

SCOPE:

This document will provide Y2K compliance information for the owners of EPC thermal printers. Model numbers addressed will include:

9802
9801
9800
9205A
9205

INTRODUCTION:

There is a growing anxiety throughout many industries about year 2000 date problems. Many older pieces of equipment do not contain proper date mathematics to accurately track dates into the next century. Many customers of ours have raised concerns about this problem.

EPC Y2K Statement concerning Models 9802, 9801, 9800, 9205A and 9205:

All of these recorders use the same Real Time Clock (M48T02 SGS- THOMSON). This IC chip keeps the internal time of the recorder. The M48T02 has a two digit century register. (e.g. 1998 translates into 98)

When this "register rolls over" or changes dates from 1999 to 2000 the register will read 00. The recorders internal year register will now be 00.

The question now can be raised. "Is this Y2K compliant"?

In this case, the recorder may be considered Y2K compatible. EPC defines the recorders in these terms because of the nature of their operation. A century roll over *does not effect* the recorders internal operation or its ability to keep and print time in its annotation. However, the century annotation has only two digits.

The recorder never digitally outputs a date. Therefore, any host equipment interfacing with these recorders will not be effected by the two digit code. A host system may update the recorder with a date past the year 2000. Thus, the recorders internal clock has no influence on the host system.

TESTING

The recorders were tested by using an automatic test program (ATP) from a Y2K compatible personal computer. The computer was set to a date past the year 2000 and interfaced with the recorder. During the program, the date was automatically set back to the year 1967. The recorder ran properly. Later in the test the date was returned to the host computers date (past the year 2000). The recorder continued to run properly. At no point in the test did either the recorder or the host system fail.

In addition, the recorder was set to 12/31/99 - two minutes before midnight. The recorder rolled over to the correct date on its own without being set from an external system.

The recorder also was able to keep track of the leap year in the year 2000.

EPC used the following to define year 2000 conformity:

Rule 1: No value for the current date will cause any interruption in operation.

The date on this series of recorders must be set from a host system. Therefore the host system must provide a valid date format to the recorder (month - date - year). (Provided this is true the recorder will display valid dates past Y2K.)

Rule 2: Date-based functionality must behave consistently for dates prior to, during and after year 2000.

The recorder has been operationally tested with dates before during and after the year 2000.

Rule 3: In all interfaces and data storage, the century in any date must be specified either explicitly or by unambiguous algorithms or inferencing rules.

This series of recorders does not output any data to electronic media. Therefore, there is no electronic transfer of dates to a host system, and no chance for electronic files to be corrupted by a bogus date code. However, the recorders do print dates on the hard copy record. The year is displayed in a two digit code. This printing technology did not even remotely exist in 1900. By inference one could easily deduce that the record was printed in the year 2000 and not the year 1900.

Rule 4: The year 2000 must be recognized as a leap year.

The recorders were tested under these conditions and the year 2000 is recognized as a leap year.

ADDITIONAL INFORMATION

Accompanying this document will be information supplied by SGS-THOMPSON concerning the M48T02.

Also, if you would like a copy of the test program used to test the 9802, 9801,9800, 9205A and the 9205, feel free to contact EPC Labs.