
Keysight Technologies

N9038A MXE EMI Receiver

N9038B MXE EMI Receiver, Multi-Touch

Option RT1, Real-Time Spectrum Analysis Upgrade

Notices

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Option RT1 – Real-Time Spectrum Analysis Upgrade

Products Affected:	MXE N9038A MXE N9038B
Requirements:	See Prerequisites
To Be Performed By:	(X) Keysight Service Center (X) Advanced User (X) User
Estimated Installation Time:	1.0 Hour
Estimated Adjustment Time:	0.0 Hours
Estimated Verification Time:	0.0 Hours

This document provides detailed instructions for the installation of Real-Time Spectrum Analysis in the N9038A MXE EMI Receiver or the N9038B MXE EMI Receiver, Multi-Touch. Please be sure to read this entire document before attempting to perform this upgrade.

Prerequisites

There is one prerequisite that must be met before installing Option RT1 in an N9038A MXE EMI Receiver or N9038B MXE EMI Receiver, Multi-Touch. It is:

Options:

N9038A-B85 Analysis Bandwidth, 85 MHz

or

N9038B-B85 Analysis Bandwidth, 85 MHz

Instructions on how to verify that this prerequisite has been met prior to the installation of this upgrade are included later in this document.

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Quantity	Description	Part Number
1	Option N9038AK-RT1 License Entitlement Certificate	n/a

Tools Required

- USB storage device with > 1 GB free memory
- Computer with Internet Access

Instrument Hardware Requirement Verification

Verify that Option B85 is installed in the instrument by pressing **System, Show, System** and verify that there is an entry for:

N9038A-B85 Analysis Bandwidth, 85 MHz

or

N9038B-B85 Analysis Bandwidth, 85 MHz

If N9038A-B85 or N9038B-B85 is not found in the instrument do not proceed any further with this upgrade. Option N9038AK-B85 or N9038BU-B85 will need to be installed before proceeding.

Installation Instructions

License Key Retrieval and Installation

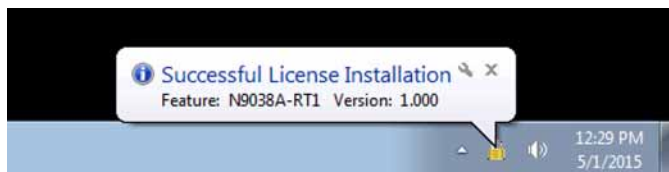
1. Plug the instrument into the ac power source and turn it on.
2. Follow the instructions on the enclosed License Entitlement Certificate to redeem the new license keys for the instrument being upgraded.

NOTE

While only one license key file will be sent it will contain within it two license keys, one for the Real-Time Spectrum Analysis application and one for Frequency Mask Triggering used in this application.

3. Once the new license keys have been redeemed follow the installation instructions that come with the licenses to install them into the instrument.
4. Once the licenses have been installed an acknowledgment of this such as seen in Figure 1 can be expected.

Figure 1 License Key Installation Confirmation



5. After the new license keys have been installed cycle the power of the instrument.
6. Verify that the license keys have been installed by pressing **System, Show, System** and make sure that the following options are present:
 - N9038A-RT1 Real-time analysis up to maximum BW, basic detection
 - N9038A-FT1 Frequency Mask Trigger >15 us signal durationor
 - N9038B-RT1 Real-time analysis up to maximum BW, basic detection
 - N9038B-FT1 Frequency Mask Trigger >15 us signal duration

Instrument Software Verification / Installation

The minimum instrument software revision to support Option RT1 in the N9038A MXE EMI Receiver is A.16.00.

The minimum instrument software revision to support Option RT1 in the N9038B MXE EMI Receiver, Multi-Touch is A.27.05.

If the instrument does not have this revision or later the instrument software will need to be upgraded.

7. Verify that the currently installed instrument software revision meets the minimum requirement for this upgrade by pressing **System, Show, System** on the instrument and verify that the **Instrument S/W Revision** is **A.16.00** or newer for N9038A, or **A.27.05** or newer for N9038B.
8. If the instrument software revision meets the minimum requirement proceed to the next section of this procedure, Operation Verification.
9. If the instrument software revision does not meet the minimum requirement update the instrument software to the latest version available.

The latest version of MXE instrument software and installation instructions can be downloaded from:

N9038A: http://www.keysight.com/find/mxe_software

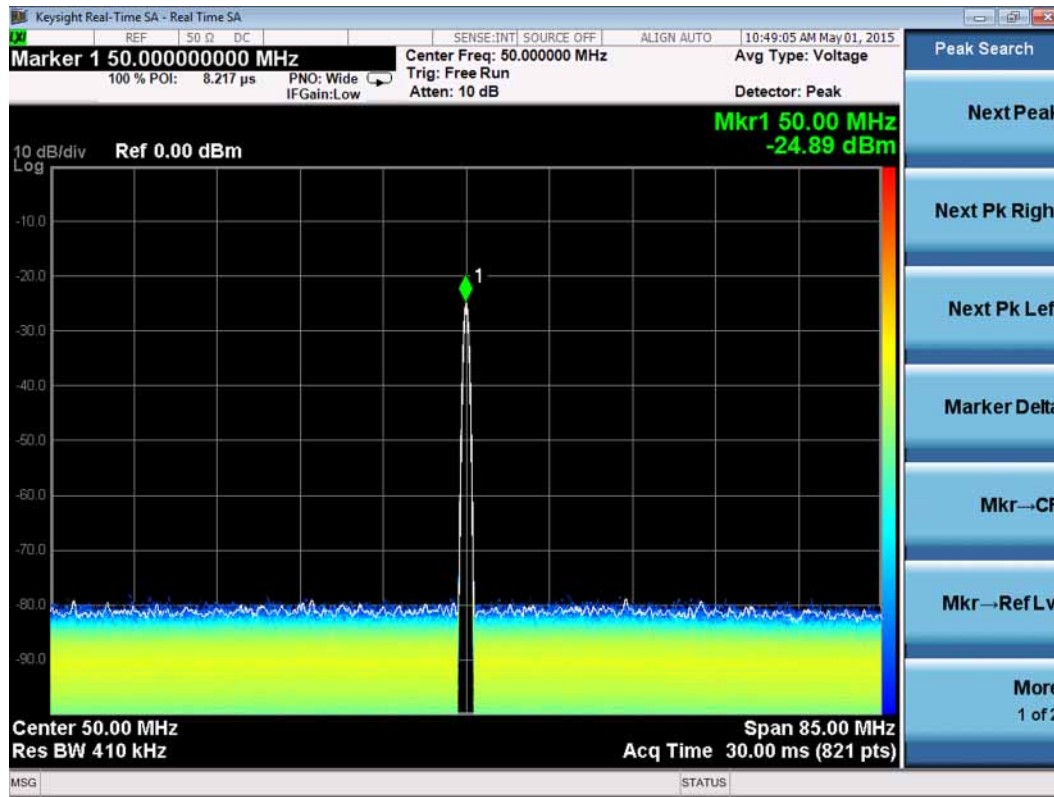
N9038B: http://www.keysight.com/find/N9038B_software

Operation Verification

This procedure will verify the basic functionality of the Real-Time Spectrum Analysis application.

10. On the instrument press **Mode, Real-Time Spectrum Analyzer**.
11. Press **FREQ Channel, Center Frequency, 50 MHz**.
12. Press **Input / Output, RF Calibrator, 50 MHz**.
13. Press **Peak Search**.
14. The display should look like that of Figure 2, and the signal amplitude should be -25.0 dBm, ± 1.0 dB.

Figure 2 Real-Time Spectrum Analysis Verification



15. This upgrade is now complete and the Real-Time Spectrum Analysis option is now ready for use.

Adjustments and Performance Verification

Manual Procedures Required

None

Automated Adjustments Required

None

Automated Performance Verification Testing Required

None

For assistance, contact your nearest Keysight Technologies Sales and Service Office. To find your local Keysight office access the following URL:

<http://www.keysight.com/find/assist>

