Green is life tmg

ABN 43 064 478 842

231 osborne avenue clayton south, vic 3169
PO box 1548, clayton south, vic 3169
t 03 9265 7400 f 03 9558 0875
freecall 1800 680 680
www.tmgtestequipment.com.au

Test & Measurement

- sales
- rentals
- calibration
- repair
- disposal

Complimentary Reference Material

This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

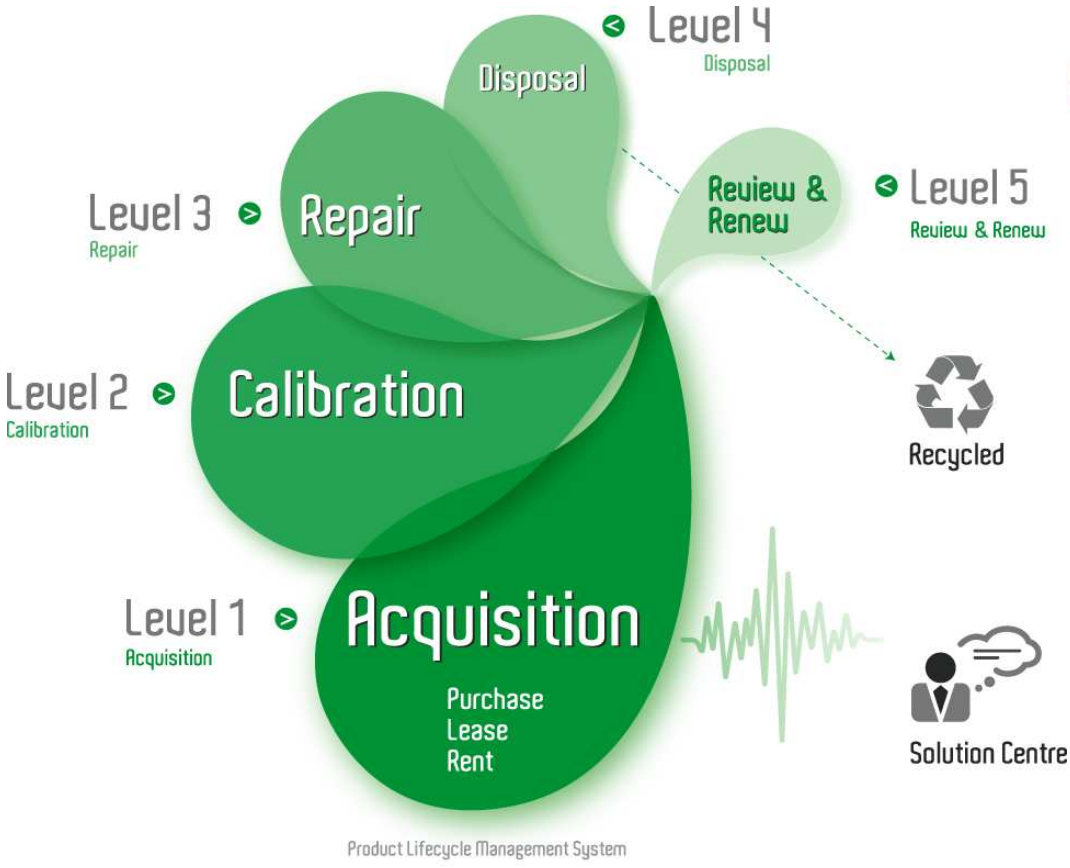
TMG will assist if you are unsure whether this model will suit your requirements.

Call TMG if you need to organise repair and/or calibrate your unit.

If you click on the "Click-to-Call" logo below, you can all us for FREE!

TMG Corporate Website **TMG Products Website**

Click-to-Call
TMG Now



Anritsu

MS2711B

Handheld Spectrum Analyzer

100 kHz to 3.0 GHz

Spectrum Analysis – Anywhere, Anytime

THE LEADING PORTABLE SPECTRUM ANALYZER FOR WIRELESS PROFESSIONALS

SPECTRUM ANALYSIS – ANYWHERE, ANYTIME

The MS2711B Handheld Spectrum Analyzer provides the "ultimate" in measurement flexibility for field environments and applications requiring mobility. Unlike traditional spectrum analyzers, the MS2711B features a rugged, ultra-lightweight, battery-operated design that enables users to conduct spectrum analysis measurements – *anywhere, anytime*.

Providing complete freedom from AC/DC power requirements, the MS2711B enables you to locate, identify, record and solve communication systems problems quickly and easily, without sacrificing measurement accuracy.

Whether you are installing, maintaining, or troubleshooting a modern wireless communication system, the MS2711B provides exceptional performance combined with ease-of-use and broad functionality – making it an ideal solution for engineers and technicians who conduct field measurements in the 100 kHz to 3.0 GHz frequency range.

The Lightest Spectrum Analyzer Available

Weighing only 4.9 lbs. (2.2 kg), the MS2711B is the lightest, fully functional spectrum analyzer available.

Easy-to-Use

Operation is straight-forward and driven by firmware that simplifies the process of making measurements and interpreting the results shown on the large, high-resolution LCD display. The menu-driven user interface is easy to use and requires little training.

- Frequency, span and amplitude functions are easily configured for optimum performance.
- Full range of marker and limit line functions facilitate quick comprehensive measurements.
- Store ten test setups for fast repeatable testing.
- Store up to 200 measurement traces internally.
- Multilingual user interface features on screen menus and messages in 6 different languages.

Rugged and Reliable

Designed specifically for field environments, the MS2711B handheld spectrum analyzer can easily withstand harsh environments and the rough day-to-day handling of field use.

- Rugged field proven design
- Lightweight NiMH battery operates continuously for over two hours on a single charge.
- Built-in energy conservation features allow battery life to be extended beyond an eight-hour workday.
- Can also be operated from a 12.5 Vdc source such as an AC-DC adapter or automotive cigarette lighter adapter that also simultaneously charges the battery.

Accurate

Utilizing an advanced synthesizer-based design, the MS2711B delivers accurate, reliable and repeatable measurements – *anywhere, every time*.

A broad range of functions coupled with narrow resolution bandwidths down to 10 kHz make it ideal for finding the source of interfering signals in modern wireless systems.

Powerful Data Analysis Software

Powerful data analysis software comes with every MS2711B unit, providing users with an easy method of analyzing system performance, trends and problems, in addition to professional report generation.

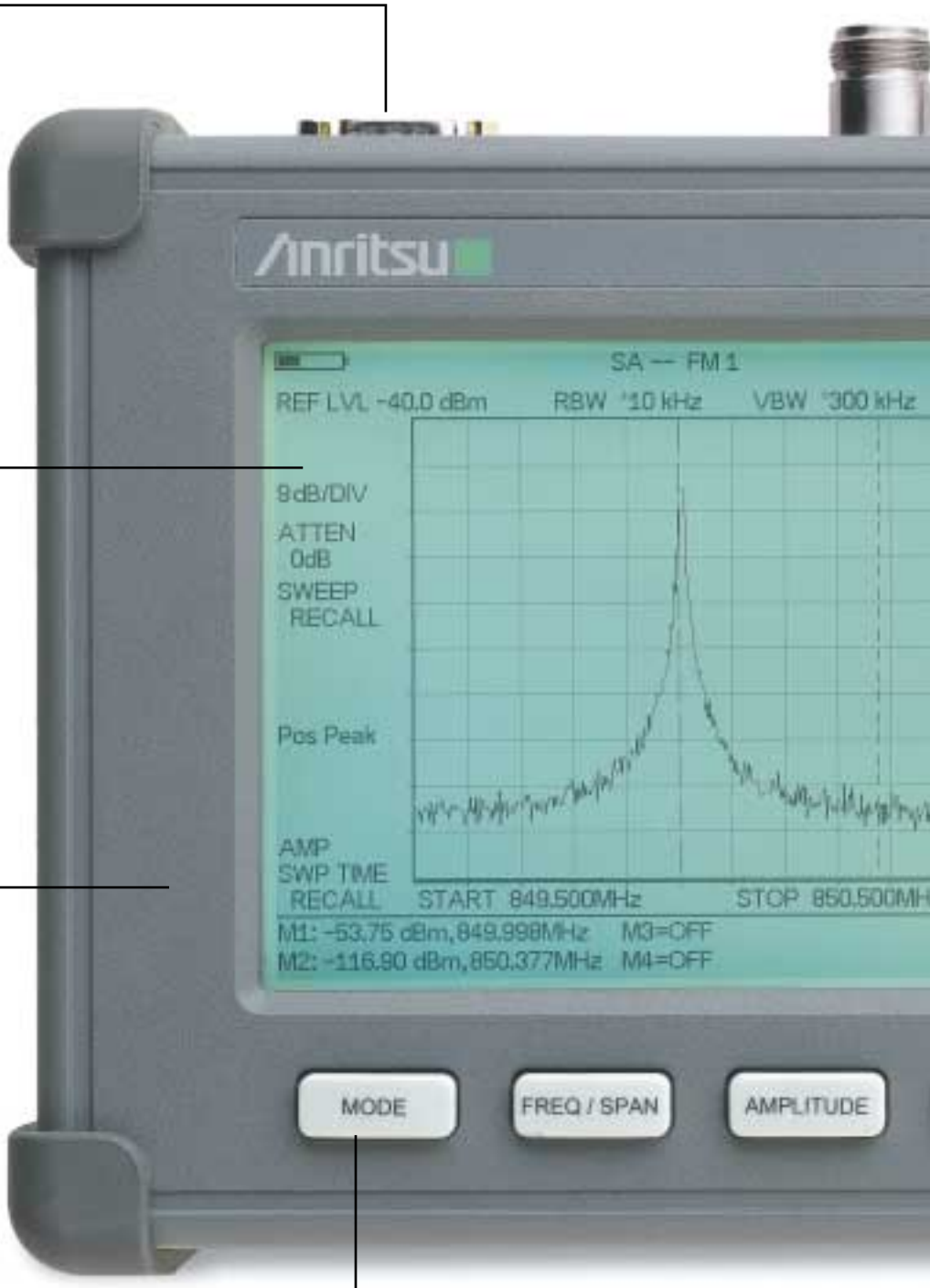
- PC software is Windows 95/98/NT4/2000/ME/XP workstation compatible and supports long alpha-numeric file names for descriptive data labeling.
- Store an unlimited number of data traces for comparison to historical performance.
- Quickly and easily download data traces from the MS2711B to a PC database with a single menu selection.

The Picture is Actual Size . . .

RS-232 Interface
Download stored data to a personal computer (PC) or a printer via a serial cable for further analysis. Use your notebook computer to automatically control and collect data in the field. Use a modem for remote operation.

Large High Resolution Display
High resolution (640x480) display featuring contrast and back-lighting capability. Easy viewing under a variety of conditions.

Rugged Chassis Design
Ruggedized, lightweight, high-impact housing ideally suited for handheld operation and field environments.
A softcase is provided for easy carrying and additional environment protection.



Unit Measurements
Metric: 25.4 x 17.8 x 6.10 cm
Inches: 10 x 7 x 2.4 in.

Function Keys
Four dedicated function keys simplify measurement tasks.

Tracking Generator Option
Optional built-in tracking generator adds scalar analysis capability from 10 MHz to 3 GHz.

Multilingual User Interface
Multi-language user interface features on-screen menus and messages in 6 different languages.

Trace Overlay
View two on-screen traces at the same time to compare the current measurement to baseline measurements stored in the unit's memory.

Measurement Key
Executes various functions and measurements such as field strength, occupied bandwidth, channel power, ACPR and AM/FM demodulation.

Save Setup
Store 10 test setups for fast repeatable testing.

Limit Line
Create simple pass/fail measurements.

Full Range of Marker Capabilities
Faster, more comprehensive measurements.

Save Display
200 memory locations for measurement data. Alphanumeric data labeling allows descriptive naming of measurement data. Automatic time and date stamp simplifies data management.

Softkeys
Intuitive softkeys menu and user interfaces.

AM/FM Receiver with Internal Speaker
Built-in AM/FM demodulator enables testing and trouble-shooting of wireless communications systems. An internal speaker or headset easily interprets signals of interest.

The Benefits are Much Larger

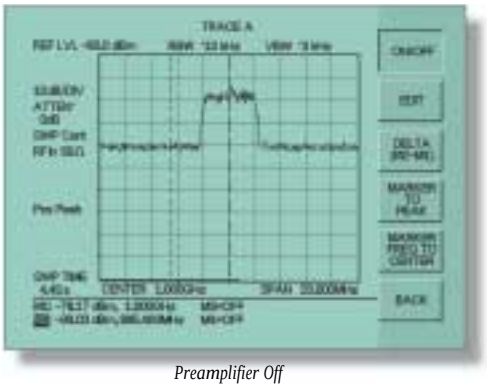
SO POWERFUL, YET SO SMALL THAT IT FITS INTO YOUR BACKPACK

POWERFUL NEW FEATURES

- Wide Dynamic Range
- Built-in Preamplifier
- Built-in Tracking Generator Option
- Dynamic Attenuation
- One-Button Measurements
- Trace Averaging
- 50Ω to 75Ω Adaptable Interface
- Multilingual User Interface
- Quick Zoom-in, Zoom-out Display
- Reference Level Offset

Wide Measurement Range

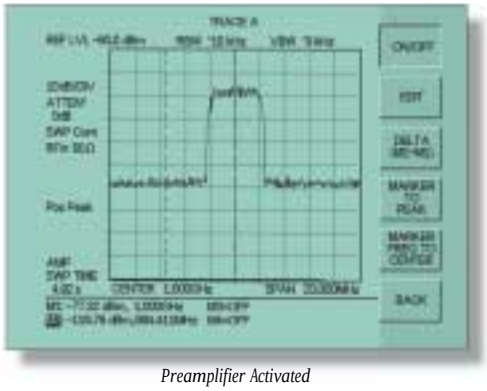
The MS2711B delivers a broad range of performance from –115 dBm to + 20 dBm for finding the source of interfering signals in various wireless technologies including cellular, PCS, mobile data, mobile satellite, fixed wireless and SMR applications.



Preamplifier Off

Preamplifier

With the built-in preamplifier activated, the sensitivity of the MS2711B can be extended to –115 dBm, enabling full testing and troubleshooting of very low level signals.



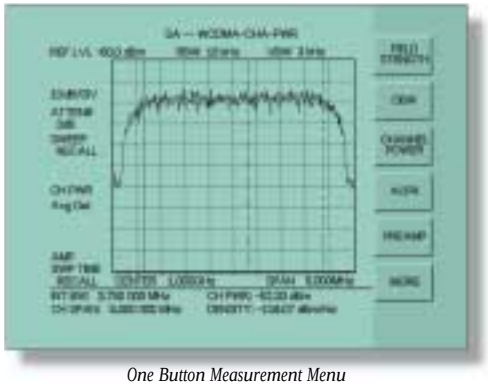
Preamplifier Activated

Dynamic Attenuation

Dynamic attenuation tracks the input signal level, automatically adjusting the reference level to protect the MS2711B in situations of high RF signal levels, or enhancing the instrument sensitivity in situations of low-level RF signal input. With the built-in preamplifier, dynamic attenuation automatically activates or de-activates the preamplifier according to signal environment.

One Button Measurements

Using the MS2711B's measurement function, dedicated one-button measurements such as channel power, adjacent channel power ratio and occupied bandwidth measurements can confirm the distortion level or channel power performance of a transmitter. Additionally, the MS2711B can conduct a series of spurious measurements when analyzing a wireless base station transmitter, and can use field strength mode to measure propagation and coverage or to pinpoint electromagnetic leakage in broadcast systems.

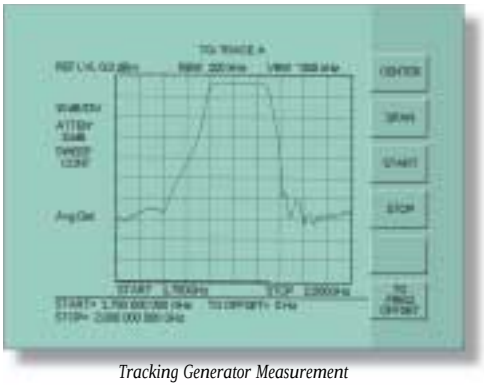


One Button Measurement Menu

HANDHELD, BATTERY-OPERATED, FIELD PROVEN DESIGN

Tracking Generator

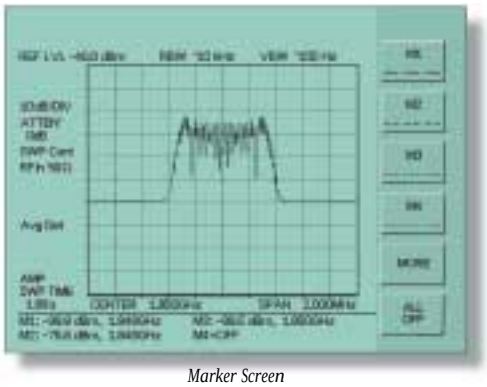
The optional built-in tracking generator adds scalar analysis capability from 10 MHz to 3 GHz. The tracking generator function can be used to measure gain, frequency response, flatness and even return loss of wireless communication systems. A built-in attenuator provides an output power range of –60 to 0 dBm.



Tracking Generator Measurement

Marker Functions

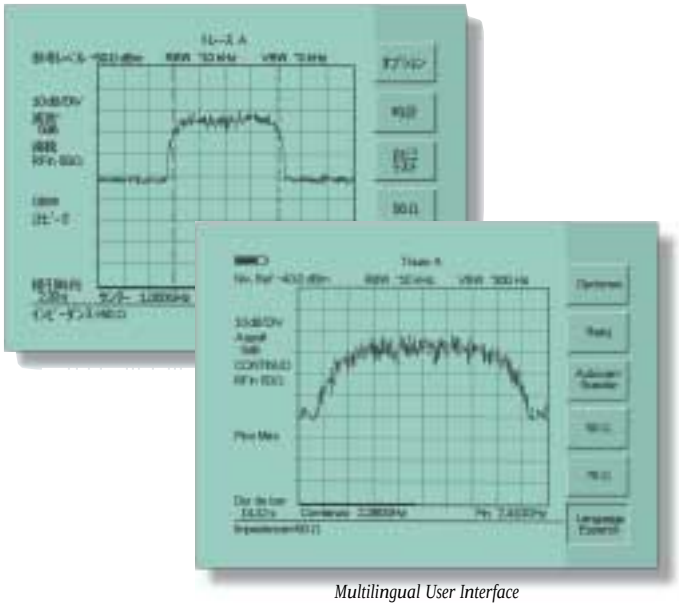
A full range of marker functions, such as peak, delta and center give users faster and more comprehensive measurements of displayed signals. Additionally, up to six individual markers can be displayed at one time on the MS2711B.



Marker Screen

Multilingual User Interface

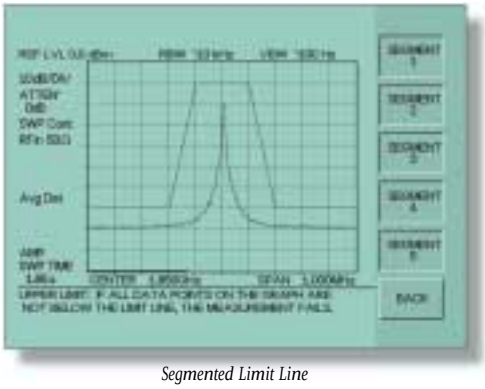
The new multilingual user interface features on-screen menus and messages in 6 different languages (English, Chinese, Japanese, German, French and Spanish).



Multilingual User Interface

Single and Segmented Limit Lines

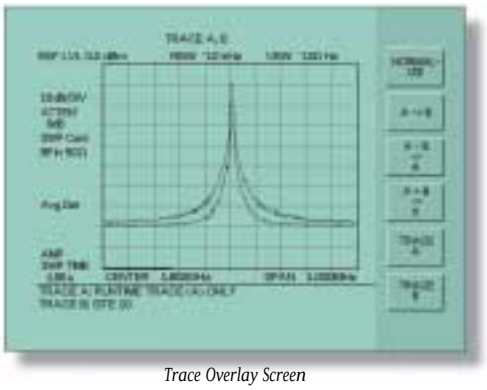
The MS2711B features both single and segmented limit line capability. Limit lines simplify amplitude measurements, giving users the ability to make quick, simple pass/fail measurements.



Segmented Limit Line

Trace Overlay

The MS2711B provides the ability for users to visually compare a current trace against a reference trace that is stored in the unit's memory.



Trace Overlay Screen

AM/FM Receiver

A built-in AM/FM demodulator enables testing and trouble-shooting of wireless communications systems. An internal speaker or headset easily interprets signals of interest.

SPECTRUM ANALYSIS – ANYWHERE, ANYTIME

Reference Level Offset

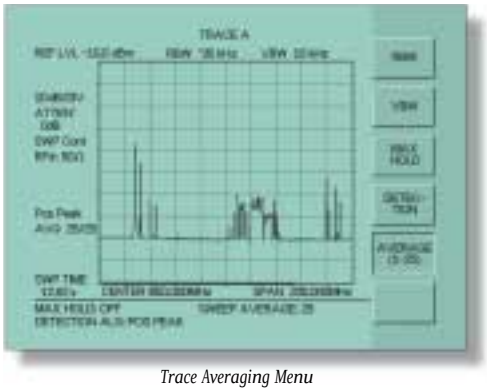
The reference level offset feature allows measurement of high signal levels with the use of an attenuator. By adding an offset value to the displayed reference level, high signal levels can then be easily and accurately displayed by the MS2711B.

Quick Zoom-In, Zoom-Out Display

Enter span parameters directly, or use the quick zoom-in/zoom-out feature to quickly reduce or increase span settings in a 1-2-5 sequence.

Trace Averaging

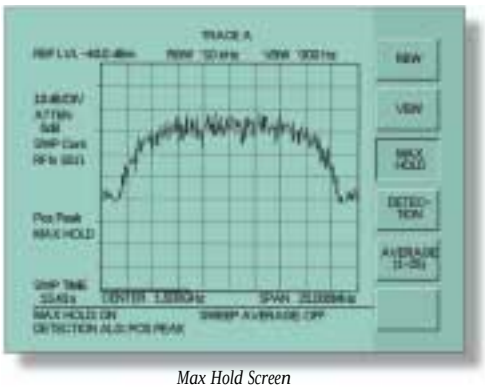
Use the trace averaging function to make easier and more accurate noise-related measurements. By selecting the trace averaging function users can select up to 25 sweep averages.



Trace Averaging Menu

Max Hold

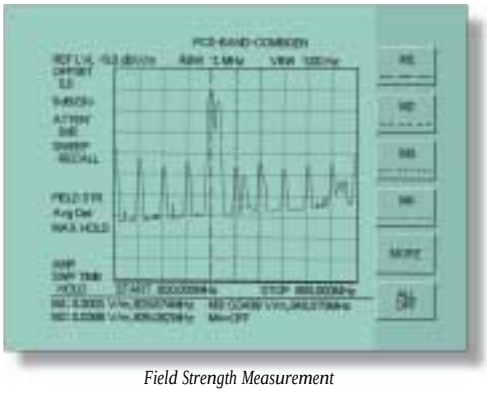
Use the MS2711B's Max Hold feature to display and hold the maximum response of the input signal.



Max Hold Screen

Field Strength Measurements

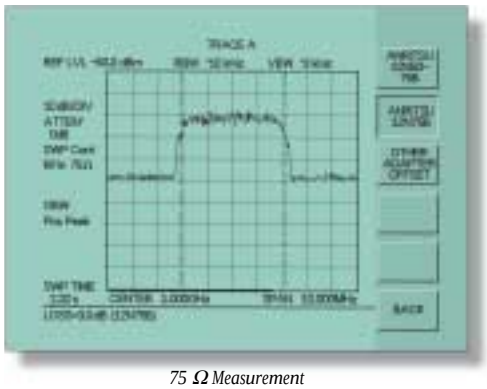
The MS2711B comes standard with field strength capability. Field strength measurements can be used to pinpoint electromagnetic (EM) leakage in broadcast systems or areas of weak coverage in mobile communication systems.



Field Strength Measurement

50Ω to 75Ω Interface

The MS2711B comes standard with a 50Ω interface feature that allows measurements of a 75Ω system while retaining amplitude accuracy with the 50Ω input of the MS2711B Handheld Spectrum Analyzer.



75 Ω Measurement

THE SMART SOLUTION FOR FIELD MEASUREMENTS

The MS2711B is perfect for radio communications agencies needing to monitor signals and sources of interference in field environments.

Power, frequency, occupied bandwidth, frequency deviation, signal strength, AM/FM demodulation and modulation depth measurements are easily executed with the MS2711B's intuitive soft-key/hard-key user interface.

The MS2711B provides a broad range of testing capability across a variety of field applications including:

- Detection of Signal Interference
- Monitoring of Selected and Unselected Transmissions
- Detection of Unlicensed Transmitters
- Detection of Undesired Emissions
- Protection Against Concealed Transmitters
- Coverage/Signal Strength Mapping

Antenna Alignment

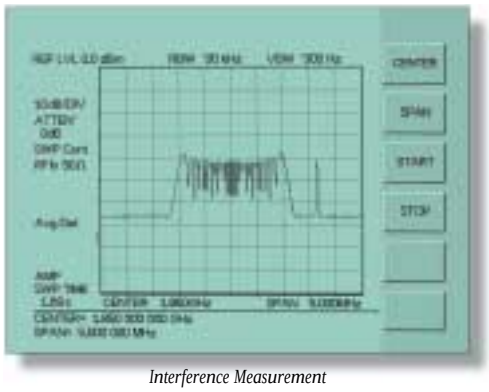
The MS2711B is ideal for field alignment of small dish antennas. Simply tune to the frequency of interest and monitor received signal strength until position is optimized.

Signal Mapping

Ideal for site surveys and other signal mapping applications, the MS2711B can optimize placement of antennas and access points in a WLAN or WPBX network. Identification of potential in-band interference as well as transmitted signal quality can be easily performed as the installer moves about the installation site. Use of the built-in preamplifier can further facilitate the identification of stray signals or optimize access point placement.

Interference

With the increased deployment of wireless technologies, identifying the source of RF interference problems can be very difficult. The MS2711B solves this problem by providing the noise floor and phase noise performance necessary to enable easy detection of signal interference. The unit's built-in AM/FM demodulation and zero span capability further facilitates detection of signal interference. With the unit's RS-232 interface, a notebook computer can be used for automated control and collection of interference data in the field. A modem can also be used for remote operation.



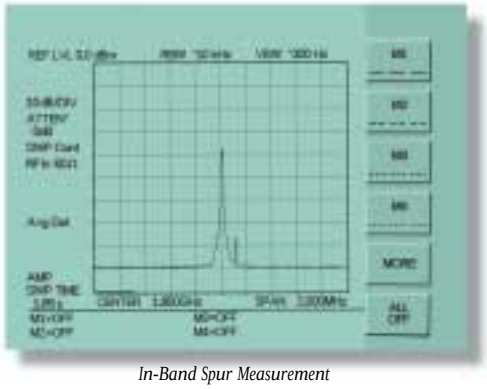
Interference Measurement

On-Site System Test

Convenient operating procedures, high sensitivity and excellent repeatability enables the MS2711B to pinpoint the smallest RF performance degradation. Harmonic distortion, Channel Power, Occupied Bandwidth, Antenna-to-Antenna isolation and potential interference problems can be detected before small problems grow into big, costly, time-consuming headaches and unwanted site downtime.

Spurious Emissions

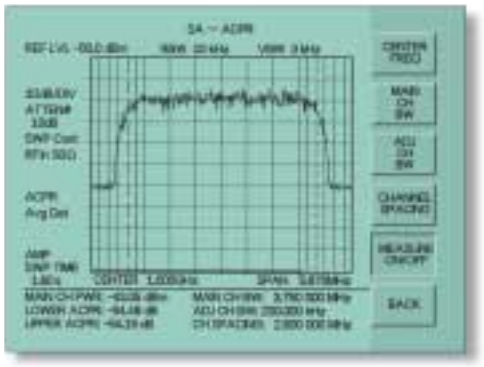
In-Band and Out-of-Band spurious emissions can cause havoc with Tx-Rx communication systems. Real-time monitoring of spurious emissions from a transmitter or receiver can uncover unwanted signals before they interfere with other users of the radio spectrum, rendering your system noncompliant.



In-Band Spur Measurement

Adjacent Channel Power

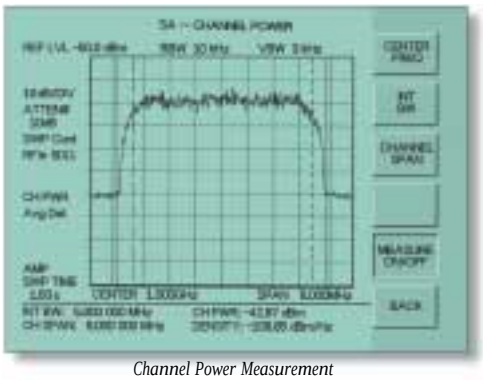
The adjacent channel power measurement allows the user to measure the amount of (or ratio of) power leakage into adjacent radio channels.



ACP Measurement

Channel Power

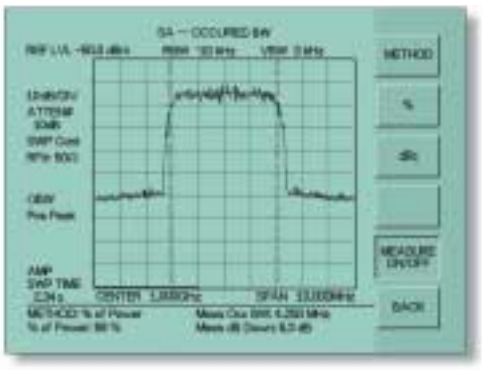
One of the most common measurements for transmitters is the channel power measurement. Channel power measures power and power spectral density in a given bandwidth and can quickly confirm if a transmitter is operating in compliance with system specification.



Channel Power Measurement

Occupied Bandwidth

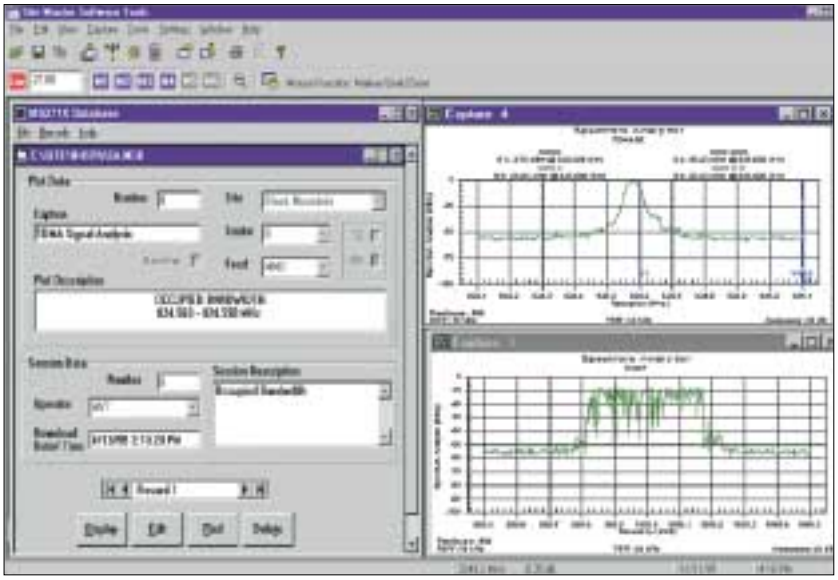
Monitoring of a transmitter's occupied bandwidth enables the user to determine if the transmitter is functioning properly. The MS2711B provides Xdb Down and % of power methods to assist users in making transmitter occupied bandwidth measurements.



Occupied Bandwidth Measurement

PC SOFTWARE TOOLS FOR PROFESSIONAL ANALYSIS AND REPORT GENERATION

Although the MS2711B features built-in analytical and reporting functions, users can also download measurement data to a PC for additional analysis or report generation. User friendly Software Tools is a Windows® program designed specifically for field spectrum analysis and will run on any computer with Windows 95/98/NT4/2000/ME/XP.
Test data can be analyzed and compared to historical performance.



The MS2711B Handheld Spectrum Analyzer Software Tools quickly stores Test Site data to a Relational Database File

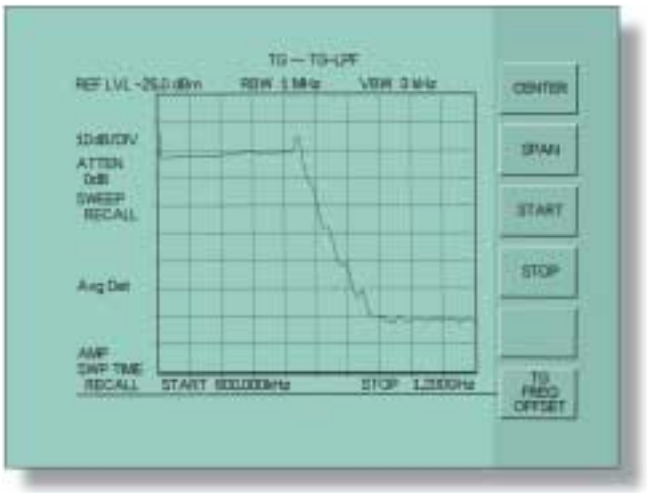
- Up to 200 MS2711B Handheld Spectrum Analyzer trace memory locations can be down loaded with a single menu selection.
- Build historical records with an unlimited number of traces in one document.
- Standard Windows 95/98/NT4/2000/ME/XP interface simplifies data analysis and report generation.
- Intelligent drag-and drop automatically converts traces to a common scale and speeds fault identification.
- Supports long file names for easy measurement data identification.
- Quickly and easily download data traces from the MS2711B to PC database with a single menu selection, or upload traces from the PC database to the MS2711B for in-field measurement comparison.

Tired of searching for a notebook full of obsolete measurement data? When you go to a site, your database goes with you. Software Tools for the MS2711B is intended for use as a maintenance tool. You can add new data to an existing database. Compare historical measurements to current test data to quickly pinpoint small changes in performance. The database's search feature allows technicians to enter data into any open field on the menu. The search returns all trace data ("records") which fit the description. So, if you'd like to see every trace measured by "Phil B." at site number "51", just pull-down (or key-in) those selections and click on the Search button.

PERFORMANCE ENHANCING OPTIONS

Tracking Generator (Option 20)

A built-in tracking generator covering 10 MHz to 3.0 GHz is available for the MS2711B, making it ideal for tuning cavity filters, adjusting repeater gain and many other applications. The fast tuning feature allows faster scalar measurements with minimal user intervention.

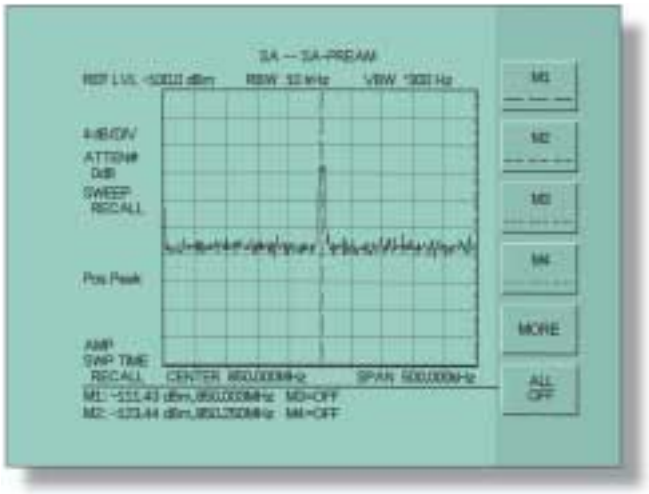


Tracking Generator (Option 20)

Preamplifier (Option 8)

Note: Option 8 is included as a no charge standard feature as of August 1, 2002.

A built-in 20 dB preamplifier featuring broadband coverage from 1 MHz to 3.0 GHz is a standard feature on the MS2711B making it ideal for low-level signal analysis and site surveys. With the built-in preamplifier, sensitivity of the MS2711B is extended to –115 dBm.



Preamplifier (Option 8)

SPECIFICATIONS

Except where noted otherwise, specified values are obtained after warming up the Anritsu MS2711B Handheld Spectrum Analyzer for 5 minutes at a constant ambient temperature. The typical values are given for reference, and are not guaranteed.

Frequency

Frequency Range
100 kHz to 3 GHz

Frequency Reference
Aging: ± 1 ppm/yr
Accuracy: ± 2 ppm

Frequency Span
1 kHz to 3 GHz in 1,2,5 step selections in auto mode, plus zero span

Sweep Time
≥ 6500 ms full span; 510 ms zero span

SSB Phase Noise
–75 dBc/Hz, 30 kHz offset

Spurious Responses
Input Related: ≤ –45 dBc

Spurious
Residual Responses: ≤ –90 dBm, ≥ 500 kHz

Resolution Bandwidths

Selections
10 kHz, 30 kHz, 100 kHz and 1 MHz

Accuracy
± 20%, typical

Video Bandwidth

Selections:
100 Hz to 300 kHz in 1-3 sequence

Amplitude

Measurement Range
+20 to –115 dBm, (with preamplifier on)

Maximum Safe Input Level
+ 23 dBm, ± 50 Vdc

Displayed Average Noise Level
≤ –115 dBm (≥ 1 MHz, typical with preamplifier on)
≤ –95 dBm (≥ 500 kHz, typical with preamplifier off)
≤ –80 dBm (< 500 kHz, typical with preamplifier off)

Dynamic Range
> 65 dB

Total Level Accuracy
± 2 dB, ≥ 500 kHz, typical
± 3 dB, < 500 kHz, typical

Units
dBm, dBV, dBmV, dBµV

Display Range
2 to 15 dB/div in 1 dB steps
Ten divisions displayed

Attenuator
Range: 0 to 50 dB, selected manually or automatically coupled to the reference level
Resolution: 10 dB steps

Display

Type
Monochrome LCD (with backlight capability)

Resolution
640 x 480

Marker Modes
6 Markers; standard, delta, marker to peak and marker to center

Memory

Trace Storage
200 stored traces

Setup Storage
10 test setups

Displayed Traces
2

Inputs

RF Input
50-Ohms

Connector
Type N Female

RF Input VSWR
2.0:1

RS-232 Interface

Type
Null modem

Baud Rate
9600,19.2k, 38.4k, 56k, 115.2k Baud

Printer Interface

Drivers
Epson ESC/P
Epson ESC/P RAST
Epson ESC/P2
HP PCL3

General Characteristics

Dimensions
10.0 in. x 7.0 in. x 2.4 in.
25.4 cm x 17.8 cm x 6.1 cm

Weight
≤2.2 kg (4.9 lbs) including battery

Power Requirement

Battery Operation (standard)
NiMH battery

AC/DC Operation (optional via external DC input)
+12.5 to +15 Vdc, 1100 mA max.

Environmental

Temperature
Operating: 0 to +50°C, humidity 85% or less
Non-operating: –20 to +75°C

Electromagnetic Compatibility

Complies with European community requirements for CE marking

Safety

Conforms with EN 61010-1 for class 1 portable equipment

MS2711B TRACKING GENERATOR (OPTION 20) SPECIFICATIONS

Frequency

Frequency Range
10 MHz to 3 GHz

Frequency Resolution
5 kHz

Tracking Offset Range
± 5 MHz

Output

Output Power Level
0 to –60 dBm

Output Power Level Resolution
0.1 dB

Absolute Level Accuracy
±1.5 dB, 0 to –40 dBm,
±4.0 dB, –40 dBm to –60 dBm

Output Tracking VSWR
<2.0:1, <0 dBm

Spurious Harmonics
≤–20 dBc

Non-Spurious
≤–20 dBc

Measurement Range

Measurement Range
+20 to –90 dBm (≥10 MHz, typical with tracking generator on)

MS2711B PREAMPLIFIER (OPTION 8) SPECIFICATIONS

Note: Option 8 is included as a no charge standard feature as of August 1, 2002.

Frequency

Frequency Range
1 MHz to 3 GHz

Amplitude

Gain
20 dB, 1 MHz to 3 GHz, typical

Measurement Range
–25 dBm to –115 Bm (with preamp on)

Displayed Average Noise Level
≤ –115 dBm (1 MHz to 3 GHz, typical)

Max Input Level (Preamp On)
–25 dBm, maximum measurable input
+13 dBm, ±50 Vdc, maximum without damage

Panel connections include a 9 pin D-sub RS-232, precision test port connector, DC power input, headphone jack and an optional RF detector connection for the power meter operations.

ORDERING INFORMATION

Standard Product and Accessories

Model MS2711B (100 kHz to 3000 MHz)
User's Guide
Soft Carrying Case
Rechargeable Battery, NiMH
AC – DC Adapter
Automotive Cigarette Lighter/12 Volt DC Adapter
One Year Warranty
CD ROM containing Software Management Tools
Serial Interface Cable

Product Options

Option 8	20 dB Preamplifier, Built-in, 1 MHz to 3.0 GHz **Note**: Option 8 is included as a no charge standard feature as of August 1, 2002
Option 20	Tracking Generator, Built-in, 10 MHz to 3.0 GHz

Optional Accessories

5400-71N50	RF Detector, N(m), 50 Ohm, 1 to 3000 MHz
42N50A-30	30 dB, 50 Watt, Bi-directional Attenuator, DC to 18 GHz, N(m) to N(f)
15NN50-1.5C	Test Port Cable Armored, 1.5 meter, N(m) to N(m), 6.0 GHz
15NN50-3.0C	Test Port Cable Armored, 3.0 meter, N(m) to N(m), 6.0 GHz
15NN50-5.0C	Test Port Cable Armored, 5.0 meter, N(m) to N(m), 6.0 GHz
15NNF50-1.5C	Test Port Cable Armored, 1.5 meter, N(m) to N(f), 6.0 GHz
15NNF50-3.0C	Test Port Cable Armored, 3.0 meter, N(m) to N(f), 6.0 GHz
15NNF50-5.0C	Test Port Cable Armored, 5.0 meter, N(m) to N(f), 6.0 GHz
15ND50-1.5C	Test Port Cable Armored, 1.5 meter, N(m) to 7/16 DIN(m), 6.0 GHz
15NDF50-1.5C	Test Port Cable Armored, 1.5 meter, N(m) to 7/16 DIN(f), 6.0 GHz
61N50	RF SWR Bridge (10 to 2500 MHz), N(m) Connector, 50Ω
61NF50	RF SWR Bridge (10 to 2500 MHz), N(f) Connector, 50Ω
1030-86	Band Pass Filter, 806-869 MHz, 1.7 dB loss, N(m) to SMA(f), 50Ω
1030-87	Band Pass Filter, 902-960 MHz, 1.7 dB loss, N(m) to SMA(f), 50Ω
1030-88	Band Pass Filter, 1.85-1.99 GHz, 1.8 dB loss, N(m) to SMA(f), 50Ω
1030-89	Band Pass Filter, 2.4-2.5 GHz, 1.4 dB loss, N(m) to SMA(f), 50Ω
510-90	Adapter 7/16 (f) to N(m), 7.5 GHz
510-91	Adapter 7/16 (f) to N(f), 7.5 GHz
510-92	Adapter 7/16 (m) to N(m), 7.5 GHz
510-96	Adapter 7/16 DIN (m) to 7/16 DIN (m), 7.5 GHz
510-97	Adapter 7/16 DIN (f) to 7/16 DIN (f), 7.5 GHz
1091-26	Adapter, DC to 18 GHz, 50Ω, N(m) to SMA(m)
1091-27	Adapter, DC to 18 GHz, 50Ω, N(m) to SMA(f)
1091-172	Adapter, DC to 1.3 GHz, 50Ω, N(m) to BNC(f)
34NN50A	Precision Adapter, DC to 18 GHz, 50Ω, N(m) to N(m)
34NFNF50A	Precision Adapter, DC to 18 GHz, 50Ω, N(f) to N(f)
12N50-75B	Matching Pad, converts 75Ω to 50Ω, 7.5 dB loss, DC to 3,000 MHz, 50Ω N(m) to 75Ω N(f)

Optional Accessories (continued)

48258	Spare Soft Carrying Case
40-115	Spare AC/DC Adapter
806-62	Spare Automotive Cigarette Lighter/12 Volt DC adapter
800-441	Spare Serial Interface Cable
551-1691	USB to RS232 Serial Adapter
760-215A	Transit Case for Anritsu Handheld Spectrum Analyzer
633-27	Rechargeable Battery, NiMH
2000-1029	Battery Charger, NiMH
2300-347	Anritsu Handheld Spectrum Analyzer Software Tools
10580-00074	Anritsu HHSA User's Guide, Model MS2711B
2000-1030	Portable Antenna, 50 Ohm, SMA (m), 1.71-1.88 GHz
2000-1031	Portable Antenna, 50 Ohm, SMA (m), 1.85-1.99 GHz
2000-1032	Portable Antenna, 50 Ohm, SMA (m), 2.4-2.5 GHz
2000-1200	Portable Antenna, 50 Ohm, SMA (m) 806-869 MHz
2000-1035	Portable Antenna, 50 Ohm, SMA (m), 902-960 MHz
70-28	Portable lightweight headset

Printers

2000-766	HP DeskJet Printer, Model 350 Includes: Interface Cable, Black Print Cartridge, and U.S. Power Cable
2000-753	Spare Serial-to-Parallel Converter Cable
2000-755	Five (5) rolls of Thermal Paper
2000-756	Serial 9-pin to 25-pin D-Sub Converter Cable (for Sieko DPU-411-12BU)
2000-1206	Black Print Cartridge (for HP 350 Printer)
2000-1207	Rechargeable Battery for DeskJet Printer (for HP 350 Printer)
2000-663	Power Cable (Europe) for DeskJet Printer
2000-664	Power Cable (Australia) for DeskJet Printer
2000-665	Power Cable (U.K.) for DeskJet Printer
2000-667	Power Cable (So. Africa) for DeskJet Printer

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