

# Keysight N9010B EXA and N9020B MXA Signal Analyzers N9048B PXE EMI Receiver

Option YAS  
Y-Axis Screen Video Out

# Notices

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## Option YAS Installation Kit

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Products Affected:	N9010B EXA Signal Analyzer N9020B MXA Signal Analyzer N9048B PXE EMI Receiver
Serial Numbers:	All
Options	
To Be Performed By:	(X) Keysight Service Center (X) Personnel Qualified by Keysight (X) Customer
Estimated Installation Time:	0.5 Hours
Estimated Adjustment and Verification Time:	0.5 Hours

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### Introduction

This kit contains all of the instructions required to install Option YAS on Keysight EXA and MXA signal analyzers and PXE EMI receivers. Option YAS enables the ANALOG OUT port to provide a Y-Axis screen video output.

The rear panel ANALOG OUT port is present on all EXA and MXA signal analyzers and PXE EMI receivers, however Option YAS must be enabled via a license file.

#### NOTE

1. At the time of manufacture the hardware related to this option was fully adjusted and the option performance was verified to be within its warranted specifications. Within one year of the initial calibration date of the instrument this option is fully calibrated with no further adjustment or verification testing.

To determine the initial calibration date, locate the original calibration certificate that was shipped with the instrument at the time of purchase. The Date of Calibration is printed on the original calibration certificate.

To ensure that this newly installed option has been installed properly, the procedure that follows includes a functional check.

2. The latest revision of the X-Series signal analyzer software may be downloaded from:

[http://www.keysight.com/find/Xseries\\_software](http://www.keysight.com/find/Xseries_software)

3. This option is licensed for one instrument model/serial number combination. The license key will only install on the designated instrument.
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## Contents

Quantity	Description	Keysight Part Number
1	Installation Note	This note
1	Option Upgrade Entitlement Certificate	5964-5178

### Tools Required for Installation

- Personal computer with internet access and USB port
- USB storage device with >2GB free memory

### Tools Required for Manual Operation Verification

- Voltmeter
- Test cable, BNC (used to connect voltmeter to the analyzer rear panel ANALOG OUT)
- Banana plug to BNC adapter (used to connect voltmeter to BNC cable)

### Installation Procedure over USB

1. Locate the Option Upgrade Entitlement Certificate (5964-5178) from the kit.
2. Redeem the Option Upgrade Entitlement Certificate by following the instructions on the Certificate.
3. After redeeming your Option Upgrade Entitlement Certificate you will receive an email with an attached License File.
4. Locate a USB storage device. Perform a virus scan on this device before use.
5. Save the License File to the root directory of the USB Storage Device.
6. Connect the USB Storage Device to the signal analyzer USB port. Windows will detect the new hardware and may display the configuration menu shown in **Figure 1**. This menu may be configured according to your preferences.

**Figure 1** USB Storage Device Configuration Menu



7. The signal analyzer will automatically consume the License File. (This may take a few minutes) When the License File is consumed the Keysight License Manager will display a “Successful License Installation” message similar to the one shown in [Figure 2](#).

**Figure 2** Successful License Installation



### Alternate Installation Procedure

The License File can be manually installed over USB or LAN by placing the license file in the following folder on the signal analyzer

C:\Program Files\Agilent\licensing

### Verify the Installation

1. Cycle the power on the signal analyzer.
2. Press **System, Show System** to display a list of installed options.
3. Verify that the newly installed option appears on the list.

## Manually Verify Operation

1. Preset X-Series analyzer. Assure mode is Spectrum Analyzer.
2. Display the 50 MHz calibrator signal. Press **Input/Output, RF Calibrator, 50 MHz**. Press **FREQ, Center Frequency**, key in 50 MHz. Press **Span, Zero Span**. You should see a flat line across the display at  $-25$  dBm.
3. Press **AMPTD, Ref Level**, and key in  $-25$  dBm. The displayed signal level should be at the top graticule line.
4. Press **Input/Output, Output, Analog Out, Screen Video**.
5. Connect a voltmeter, set to measure DC volts, to the analyzer rear panel ANALOG OUT connector.
6. The voltmeter should measure 1V.
7. Increase the Ref Level to  $-15$  dBm. The signal should drop one graticule division on screen and the voltmeter reading should be 0.9 V.
8. This test is sufficient to determine if the output circuitry is working properly for all Analog Out signal selections.

## Option YAS Installation Kit

### Utilities, Adjustments, and Performance Verification Tests

Calibration Software and specified test equipment is required to perform the adjustments, and can be used to automate the performance verification testing. Information on how to obtain this software can be found at

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

#### Utilities Required

None

#### Adjustments Required

None

#### Performance Testing Required

None

#### **A full calibration is required to assure the instrument meets all specifications**

The end user must ultimately determine whether they want a full calibration to be performed after the installation of this upgrade or not. If a full calibration is required, arrangements regarding the level of calibration must be made between the end user and the calibration provider.

For assistance, contact your nearest Keysight Technologies Sales and Service Office. To find your local Keysight office access the following URL, or if in the United States, call the following telephone number:

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

1-800-829-4444 (8 am - 8 pm ET, Monday - Friday)





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