82_{GDS Helpsheet}



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

Hardware

Standard Controller

Installing RFM & RS232 Cables

1. Introduction

- 1. Ensure controller pressure is released and remove electrical power.
- 2. Remove six socket screws retaining the top plate.
- 3. Raise the top plate a small amount by sliding it a little to the left and lifting the front edge of the top plate. This will reveal the display and keypad ribbon cables. Note the orientation of the cables and carefully disconnect them from the main PCB.
- 4. It is now possible to rotate the top plate backwards to ascertain whether the plate can be laid behind the base. Release those cables necessary (after noting their correct position and orientation) and lay the top plate behind the base.
- 5. The RS232 cable consists of a 25 Pin socket on a cable plate connected to a 20 pin header socket by a grey ribbon cable. Remove the rectangular blanking plate at the back of the controller. Install the cable plate with red cable edge to the left hand side when viewed from the front. Plug the header socket into CON10 noting that the orientation key is in the front of the connector. (see Fig 1).
- 6. The RFM cable consists of a circular 9 pin socket mounted on a cable plate connected to a 10 pin plastic single line header socket by a grey plastic cable. Remove the round blanking plate at the right hand end of the controller. Install cable plate with red dot to the top. Plug white cable socket into CON 3 which can be found at the top right hand corner of the main PCB. (see Fig 1).
- 7. It may be necessary to change some electronic components on the main circuit board. If you have been issued with replacement electronic components you will also receive a set of instructions for this. Follow those instructions before you replace the top plate.
- 8. Lift the top plate onto the base with the front edge up and reconnect the cables released in action 4. above. Now close the top plate so that the display and keypad can be reconnected noting that the display cable has no twist in it whereas the keypad cable is twisted so that pin '1' on the cable socket goes to the L.H.S. when plugged into the PCB header.
- 9. Carefully close down the top plate pushing in the cables so that they are not trapped between it and the base.
- 10. It is now possible to power up the controller and check for correct operation in accordance with the operation manuals. Replace the six socket screws securing the top plate to the base.

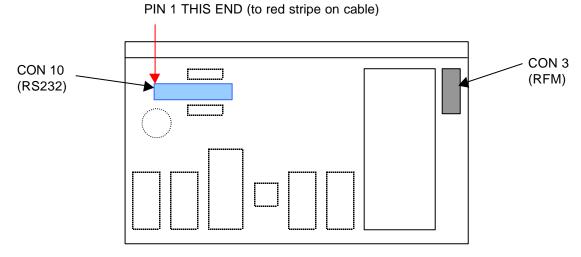


Fig 1. Standard controller main board showing RS232 and RFM cable connection points

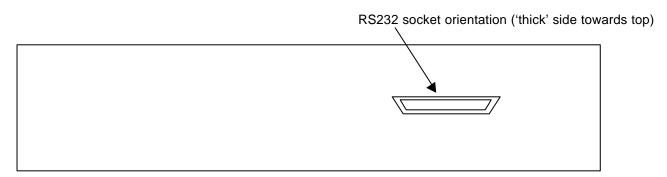


Fig 2. RS232 socket orientation looking from outside the back of the controller