# Keysight Technologies N9048B EMI Receiver

Option C35, 3.5 mm Input Connector Retrofit Kit



## Notices

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### Manual Part Number N9048-90019

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# Option C35, 3.5 mm Input Connector Retrofit Kit

Products Affected:

Serial Numbers:

≥ MY58480000

To Be Performed By:

(X) Keysight Service Center

() Personnel Qualified by Keysight

() Customer

Estimated Installation Time:

Estimated Adjustment and Verification Time:

3 Hours

#### Introduction

The Option C35 retrofit kit, N9048-60017, provides all the parts and instructions necessary to install the 3.5 mm input connector into the Keysight PXE Series EMI Receivers.

NOTE

The latest revision of the PXE Series EMI Receivers software may be downloaded from <a href="http://www.keysight.com/find/xseries\_software">http://www.keysight.com/find/xseries\_software</a>.

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

NOTE

The instrument must be performance tested to assure it meets specifications following the hardware installation. It is possible that installing the input connector and different input cable might cause frequency response to be out of specifications. The X-Series Performance Verification and Adjustment Software must be used. All adjustments are automated.

# Option C35, 3.5 mm Input Connector Retrofit Kit

# Contents - Option C35 Retrofit Kit, N9048-60017

Quantity	Description	Keysight Part Number
1	Option Upgrade Entitlement Certificate	
1	Installation Note, Option C35	N9048-90019
1	Cable assembly, Attenuator-RF Input 1 (C35)	N9048-21326
1	Connector assembly, 3.5 mm (serial # < MY/SG62030000)	N9038-60019
	3.5 mm Connector	08673-60040
	Washer-Lock Internal-Tooth 0.377-in-ID 0.507-in-OD 0.022-in-THK	2190-0016
	Nut-HEX-DBL-CHAM 3/8-32-THD .094-in-THK	2950-0001
	Bracket, C35	N9038-21201
1	Enhanced Connector assembly, RF input, 3.5 mm (serial # > MY/SG62030000)	N9048-60119
	3.5 mm Connector	08673-60040
	Washer-Lock Internal-Tooth 0.377-in-ID 0.507-in-OD 0.022-in-THK	2190-0016
	Nut-HEX-DBL-CHAM 3/8-32-THD .094-in-THK	2950-0001
	Bracket, RF Input, 3.5 mm, Enhance	N9048-20619
2	Screws, M3x0.5 8mm-LG (Crest Washer-Pan Head-TORX)	0515-0372
8	Screws, Machine W/Patch-Lock 90-DEG-Flat-HD Torx-T10 M3X0.5 8mm-LG SST-300 passivated finish	0515-2032
2	Screws, Machine Flat-HD Torx-T10 M4X0.7 6mm-LG Steel Zn-Plated Blue	0515-6548
1	EMI 0-ring	8160-1637

### **Tools Required**

- T-20 Torx driver
- T-10 Torx driver
- 5/16-inch open end wrench
- N9048B PXE Service Guide can be found online at the following URL:

#### www.keysight.com/find/N9048B\_service\_guide

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

If adjustments and performance testing is required:

- Keysight Calibration and Adjustment Software, N7818A (revision A.10.00 or later)
- Test equipment and computer supported by the N7818A Performance Tests and Adjustment Software.

WARNING

Before you disassemble the instrument, turn the power switch to Standby and unplug the instrument. Failure to unplug the instrument can result in personal injury.

CAUTION

Electrostatic discharge (ESD) can damage or destroy electronic components. All work on electronic assemblies should be performed at a static-safe workstation. Refer to the documentation that pertains to your instrument for information about static-safe workstations and ordering static-safe accessories.

#### Installation Procedure

#### Installation Procedure

Remove the Instrument Outer Case, Front Panel Assembly, and Right Side Chassis (RF Bracket)

### CAUTION

If the instrument is placed on its face during any of the following procedures, be sure to use a soft surface or soft cloth to avoid damage to the front panel, keys, or input connector.

See the Instrument Outer Case, Front Frame Assembly and RF Area (RF Bracket) removal procedures in the Service Guide's "Assembly Replacement Procedures" chapter. Discard the eight Front Frame screws.

Remove the Type-N Input Connector Assembly and Cable

See the Input connector assembly removal procedure in the Service Guide's "Assembly Replacement Procedures" chapter.

Remove the other end of semi-rigid cable W2 from the attenuator and carefully remove the cable from the instrument.

Install the 3.5 mm Input Connector and Cable

- 1. Locate the semi-rigid cable in the retrofit kit.
- 2. Position the semi-rigid cable between the input attenuator and the location where the Type N connector had been.
- 3. Connect the semi-rigid cable to the attenuator, but only tighten the connection hand tight.
- 4. Locate the 3.5 mm input connector assembly in the kit.
- 5. Install the input connector assembly onto the chassis with the two screws (M3 x 0.5, instrument serial # < MY/SG62030000, or M4 x 0.7, instrument serial # > MY/SG62030000) from the retrofit kit, but leave the mounting screws loose to allow the connector assembly to move when connecting the cable.
- **6.** Connect the semi-rigid cable to the connector assembly, but only tighten the connection hand tight.
- 7. Torque the two screws securing the connector assembly to the chassis to 9 inch-lbs (M3 screws), or 12 inch-lbs (M4 screws).
- 8. Torque both ends of the semi-rigid cable to 10 inch-lbs.
- **9.** Locate the O-ring in the kit and slide the O-ring over the input connector so it seats at the base of the connector.

Re-Install the Right Side Chassis, Front Frame Assembly, and Instrument Outer Case

See the Instrument Outer Case, Front Frame Assembly and RF Area procedures in the Service Guide's "Assembly Replacement Procedures" chapter if needed. Attach the Front Frame using the eight screws (0515-2032) included in the kit.

## Installation Procedure over USB

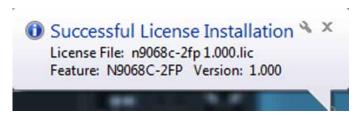
- 1. Locate the Option Upgrade Entitlement Certificate from the kit.
- 2. Redeem the Option Upgrade Entitlement Certificate by following the instructions on the Certificate.
- 3. After redeeming your Option Upgrade Entitlement Certificate you will receive an email with an attached License File.
- 4. 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. Press System, Show System to display a list of installed options.
- 2. Verify that N9048B-C35 appears on the list.

Adjustments, and Performance Verification Tests

# Adjustments, and Performance Verification Tests

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

#### http://www.keysight.com/find/calibrationsoftware

# Adjustments Required

#### Adjustments

None anticipated, but dependent on possible performance test results.

# Performance Testing Required

The following performance verification tests are the minimum set required to ensure that this newly installed option is functioning properly. Performing only these tests does not guarantee the instrument meets all specifications.

#### **Performance Verification Tests**

Frequency Response (all available tests)

Residual Responses

#### 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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