

N9048B-02

Modification Recommended Service Note

Supersedes:
NONE

N9048B PXE EMI Receiver

Serial Numbers: MY59500006, MY59500012, MY59500015, MY59500016, MY59500020, MY59500021, MY60450107

The Problem

Signal amplitude loss can occur above 3.6 GHz tuned frequency on option 544 (44 GHz) analyzers.

Parts Required:

NONE. Software update only.

ADMINISTRATIVE INFORMATION

ACTION	<input type="checkbox"/> ON SPECIFIED FAILURE	STANDARDS			
CATEGORY:	<input checked="" type="checkbox"/> AGREEABLE TIME	LABOR:	0.5 Hours		
LOCATION	X CUSTOMER INSTALLABLE	SERVICE:	<input type="checkbox"/> RETURN	USED	<input type="checkbox"/> RETURN
CATEGORY:	<input type="checkbox"/> ON-SITE (active On-site contract required)	INVENTORY:	<input type="checkbox"/> SCRAP	PARTS:	<input type="checkbox"/> SCRAP
	X SERVICE CENTER		<input type="checkbox"/> SEE TEXT		<input type="checkbox"/> SEE TEXT
	<input checked="" type="checkbox"/> CHANNEL PARTNERS				
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL:	2-15-2022		
	<input type="checkbox"/> Calibration Required	PRODUCT LINE:	12		
	X Calibration NOT Required	AUTHOR:	BS		

ADDITIONAL INFORMATION:

Situation:

Calibration values on certain disk image versions causes the preselector filter used above 3.6 GHz to be swept too quickly and this will result in measured amplitude loss. The amount of loss will vary and depends on whether the Preselector Center routine was performed, the frequency span setting, and the Sweep Time Rules setting, where the default Sweep Time Rules setting is Normal, which allows faster sweeps than the Accuracy setting.

If you want to verify the problem, set up the analyzer as shown in this screen shot. A 25 GHz signal at -15 dBm is provided by a signal source. Notice the signal is distorted, and the amplitude is 5 dB lower than expected.



The issue only appears on instruments with upper frequency ranges of 44 GHz and with the serial numbers shown above.

Solution/Action:

There are two possible courses of action.

Action 1.

1. Download and install instrument software A.28.07 or later. This software version ignores the calibration values on the instrument disk image that cause the issue.
2. Perform the built-in Characterize Preselector routine.
Press **System** (the gear icon in the upper right portion of the instrument screen), **Alignments**, **Advanced**, **Characterize Preselector**.

Instrument software is available at:

https://www.keysight.com/find/xseries_software

Action 2.

Applicable to Keysight service centers.

A utility is available if you have a PC that can remotely control the signal analyzer via LAN, GPIB, or USB, and you can install the VEE run time engine on the PC. The utility will modify the calibration values on the analyzer's disk image and trigger the Characterize Preselector routine.

The instrument software does not need to be updated

Download the utility from http://sa.support.keysight.com/XSA/YTF_util/YTF_Fix.vxe

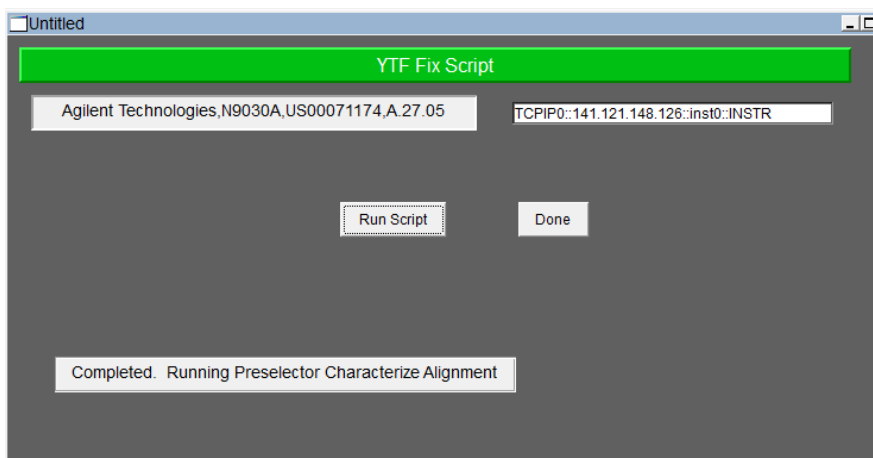
The VEE runtime engine can be installed from:

<https://www.keysight.com/main/software.jsp?ckey=2213956&id=2213956&lc=eng&cc=US>

Carefully enter the instrument's VISA address into the upper right box and click Run Script.

For example, if an instrument is connected to a common LAN router with an external PC, then the VISA address would be in the format of: TCPIP0::192.168.0.2::inst0::INSTR, where 192.168.0.2 is the instrument's IP address.

The utility will complete the changes to the instrument's disk image and then perform the Characterize Preselector routine that takes a few minutes.



Revision History:

Date	Service Note Revision	Author	Reason for Change
15 Feb 2021	01	Bill Scharf	As Published