

New Life for Old Instruments

A sure cure for vacuum-tube aging and associated reliability problems in instruments, and for the resulting calibration, maintenance and inventory expenses, is a FETRON[®] solid-state tube conversion kit from Teledyne Semiconductor.

FETRONs are hybrid integrated circuits that replace vacuum tubes. They use cascoded JFETs (junction field-effect transistors) to duplicate the transfer characteristics of specific types of vacuum tubes. And FETRON metal-can packages plug directly into vacuum tube sockets.

Because FETRONs are solid-state, they have essentially the same stability, low-noise characteristics and reliability as high-quality bipolar transistors.

Communications companies are using FETRONs in large quantities to improve existing tube equipment. Now for the instrument owner, Teledyne has developed off-the-shelf conversion kits. Each is a set of FETRONs designed to replace the tubes in widely used instruments.

At present, FETRON conversion kits are available at a fraction of the cost of a new instrument to upgrade the HP400 VTVM and the CA plug-in module for Tektronix 500 series oscilloscopes.

