

9 GDS Helpsheet



World Leaders in Computer Controlled Testing
Systems for Geotechnical Engineers and Geologists

Hardware

Advanced Controller

Changing Firmware, MKII Controller

1. Introduction

We at GDS impart the performance characteristics to the digital controller by programming a chip that plugs onto the main printed circuit board. This piece of "hardware" is called an "EPROM" (Erasable Programmable Read Only Memory) and the "software" that is programmed into it is called "firmware".

From time to time we update the firmware with our latest developments and so there may be occasions when we advise you to fit a particular firmware enhancement. The procedure for changing the firmware is given below.

2. Changing Firmware

1. Ensure controller is powered off and the ac power lead is removed.
2. Remove the eight cap headed Allen screws retaining the control panel.
3. With the assistance of a colleague gently raise the control panel end of the top-plate by approximately 100mm, ensuring that no cables are stretched .
4. Remove the EPROM located in position E by using a small screwdriver gently to lever each end of the EPROM in turn until the chip can be lifted out easily.
5. Insert the replacement EPROMs into the sockets EF and G with the little cut-out in the EPROM in the same alignment as the one that was removed, making sure that no legs are left out or bent under.
6. Replace the top-plate making sure that no cables are trapped and that the rubber strips around the top edge of the control panel are not displaced. Secure the top-plate with the eight screws.
7. Carry out the diagnostics as described in section 3.3 of the addendum to part I of the Users handbook to check that the EPROM has been correctly inserted.

WARNING: We recommend that the above procedure is carried out by someone who is familiar with handling electronic components. The procedure may be helped with the use of IC inserters and extractors.