E4408B-12 <u>SERVICE NOTE</u>

Supersedes: None

E4408B ESA Series Spectrum Analyzers

Serial Numbers: All

An error message occurs during the 3 GHz RF Assembly Adjustment portion of the TME LO Amplitude Adjustment test on the instruments which have certain vintages of the ESA RF assembly.

Parts Required:P/NDescription

Qty.

None

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

INFORMATION ONLY

AUTHOR: DC PRODUCT LINE: 12

ADDITIONAL INFORMATION:

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Situation:

If the ESA being adjusted has a 50 ohm, 3 GHz input part number of E4403-60100 or E4403-60107, the 3 GHz RF Assembly Adjustment portion of the LO Amplitude Adjustment test will fail. The error message on the PC looks like:

Test Set	IP Error
٩	The connection between the E4407B and the E4419A is incorrect.
	Press 'Retry' to display the setup and continue.
	ОК

The failure is occurring because a DAC was recently removed from the RF assembly board and replaced with a fixed gain amplifier.

Solution/Action:

Before doing the LO Amplitude adjustment, press [System], {More 1 of 3}, {Show Hardware} on your analyzer. Look for "50 ohm 3 GHz Input" assembly name. If the part number listed is E4403-60100 or E4403-60107, skip the 3 GHz RF Assembly LO Adjustment portion under the LO Amplitude Adjustment test. Perform all the other adjustments under the LO Amplitude Adjustment except this one.

After all the portions except the 3 GHz RF Assembly LO Adjustment of the LO Amplitude Adjustment test are run, when you click on "Finish" Test, the following message appears on the screen.

Confirm Storage of New Values			
The test FAILED due to the following reason(s):			
* One or more test setups were NOT verified.			
*** WARNING ***			
The adjustment FAILED, storing the results could cause analyzer performance to FAIL specifications.			
Store the new correction values?			
Press 'Yes' to store the new values Press 'No' to re-store the original values			
Yes No			

This error message occurs because the 3 GHz RF Assembly Adjustment portion of the LO Amplitude Adjustment test was not performed. Click "Yes" to store the new values. After you click yes, the following message appears on the PC screen:

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Test Sequencing				
LO Amplitude Adjustment has exited with a result of FAIL				
How would you like to proceed?				
Rerun the test Run next test Abort Sequence				
This dialog will close in 5 seconds. Press this button to stop the clock				

Click on "Run Next test" or just wait for 5 seconds, depending on the tests you are running. After 5 seconds or after all the other adjustment tests are performed, here is what the adjustment test result will look like:

💵 Agilent N7800A Test Management Environment Software					
File View Licenses Administration Help					
Order Information Run Tests Test Reports					
Order Information					
Order Number: 1-ESA_LO_Adjustment Model: E4407	'B				
Serial Number: US45100000 Unique Identifier:					
Sessions Session Name: As Received Vew Session Rename Session					
Test Plan Information					
Test Plan: Adjustment Variant: Normal	▼ Test Plan Help				
Results View: Test Station: Station	Select Equipment				
Test Name Result Date/Time	Test Context				
□ 10MHz Reference Frequency Adjustment □ IF Amplitude Adjustment □ Reference Amplitude Adjustment ☑ L0 Amplitude Adjustment ☑ L0 Amplitude Adjustment ☑ YTF Adjustment ☑ Frequency Response Low Band Adjustment ☑ Frequency Response High Band Adjustment	Operator: Dipti Temperature: 24.3 °C Humidity: 55 %				
	Line Frequency: 60 Hz				
	Enter Notes				
	Run Control				
	Pause between tests				
	Pause on test point fail				
	Start				

The LO Amplitude adjustment test result appears as Fail because the 3 GHz RF Assembly Adjustment portion of the LO Amplitude Adjustment test was not performed. Ignore the fail message and continue with your tests.

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The software engineering team is working on getting the TME software updated to remedy this situation. The updated version will be ready by July 2007. Check your TME software for updates during that time frame.