# S E R V I C E N O T E

SUPERSEDES: None

## **HP 8751A Network Analyzer**

**Serial Numbers:** 0000J00000/3146J00701

0000A00000/xxxxAxxxxx (To be advised later)

(Firmware Revision 4.01 and below)

# Firmware upgrade improves performance and corrects known problems described in Table 1.

To Be Performed By: HP-qualified personnel

Parts Required:

HP P/N Qty. Description

W/O Opt. 002 W/ Opt.002

08751-86901 08751-86602 1 A1 ROM set Rev.4.02 08751-86403 08751-86403 1 A2 ROM set Rex.4.02

Continued

DATE: 30 November 1992

### **ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:					
MODIFICATION RECOMMENDED					
ACTION CATEGORY:	☐ IMMEDIATELY ■ ON SPECIFIED FAILURE ☐ AGREEABLE TIME	STANDARDS: LABOR: 1.0 Hour			
LOCATION CATEGORY:	☐ CUSTOMER INSTALLABLE☐ ON-SITE☐ HP LOCATION	SERVICE ☐ RETURN USED ☐ RETURN INVENTORY: ☐ SCRAP PARTS: ☐ SCRAP SEE TEXT ☐ SEE TEXT			
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	RESPONSIBLE UNTIL: 30 November 1994			
AUTHOR: MT	ENTITY: 3355	ADDITIONAL INFORMATION:			

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## Situation:

Table 1. Known Problems Corrected by Firmware Rev. 4.02

Problem	Description
Different results between OUTPLIMF? and OUTPLIML?	The "OUTPLIMF?" and "OUTPLIML?" may return incorrect results.
ADDRESS ERROR at boot up	If an auto-start I-BASIC program "AUTOST" is stored in the RAM disk and the INPUT command is used in the program, the ADDRESS ERROR may occur and the analyzer may not boot up.  NOTE:  This symptom will disappear if the HP 8751A is not turned on for long time, because the memory backup time for RAM Disk is approximately 70 hours. When the end-user reports the symptom but no trouble is found at service bench confirm if the end-user uses "AUTOST" program.
Unexpected"External Reference Locked" message	When the external reference signal is supplied to the HP 8751 A through the BNC terminal on the rear pannel, the "External Reference Locked" message is displayed on the display. But, even when the BNC connector is disconnected, the message still remains. The HP-IB command "EXTRLOCK?" behaves in the same way. Even after the connector is disconnected, the command returns the "1" that means "Locked".  Solution:  This function is re-designed with the new firmware Rev. 4.02. The changes are as follows:  1. The message on the display:  When the external reference connector is disconnected, the "EXT REF - UNLOCK" message is displayed.  2. HP-IB command "EXTRLOCK":  When the external refer ence connector is disconnected, the command returns "0" that means "UNLOCK".
Incorrect Q value in bandwidth search	At bandwidth search function, WIDTHS under MKR SEARCH Menu under MKR FCTN key, the displayed Q value might be incorrect if the value is more than 100000. Example, if the correct Q value is 198721, the displayed value is 19872.  NOTE: This error doesn't happen on HP-IB. The "OUTPFILT?" returns correct Q value.

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#### **Solution/Action:**

The problems listed in Table 1 are fixed with firmware revision 4.02 and above. Replace six ROMs on the A1/A2 boards with new ROMs,

#### Procedure:

- 1. Turn the HP 8751A on. The firmware revision will be displayed. Check the firmware revision.
- 2. Remove the top cover and shield plate.
- 3. If the revision is "Rev.4.xx",
  - a. Remove only the A1 board.
  - b. Replace the ROMs of the A1 board with Rev.4.02 ROMs. Table 2 and Figure 1 show the ROM locations.
- 4. If the revision is "Rev.3.xx" and below,
  - a. Remove the A1 and A2 boards.
  - b. Replace the ROMs of the A1 and A2 boards with Rev. 4.02 ROMs. The ROM locations are shown in Table 2, Table 3 and Figure 1.
  - c. Figure 1 shows the jumper and bit switch settings for Rev. 4.02. In case of any difference, replace RAMs and change the switch settings by referring to the Modification Note (P/N 08751-90034).
- 5. Reinstall the A1 and A2 boards.
- 6. Turn on the HP 8751A, and confirm the following:
  - a. The "REV. 4.02" is displayed.
  - b. The "POWER ON TEST FAILED" message is NOT displayed.
- 7. Turn the HP 8751A off. Reinstall the shield plate and the top cover.

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**Table 2. A1 ROMs (Rev.4.02)** 

Reference Designator	Part Number W/O Opt.002	Part Number W/ Opt.002
A1U43	08751-85901	08751-85611
A1U44	08751-85902	08751-85612
A1U45	08751-85903	08751-85613
A1U46	08751-85904	08751-85614
A1U47	N/A	08751-85615
A1U48	N/A	08751-85616

**Table 3. A2 ROMs (Rev.4.02)** 

Reference Designator	Part Number
A2U1	08751-85421
A2U2	08751-85422

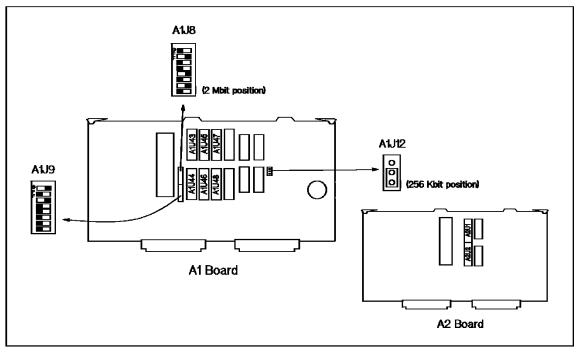


Figure 1. A1 and A2 Boards