

# Hand-Held 2GHz RF Signal Strength Analyzer

- ◆ Hand-Held and battery operated.
- ◆ 100kHz to 2060MHz measurement range.
- ◆ Built-in 2GHz frequency counter.
- ◆ Detects Wide band and Narrow band FM, AM and Single Sideband Signals.
- ◆ Phase lock loop for precise frequency tuning.
- ◆ RS-232 interface.
- ◆ Up to 160 channels may be scanned and displayed.

- ◆ Audio output with built-in speaker.
- ◆ Detachable antenna included.
- ◆ Back lit display.
- ◆ All functions are menu selected.
- ◆ Instrument setups & display data may be stored in memory.
- ◆ Includes software and RS-232 Cable.
- ◆ Serial or parallel interface.
- ◆ Hard copy printer output of spectrum and bar graph displays.

## ◆ FREQUENCY

**Frequency Range:** 100kHz to 2060MHz  
**Frequency Step:** 5kHz to 9995kHz in multiples of 5kHz or 6.25kHz  
**Ref. Oscillator Accuracy:**  $\pm 3$  PPM  
**Frequency Marker Accuracy:**  $\pm 25$  PPM  
**Frequency Measurements:** Narrow Band FM, Wide Band FM, AM and Single side band

## ◆ INPUT

**Input Impedance:** 50 $\Omega$   
**Maximum Input Volts:** 5V RMS (+270dBm)  
**Measurement Units:** dBmV, dB $\mu$ V, dBm  
**Attenuation:** 0dB or -10dB internal; 0dB to 60dB with external Attenuator

## ◆ LEVEL MEASUREMENTS

### Narrow Band FM

**Level Measurement Range:** -117dBm to -67dBm; (1MHz to 2060MHz)  
**Resolution:**  $\pm 0.5$ dB  
**Accuracy:**  $\pm 3$ dB  
**Bandwidth:** 12.5kHz

### ◆ WIDE BAND FM, AM & SSB

**Level Measurement Range:** -108dBm to -58dBm (10MHz to 2060MHz)  
**Resolution:**  $\pm 0.5$ dB  
**Accuracy:**  $\pm 3$ dB  
**Bandwidth:** Wide band FM: Approx. 180kHz  
AM and SSB: Approx. 2.4kHz  
**BFO Frequency Range:**  $\pm 1.5$ kHz  
**Reception Sensitivity:** 0 to 6dB $\mu$ V EMF with supplied antenna  
**Antenna Reception S/N Ratio:** N-FM: 10 dB;  
W-FM: 12 dB

## ◆ DISPLAY

**Display Modes:** Spectrum, Bar graph and Frequency counter  
**Spectrum Display:** Displays 160 channels  
**Bar Graph Displays:** Multi channel (2, 5, 10, 20, 40, 80, 160 bar graphs per display), Single Channel and 2 Channel difference.  
**Sweep Modes:** Single, Normal and Free run  
**Spurious Signals:** (internally generated) - 35dBc for W-FM; -45dBc for N-FM (typical below full scale signal level)

## ◆ SCAN MODES

Manual, Channel (memory scan) and Search scan  
**Scan Rate:** 12.5 Ch./sec.

## ◆ MEMORY

**Data Memory:** Stores 10 displays of up to 160 CH per display  
**Setup Memory:** Stores 10 setups for each scan mode

## ◆ FREQUENCY COUNTER

**Bandwidth:** 9MHz to 2060MHz  
**Resolution:** 1kHz  
**Accuracy:** 50PPM  $\pm 1$  count  
**Input Impedance:** 50 $\Omega$   
**Max Input Volts:** 5V RMS  
**Response Time:** 0.512 Sec.  
**Input Sensitivity:**  
9MHz to 2060MHz: 120mV;  
20MHz to 1500MHz: 50mV;  
2MHz to 2060MHz: 500mV  
**Data Memory:** Stores 10 readings

## ◆ MISCELLANEOUS

**LCD:** 192  $\times$  192 Pixels, Light green  
**Back Light:** LED. Back light will shut off 5 seconds after the last key depression  
**Interfaces:** Std RS-232 interface with female 8 pin mini Din connector. Baud Rates of 1200, 2400, 4800 or 9600 BPS are menu selected. The software supplied is a Windows<sup>®</sup>-based program, which runs under Windows 95, 98, ME and 2000.  
**Auto Power Off:** 5, 10, 20 or 30 minutes after the last key depression—user selected.  
**Audio Output:** 120mW into a 8 $\Omega$  Speaker  
**Power Requirements:** (6) AA NiCd or Alkaline Batteries, 12 volt car adapter or 11V to 16V 500 mA Max AC to DC adapter

## ◆ PHYSICAL

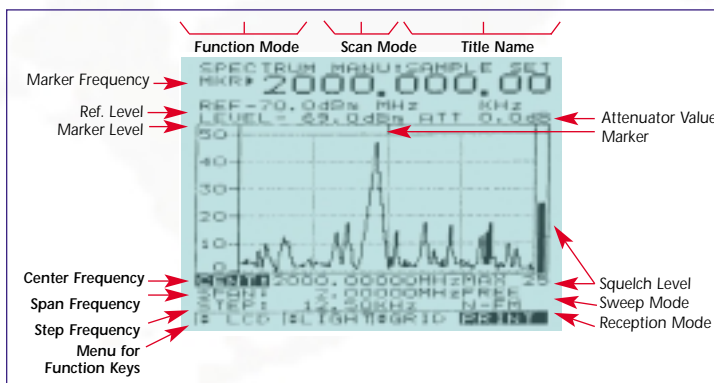
**Operating Temperature:** 0 $^{\circ}$ C to 40 $^{\circ}$ C  
**Relative Humidity:** 35% to 85%  
**Storage Temperature:** -10 $^{\circ}$ C to 50 $^{\circ}$ C  
**Dimensions:** 9.5" H  $\times$  4" W  $\times$  1.77" D  
**Weight:** 1.4 lb.  
**Supplied Accessories:** (6) 1.5V AA NiCd Batteries, Detachable 9" whip antenna, Operator's manual, RS-232 Cable, Carrying case, Earphone, Carrying strap and Software, Vehicle power adapter, AC/DC converter.



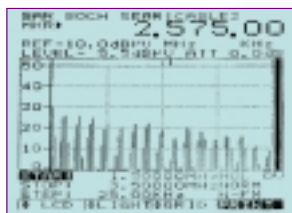
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## SPECTRUM ANALYZER DISPLAY

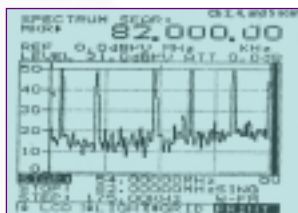


### BARGRAPH DISPLAY



This feature makes level readings easy and "cleans up" each frequency (compared to a spectrum display). Patterns may be readily seen, for example: this display of computer monitor radiation.

### SPECTRUM DISPLAY



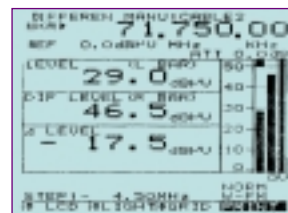
This Mode scans and displays 160 channels. Squelch level may be set above or below carrier level in order to pause scan and detect the signal. Detection modes are AM, NFM, WFM and SSB.

### CHANNEL EDIT MODE



Up to 1600 channels may be stored in any order, then scanned and identified by 9-digit freq. and 5-letter title. Useful for Cable TV, Cellular phone, and other field applications where repetitive measurements need to be made.

### TWO CHANNEL DIFFERENCE MODE



This Mode displays 2 carrier levels and their difference. A key application verifies that a TV or Cable channel's video and audio carriers are within specifications.