

85620A-06C

HP 85620A Mass Memory Module

Serial Number:

0000A00000/9999A99999

Supersedes: 85620A-06B

Year 2000 Compatibility

Situation:

By itself, the HP 85620A Mass Memory Module is neither Year 2000 compatible or incompatible. Compatibility depends on the host spectrum analyzer. Spectrum analyzer firmware revisions earlier than 971024 have two Year 2000 bugs when used with the HP 85620A TIMEDATE and AUTOEXEC functions. Here are the descriptions of these two bugs.

#### 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 the HP-IB, the order in which the catalog of stored traces 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:

TRACE YYMMDDHHMMSS

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 unlikely that 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 years 89 through 99 and above and by adding 2000 to years 00 through 88. This can be done mentally during front-panel operation or programatically during remote operation.

#### 2. AUTOEXEC Date Limitations

The AUTOEXEC functions allow DLPs to be executed, or traces to be 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 traces. In the example given, it would be necessary to add 10 years to the 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:

Install firmware revision 971024 or later to make the 8560 E-series spectrum analyzer/MMM combination fully year 2000 compliant. Spectrum Analyzers with serial prefix 3410A and later will only require the firmware kit. Earlier 8560 E-series instruments will require hardware retrofits. Refer to the firmware note or the firmware upgrade service notes for the particular model for details on upgrading firmware. MID will cover the upgrade cost for all spectrum analyzers shipped on or after 01 January, 1997. See also the latest revisions of service notes 8560E-19, 8561E-15, 8562E-07, 8563E-19, 8564E-14, or 8565E-14. The bugs described only affect two seldom-used functions and have easy workarounds. Customers may elect to use the workarounds rather than go through the expense of the firmware upgrades if this satisfies their need. (8560A/B series analyzers have no retrofit path; the workarounds described above must be used.)

Date:

14 May, 1999

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*   ADDITIONAL INFO: _____            *
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