

Revision History

# Keysight M90XA X-Series Measurement Applications for Modular Instruments

Notice: This document contains references to Agilent. Please note that Agilent's Test and Measurement business has become Keysight Technologies. For more information, go to [www.keysight.com](http://www.keysight.com).

# Notices

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## Manual Part Number

M9000-90008

## Edition

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### WARNING

A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood and met..

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# M90XA Revision History

This revision history document is relevant for the following Keysight products:

Product/Feature	Description
M9063A	Analog Demodulation Measurement Application
M9064A	VXA Vector Signal Analysis Measurement Application
M9068A	Phase Noise Measurement Application
M9071A	GSM/EDGE/EVO Measurement Application
M9072A	CDMA2000/CDMAOne Measurement Application
M9073A	W-CDMA/HSPA+ Measurement Application
M9076A	1xEV-DO Measurement Application
M9077A	WLAN 802.11a/b/g/n/ac Measurement Application
M9079A	TD-SCDMA/HSPA Measurement Application
M9080A	LTE FDD Measurement Application
M9080B	LTE-Advanced FDD Measurement Application
M9081A	Bluetooth® Measurement Application
M9082A	LTE TDD Measurement Application
M9082B	LTE-Advanced TDD Measurement Application

Keysight recommends that you keep your system up to date by installing the most recent software version. Only the most current version, along with update instructions, is accessible via the web and can be downloaded from <http://www.keysight.com/find/M90XA-SW>.

The table below lists the release dates for each version of instrument software.

To see the version that is currently installed on your system, open Control Panel and find M90XA under installed programs. You can find versions of installed components as follows:

- M9391A and M9393A drivers: Control Panel, Installed Programs
- XSA: Run M90XA. Send the SCPI query \*IDN? or from the GUI, select **Utilities > System > Show > System** and look for the **Instrument S/W Revision** entry on the display.

M90XA Software Version	Release Date
Version 2.1	April 2015
Version 2.0	July 2014
Version 1.1.500	December 2013
Version 1.0.9	October 2013

# Version 2.1 (April 2015)

Minimum required M9391A driver: 1.2.417.1

Minimum required M9393A driver: 1.1.518.1

XSA version: M.14.50

## Enhancements

- Added support for the following measurement application:
  - M9068A - Phase Noise Measurement Application
- Updated all X-Series measurement applications to version 14.5. See X-Series Revision History at [http://www.keysight.com/upload/cmc\\_upload/All/XSA\\_SWRev\\_History-Win7.pdf](http://www.keysight.com/upload/cmc_upload/All/XSA_SWRev_History-Win7.pdf)
- Reorganized the programming examples. Added new MATLAB and Visual Basic .NET programming examples.
- Measurement speed and performance enhancements in key areas.

## Issues Resolved

- Issues fixed in X-Series measurement applications are described in the X-Series Revision History at [http://www.keysight.com/upload/cmc\\_upload/All/XSA\\_SWRev\\_History-Win7.pdf](http://www.keysight.com/upload/cmc_upload/All/XSA_SWRev_History-Win7.pdf)

# Version 2.0 (Release Date July 24, 2014)

Minimum required M9391A driver: 1.1.300.0

Minimum required M9393A driver: 1.0.70.0

XSA version: A.14.01

## Enhancements

- Added support for M9393A PXIe Vector Signal Analyzer.
- Added support for the following measurement applications:
  - M9063A - Analog Demodulation Measurement Application
  - M9064A - VXA Vector Signal Analysis Measurement Application
  - M9080B - LTE-Advanced FDD Measurement Application
  - M9081A - Bluetooth\_® Measurement Application
  - M9082B - LTE-Advanced TDD Measurement Application

**The LTE-Advanced apps are not supported in 32-bit mode.**

- Updated all X-Series measurement applications to version 14. See X-Series Revision History at [http://www.keysight.com/upload/cmc\\_upload/All/XSA\\_SWRev\\_History-Win7.pdf](http://www.keysight.com/upload/cmc_upload/All/XSA_SWRev_History-Win7.pdf)
- Added support for running in-process with 89600 VSA software and sharing hardware driver sessions.
- Measurement speed and performance enhancements in key areas.

## Issues Resolved

- Issues fixed in X-Series measurement applications are described in the X-Series Revision History at [http://www.keysight.com/upload/cmc\\_upload/All/XSA\\_SWRev\\_History-Win7.pdf](http://www.keysight.com/upload/cmc_upload/All/XSA_SWRev_History-Win7.pdf)

# Version 1.1.500 (Release Date December 16, 2013)

Minimum required M9391A driver: 1.1.300

XSA version: A.13.33

## Enhancements

None

## Issues Resolved

- Fixed an issue where the result for Power Spectral Density (PSD) under the Channel Power (CHP) measurement was slightly less than the value measured with a swept analyzer.
- Fixed an issue where the Gate Length parameter was not being used to determine the data acquisition time for gated spectrum measurements.
- Fixed an issue where the TD-SCDMA Spectrum Emission Mask measurement did not account for External Gain for the first measurement.
- Fixed several issues that caused the M90XA to crash at exit.
- Fixed an issue where the M90XA virtual front panel was always the top-most window.

# Version 1.0.9 (Release Date October 4, 2013)

Minimum required M9391A driver: 1.1.136

XSA version: A.13.32

Initial Release

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