

E5100A/B-13

S E R V I C E N O T E

SUPERSEDES: NONE

E5100A/B Network Analyzer

Firmware Revision: 2.00 and below

Modification to fix problem that EQU0? command returns negative value

To Be Performed By: HP-qualified personnel

Parts Required:

Need one of the following firmware disks:

HP P/N	Qty.	Description	Used for
E5100-18003	1	FW DISK 2.10#509	E5100A with Option 509
E5100-18103	1	FW DISK 2.10 1BW	E5100B with black & white LCD
E5100-18203	1	FW DISK 2.10 1CL	E5100B with color LCD
E5100-18303	1	FW DISK 2.10 2BW	E5100A with black & white LCD (*1)
E5100-18403	1	FW DISK 2.10 2CL	E5100A with color LCD

Note *1: If the maximum number of sweep points of the HP E5100A is 801, P/N E5100-18103 should be used.

Continued

DATE: August 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 1.0 Hours
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> HP LOCATION	SERVICE INVENTORY:	<input 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	HP RESPONSIBLE UNTIL: August 1998	
AUTHOR: KI	ENTITY: 3355	ADDITIONAL INFORMATION:	

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Situation:

When EQU0? query command is used to get C0 value (capacitance in the equivalent circuit of resonator) in IMPEDANCE conversion mode, the query response may be negative value.

Example

```
OUTPUT @E5100;"EQU0? 100MHZ"  
ENTER @E5100;C0
```

In the above program, C0 should be always 0 or positive value in normal operation. However, returned C0 might be negative value.

This problem is caused by a firmware bug on revision 2.00 and below.

Solution/Action:

This problem can be fixed by firmware update.

1. Firmware update procedure
 - 1-1. Press [System], {MORE}, {SERVICE MENU}, {FIRMWARE REVISION} keys to confirm that the unit has a firmware revision 2.00 and below.
 - 1-2. Confirm that the firmware disk is correct one to update the firmware of the unit. (see the part list of "Parts Required:")
 - 1-3. Turn OFF the unit.
 - 1-4. While pressing [Preset] and [0] keys at the same time, turn ON the E5100A/B, and wait for a while until some {firmware update} softkey is appeared on the display,
 - 1-5. Press {Firmware Update} softkey.
 - 1-6. Insert the firmware disk into the floppy disk drive of the HP E5100A/B.
 - 1-7. Press {OK} softkey.
 - 1-8. Press {EXECUTE UPDATE} softkey.
 - 1-9. Press {OK} softkey to start the firmware update.

Note: It will take several minutes to complete the firmware update. When the firmware update is completed, the unit automatically execute preset operation.

- 1-10. Put the firmware revision label included in the firmware disk set on the rear panel.
2. Final operation check
 - 2-1. Turn the E5100A/B ON and confirm that the unit passes power on selftest.
 - 2-2. Press [System], {MORE}, {SERVICE MENU}, {EXECUTE TEST} to start self-diagnoses.
 - 2-3. Confirm that the unit passes the self-diagnoses.