## 8752A-01A

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

SUPERSEDES 8752A-01

## **HP 8752A Network Analyzer**

**Serial Numbers:** 0000A00000/3102A00838

#### Firmware Revision 1.03 Introduced

To be performed by: HP-Qualified Personnel or Customer

Parts Required: Parts Kit 08752-60003

**Contents of HP 8752 Firmware Kit (08752-60003)** 

Qty	Description	
1	A9U4 08752-80023	
1	A9U5 08752-80024	
1	A9U24 08752-80025	
1	A9U25 08752-80026	
1	Installation Note 08752-90037	

#### Situation:

A problem has been discovered in firmware revision 1.02 for the HP 8752A network analyzer. Data and instrument state disk files created by an HP 8752 with revision 1.02

Continued

DATE: 1 June 1991

### **ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:				
MODIFICATION RECOMMENDED				
ACTION CATEGORY:	☐ IMMEDIATELY ■ ON SPECIFIED FAILURE ☐ AGREEABLE TIME	STANDARDS: LABOR 0.5 Hours		
LOCATION CATEGORY:	<ul><li>■ CUSTOMER INSTALLABLE</li><li>■ ON-SITE</li><li>■ HP LOCATION</li></ul>	SERVICE ☐ RETURN USED ☐ RETURN INVENTORY: ☐ SCRAP PARTS: ☐ SCRAP SEE TEXT ☐ SEE TEXT		
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	RESPONSIBLE ENTITY: 4500 UNTIL: June 1993		
AUTHOR: ML	ENTITY: 4500	ADDITIONAL INFORMATION:		

© 1991 HEWLETT-PACKARD COMPANY PRINTED IN U.S.A.



Page 2 Service Note 8752A-01A

firmware are not compatible with earlier firmware revisions. Also, instruments with earlier revisions of firmware cannot read disk files created with firmware revision 1.02. Firmware revision 1.03 has been introduced to fix this problem. Disk files created by firmware revision 1.03 are compatible with all earlier firmware revisions.

#### Firmware History

Revision 1.02 firmware added the following new features.

1. Faster data array transfer to an external controller is now possible when using FORM1, FORM2, FORM3, or FORM5 (not FORM4). The HP-IB mnemonics and their normal-speed equivalents are shown below.

FAST	NORMAL	
OUTPRAF<1-4>	OUTPRAW<1-4>	Output current raw data
OUTPDATF	OUTPDATA	Output active channel corrected data
OUTPMEMF	OUTMEMO	Output current memory data
OUTPFORF	OUTPFORM	Output active channel formatted data

2. The HP 8752 automatically switches to system controller mode when necessary if no other controller is on the bus.

Revision 1.02 firmware corrected the following problems found in revision 1.01.

- 1. Controller-based plotting using the OUTPPLOT command did not work properly.
- 2. When recalling a dual channel measurement state with uncoupled channels and interpolated error correction on each channel, the error correction was not properly interpolated unless the error correction was toggled off and then on.
- 3. When "INPUDATA" was used to input FORM4 data arrays to the instrument, an extra zero was added at the first point. This offset all the following values, causing real data to appear as imaginary values and vice versa.
- 4. Sending titles over HP-IB into a sequence occasionally appended the title instead of replacing the current title.
- 5. Recalling an instrument state from disk which had formatted data and user graphics did not update the trace.
- 6. Power trips occasionally occurred at preset and recall. Also, power trip set the test port power to -5 dBm instead of the correct value of -20 dBm.
- Invalid calibration coefficients were generated when a calibration was done in CW time with interpolation turned on, and then was switched to power sweep mode.
- 8. In narrowband sweeps, with a center frequency less than 3.3 MHz, the sweep speed was too slow.

Service Note 8752A-01A Page 3

Revision 1.01 firmware corrected the following problems found in revision 1.00.

- 1. Calibrations which were stored to disk could not be recalled.
- 2. If a parameter was changed while the instrument was in hold, the format could not be changed afterwards unless the MEASURE RESTART key was pressed.
- 3. In list frequency mode, if a single segment list was saved to an internal register and then recalled, the following problems occurred.
  - a. Invalid data was shown on the display. The correct data was displayed after the MEASURE RESTART key was pressed.
  - b. The stop frequency shown on the display was wrong. This could also be corrected by pressing MEASURE RESTART.

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

The firmware revision of the HP 8752A is displayed on the CRT when the instrument is initially turned on. The information is in the line which has the format "HP 8752A n.nn month.day.year," where n.nn is the firmware revision number.

Customers who need disk file compatibility between different versions of the HP 8752A should replace their firmware with revision 1.03. A firmware upgrade kit is available as HP part number 08752-60003. Installation takes about 15 minutes and can be performed by the customer.

Since disk file compatibility is the only change from revision 1.02 to 1.03, this firmware upgrade is not recommended for customers who do not need disk file compatibility with older HP 8752A network analyzers.