Agilent PSA Spectrum Analyzer Firmware Revision History

Purpose:

The purpose of this document is to provide an overview of the important changes made with each PSA Series Spectrum Analyzer firmware and measurement personality revisions.

A.03.04 REL 010 July 8, 2002

This package contains Option 266 only.

See A.03.04 REL 009 for base firmware history.

A.03.04 REL 009 July 8, 2002

This package contains all measurement personalities except Option 266.

Resolved Defects:

- GSM/EDGE:
  PK EVM and 95% EVM for severely impaired EDGE signals

A.03.03 REL 008 May 30, 2002

This package contains Option 266 only.

See A.03.03 REL 007 for base firmware history.

Added Support for Optional Measurement Personalities:

- Option 266 8566/68B Code Compatibility
- This package does not support other measurement personalities.

A.03.03 REL 007 May 30, 2002

This package contains all measurement personalities except Option 266.

Added Support for new instruments:

- E4446A (3 Hz – 44 GHz)
- E4448A (3 Hz – 50 GHz)

Features Added or Enhanced:

- Amplitude Corrections
- 64Mb Flash Memory Support
- 89600 Support
- Limit Lines
- Variable Sweep Points
- Spectrum Analysis Measure, many enhancements including:
  Multi Carrier Power: Now supports up to 12 carriers
  Spectrum Emission Mask: Support for 802.11a/b and HiperLAN
- All Comms Apps: Now supports high crest factor signals.
- GSM/EDGE ORFS switching speed improvement
- Option 1DS PreAmp: Turned ON for W-CDMA, cdma2000, cdma1xEV-DO

- W-CDMA: Pre-defined Test Model update for Code Domain and Mod Accuracy to conform to latest 3GPP standard.
- W-CDMA SEM: Reference signal power measurement improvement
- Cdma2000 SEM: Default setting improvement

Resolved Defects:

- Amplitude reduction during multi-band sweeps
- Spectrum Analysis Measure:
  Spurious Emissions lock-up when entering measurement many times.
  Harmonic Distortion lock-up when sending CONF:HARM command followed by INIT:IMM using GPIB.
  INITiate:CONTinuous ON command not working correctly.
- Phase Noise:
  READ:LPL? Returns incorrect values for DEG/RAD and RES FM with 10kHz to 1MHz Spans.
  Instrument goes into loop condition switching between Log Plot and Monitor Spectrum.
  Log Plot Markers not functional after Power On Preset.
- GSM/EDGE:
  PvT averaging, external trigger delay, and multi-slot midamble defects
  Orfs frame trigger defects
- W-CDMA:
  ACLR sweep and dynamic range defects
  CDP tDPCH value and graph annotations for X-axis incorrect.
  PICH symbol EVM does not function.
- Cdma2000:
  CDP graph annotations for X-axis incorrect and marker resolution cannot be changed after device change without preset.
- cdma1xEV-DO:
  RHO, I/Q Error measurement marker error
  CDP total power not recalculated when needed.
  :DISPlay:RHO:VIEW SCPI command not working correctly.
- CdmaOne:
  Mod Accuracy, Time Offset measurement reports wrong value.
  Spur Close measurement mask not correct.

A.02.07 REL 010 April 26, 2002

Resolved Defects:

- Phase Noise: Residual FM measurement accuracy improvement

A.02.07 REL 009 March 18, 2002

Resolved Defects:

- Auto Alignment causes crash during FFT measurements.

A.02.05 REL 008 March 1, 2002

Resolved Defects:

- Crash when switching from CDMA2000 to GSM/EDGE mode, then selecting Data Bits view.
- Crash when in channel power while changing center frequency and RBW.
- W-CDMA correlation failures (error 503) with SCH sync mode in Mod Accuracy.

- CdmaOne RHO measurement intermittently fails to correlate signal.
- LO unlocks after setting phase noise optimization manually to f<50 KHz with span set to <50 MHz and then setting span to > 50 MHz.
- Instrument hangs after switching between modes during an Align All Now.
- “Align All Needed” message not consistent with instrument alignment being needed.
- LO loop optimization causing 1st LO unlock errors.
- Calibrator display corrupted when setting attenuator with Trace set to Min Hold.
- Amplitude loss while displaying two frequency band breaks simultaneously and narrowing RBW.

A.02.04 REL 004 January 1, 2002

Added Support for Optional Measurement Personalities:

- Option 204 1xEV-D0 Measurement Personality

Resolved Defects:

- Phase Noise Personality:
  Crash when using remote access to switch to log plot after power cycle.

A.02.04 REL 001 December 7, 2001

Added Support for Optional Measurement Personalities:

- Option BAF W-CDMA Measurement Personality
- Option B78 cdma 2000 Measurement Personality
- Option 226 Phase Noise Measurement Personality
- Option BAC cdmaOne Measurement Personality
- Option 202 GSM (with EDGE) Measurement Personality
- Option BAE NADC/PDC Measurement Personality

Added and Enhanced Standard Power Suite Measurements:

- Adjacent Channel Power
- Burst Power
- Channel Power
- Complimentary Cumulative Distribution Function (CCDF)
- Harmonic Distortion
- Multi Carrier Power (MCP)
- Occupied Bandwidth (OBW)
- Spectrum Emissions Mask (SEM)
- Spurious Emissions
- Third Order Intercept (TOI)

Added Radio Standard Parameter Setups for Power Suite Measurements:

- IS-95
- J-STD-008
- NADC
- GSM/EDGE

- 3GPP W-CDMA
- cdma2000 SR1
- cdma2000 SR3-MC
- cdma2000 SR3-DS
- PDC
- Bluetooth

Resolved Defects:

- Flatness corrections applied in linear scale.
- Repaired signal drop on signal band crossings.

A.01.09

Resolved Defects:

- Improvement in the accuracy of long averaged detection sweeps.

A.01.08

Resolved Defects:

- Improvements made to the FFT mode including auto-coupling, spans, and signal locking.

A.01.04 January 5, 2001

This was the first code shipped to customers.
