

MODIFICATION RECOMMENDED –
CORRECTS MANUFACTURING OR DESIGN DEFECTS

E4446A-05A

S E R V I C E N O T E

Supersedes:
E4446A-05

PSA Series Spectrum Analyzer

E4440A, E4443A, E4445A, E4446A and E4448A

Service Notes: E4440A-08, E4443A-07A, E4445A-07A, E4446A-05A,
E4448A-06A

Serial Numbers: **US42510236, US42510259, US42510265, US42510267, US42510269,
US42510274, MY42510189**

A hardware defect has been detected in the above range of PSA series spectrum analyzers. This defect can cause measurements to be made not to the specified performance of the instrument. The effected assembly is the A7 Digital IF board. Please perform the following procedure to determine if the instrument does require modification. The modification is to replace the A7 Digital IF Assembly with the E4440-69195 Digital IF exchange assembly.

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Description	Qty.
E4440-69195	Digital IF Exchange Assembly	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input checked="" type="checkbox"/> IMMEDIATELY <input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	STANDARDS: LABOR: 0.0 Hours	
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY: <input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	USED PARTS: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: Nov 1, 2004	
AUTHOR: BNN	PRODUCT LINE: 12		
ADDITIONAL INFORMATION:			

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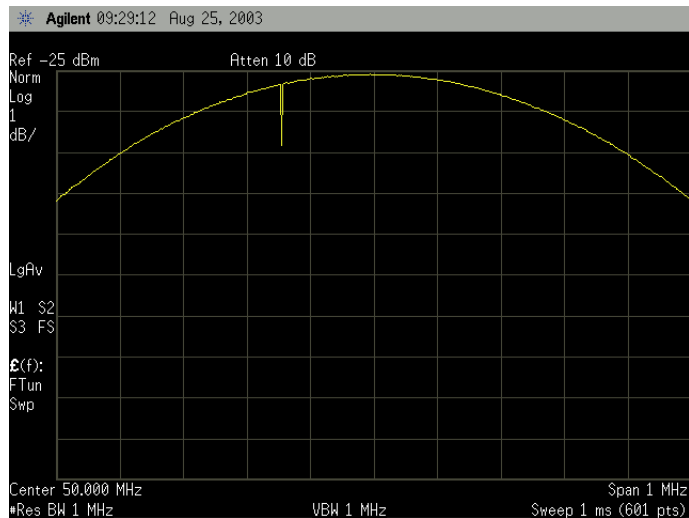
October 22, 2003

Situation:

A hardware defect has been detected in the above range of PSA series spectrum analyzers. This defect can cause measurements to be made not to the specified performance of the instrument. The effected assembly is the A7 Digital IF assembly. Customer notifications will begin in early October, 2003. Please perform the following procedure to determine if the instrument does require modification.

To identify if your unit is affected, perform the following procedure with the PSA Series Spectrum Analyzer. No external equipment is required.

- Press the PRESET key.
- Tune the instrument to 50 MHz by pressing the FREQUENCY key followed by 50 MHz.
- Set the span to 1 MHz Hertz by pressing the SPAN key followed by 1 MHz.
- Set the Resolution Bandwidth to 1 MHz by pressing the BW/AVG and setting the Res BW to 1 MHz.
- Turn the 50 MHz calibration signal on by pressing the INPUT/OUTPUT key and selecting the Input Port to be the 50 MHz Amplitude Reference.
- Set the Reference level to -25 dBm and the Scale/Div to 1 dB by pressing the Amplitude key.



Effected instruments will randomly show an amplitude drop of approximately 2 to 3 dB.

If the instrument is not within the S/N range listed above, or the instrument does not display the error in the procedure stated above, no action is required.

Solution/Action:

Replace the A7 Digital IF assembly P/N E4440-60025 or E4440-60195 with the Digital IF exchange assembly P/N E4440-69195. Perform recommended performance verification procedures and possible adjustments. Please reference the PSA Service guide for additional details.

Assembly	Adjustments and Tests	Performance Verification
A7 Digital IF Assembly	Internal Align All Now	Absolute Amplitude Accuracy Resolution BW Switching Display Scale Fidelity