

S E R V I C E N O T E

SUPERSEDES: None

438A Power Meter

Serial Numbers: 0000U00000 / 3513U04623

Modification to Eliminate Measurement Instability**To Be Performed By: Agilent-Qualified Personnel****Parts Required:**

P/N	Description
1826-1076	IC 444

Additional Test Equipment Required:

11683A Range Calibrator 11730A Power Sensor Cable

Situation:

When the unit is measuring a power level at the bottom of a range there can be as much as 0.1 dB variation in the power measured when measuring a stable power source like the cal. output on the power meter or from a range calibrator.

The problem will only be seen when the power meter is in manual range. For example, the 438A power meter with an 8482A sensor connector to the calibrator output would give unstable measurements in manual range 4 but would give stable measurements in manual range 3 and Autorange.

Continued

DATE: January 1996

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:					
MODIFICATION RECOMMENDED					
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	Labor 2.0 Hours		
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT	USED PARTS:	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE		AGILENT RESPONSIBLE UNTIL: January 1998		
AUTHOR: PN	ENTITY: E600	ADDITIONAL INFORMATION:			

Solution/Action:

- PRESET the 438A Power Meter.
- Connect the range calibrator to the 438A "A" input with the sensor cable.
- Set the range calibrator to: Range 1 mW, Polarity NORMAL, Function STANDBY.
- ZERO the 438A Power Meter
- Change the range calibrator to CALIBRATE.
- On the 438A Power Meter press CAL ADJUST, SET A, 100 <Enter>.
- Set the 438A Power Meter to range 4 by pressing MNL RANGE 4 <Enter>.
- Once the meter has calibrated set the measurement units to dBm.
- Check the variation on the display. It should be < 0.04 dB. If it is > 0.04 dB then change U23 and U24 on the A5 assembly using part number 1826-1076.
- Once the parts have been replaced verify that the problem has been fixed by going through the procedure above again.