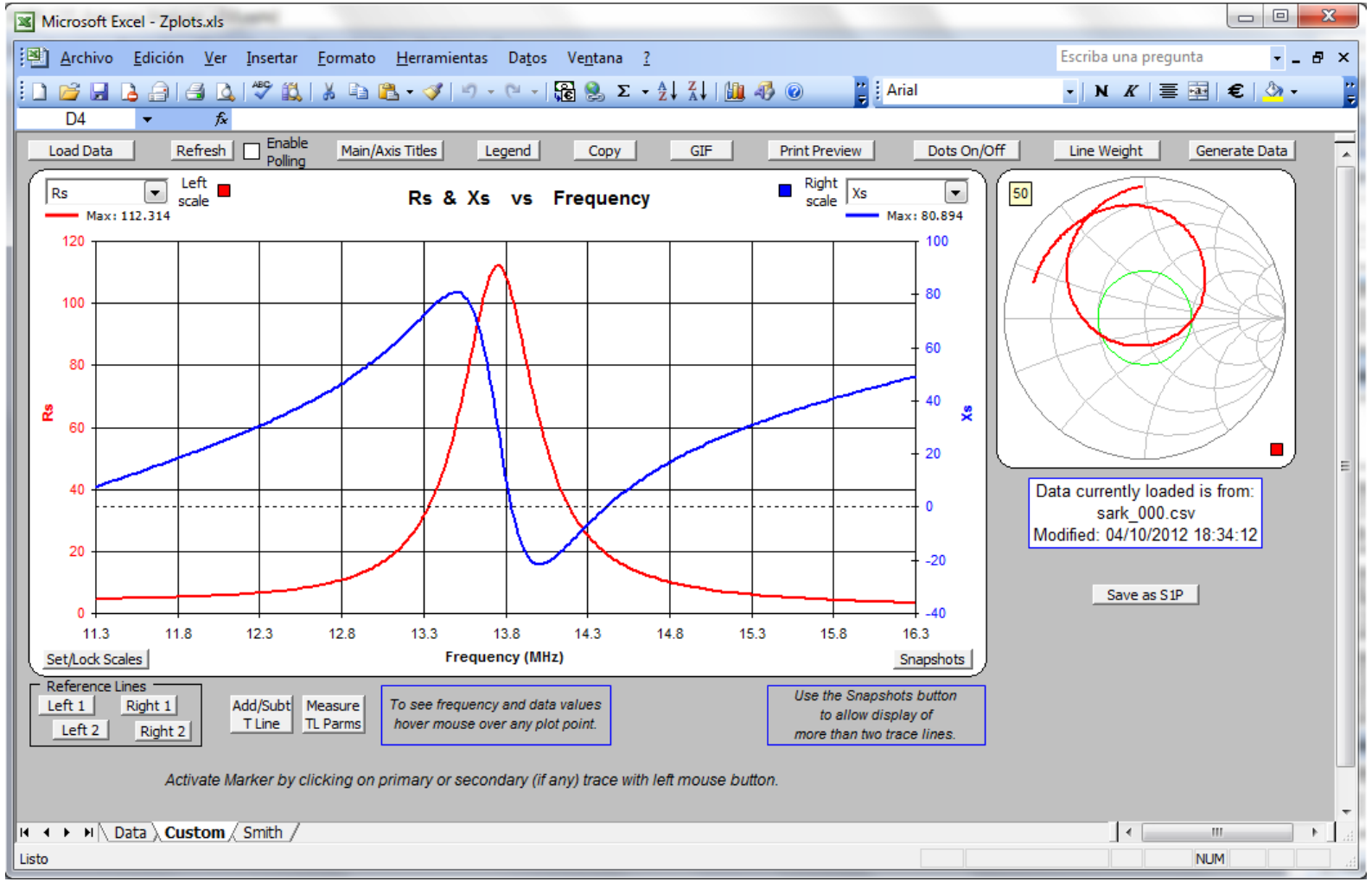
Scalar, Smith and Impulse/Step response charts

Operates online or offline with captured files





Compatible with AC6LA – ZPlots Software



For more information please see
http://www.sark110.com