

8560E-19C

Supersedes: 8560E-19B

HP 8560E Portable Spectrum Analyzer

8560E-19C Serial Numbers 0000A00000/3745A03343  
8561E-15C Serial Numbers 0000A00000/3745A02170  
8562E-07C Serial Numbers 0000A00000/3745A00609  
8563E-19C Serial Numbers 0000A00000/3745A08208  
8564E-14C Serial Numbers 0000A00000/3745A01072  
8565E-14C Serial Numbers 0000A00000/3745A00838

Serial Numbers as of 31 December, 1996

8560E: 3650A02708  
8561E: 3650A01743  
8562E: 3650A00259  
8563E: 3650A06273  
8564E: 3650A00680  
8565E: 3650A00576

Year 2K Update Information

To Be Performed By: HP-Qualified Personnel

Situation:

The HP8560 Series portable spectrum analyzers with firmware revisions earlier than 971024 have two year 2000 issues only when used with the HP 85620 Mass Memory Module (MMM) TIMEDATE and AUTOEXECUTE functions. The MMM is used to store large numbers of traces, execute downloadable programs (DLPs) and personalities (e.g. HP 85671A Phase Noise Utility), and do limit-line pass/fail testing. Here are the descriptions of the bugs and workarounds:

#### 1. Timedate Stamp on Saved Traces

The time/date stamp is stored with all traces. Whenever a catalog is executed, either from the front panel or over HP-IB, the order in which the catalog appears will be compromised by the fact that only two digits of the year are generated from the real-time clock (RTC, hardware). This most directly affects traces which are either stored automatically (using the AUTOSAVE feature) or those traces which are stored without a unique title. For example, if a trace is stored without a title, the name becomes:

TRACEYYMMDDHHMMSS

Where YY = year, MM = month, DD = day, HH = hour, etc. The obvious sorting order becomes significant based on the year. The year 2000 is represented by 00 and therefore sorts before any previous year.

Since it is highly unlikely these analyzers and the MMM will be used after 2089 (100 years after the MMM was introduced), all traces saved will have a unique filename. The sorting issue can be resolved by adding 1900 to all years 89 through 99 and above and adding 2000 to all years 00 through 88. This can be done either mentally during front-panel operation or programmatically during remote operation.

#### 2. AUTOEXECute Date Limitations

The AUTOEXEC function allows DLPs to be executed, or traces saved automatically when a certain criteria has been met. Criteria can be either a specified time interval, end-of-sweep (EOS), or a limit-line failure. When setting the autoexecution criteria, it is necessary to specify a start and stop date. Currently, only dates between 1 Jan 1988 and 31 Dec 1999 are acceptable dates.

The only known workaround for this is to change the date on the real-time clock to a date between 1 Jan 1988 and 31 Dec 1999. For example, if the real date is 3 June, 2003, set the date to 3 June 1993. The disadvantage of this workaround (besides the obviously incorrect date) is that the incorrect date will be saved with any saved traces. In the example given, it would be necessary to add 10 years to the all dates displayed by the MMM.

Since the AUTOEXEC feature is rarely used, and, when it is, the data is usually subjected to post-processing by the user, the workaround described above is reasonable.

Solution:

8560E series Portable Spectrum Analyzers with firmware older than 971024 can be upgraded to the current firmware revision to eliminate the bugs described, or the workarounds can be used. Instruments with serial prefixes 3410A and above only require new firmware. Older instruments require hardware retrofits to make the new firmware compatible. Detailed firmware upgrade information is available in Service Notes 8560E-04I, 8561E-03I, 8562E-03C, 8563E-04I, 8564E-01H, 8565E-01H, and in Firmware Note 08560-90150. For cost savings HP recommends that the workarounds be used rather than doing the upgrades in situations where this is acceptable.

Upgrades for instruments shipped after 31 December, 1996 (see serial numbers listed above) will be covered under Extended Warranty.

Date:

20 January, 1999

```
*****
*
*                MODIFICATION RECOMMENDED                *
*                -----                *
*
*      STANDARDS: LABOR HOURS   0.5                *
*      ACTION CATEGORY: ON SPECIFIED FAILURE      IMMEDIATELY     *
*                        AGREEABLE TIME   X                *
*      LOCATION CATEGORY: CUSTOMER INSTALLABLE   X  ON-SITE     *
*                        HP LOCATION   X                *
*      AVAILABILITY: PRODUCT'S SUPPORT LIFE                *
*      SERVICE INVENTORY: RETURN      SCRAP      SEE TEXT   X *
*                        USED PARTS: RETURN      SCRAP      SEE TEXT   X *
*      HP RESPONSIBLE UNTIL: See Text                *
*      AUTHOR/ENTITY:  GPB/5320                *
*      ADDITIONAL INFO: _____                *
*****
```