

165 GDS Helpsheet

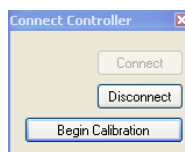
World Leaders in Computer Controlled Testing Systems for Geotechnical Engineers and Geologists

Software

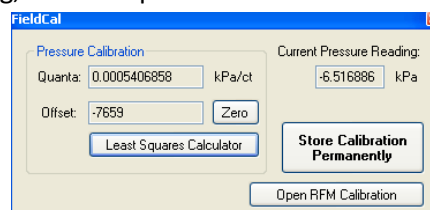
General

Calibrating a STDDPCv2 controller using the Field Cal tool

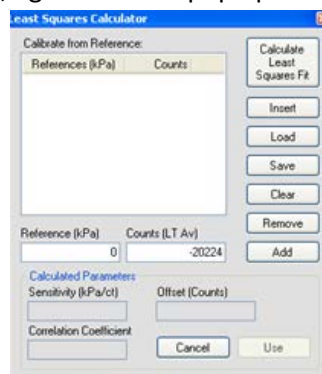
- 1) Connect the controller to the PC and turn on.
- 2) On the application (if not done already) delete the part of the name 'removethis' leaving only FieldCalTool.exe
- 3) Open the application.
- 4) The following box will appear on your PC, select 'Connect'. Select the connect controller you wish to calibrate from the drop down list (if your controller does not appear, make sure all connection are firm and that the controller is switched on, then restart the application.)



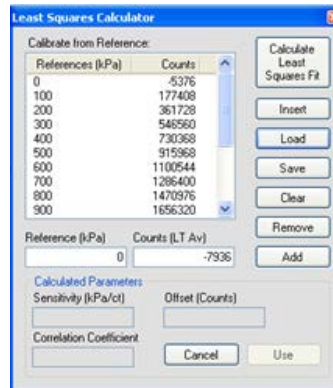
- 5) The Select Begin calibration a pop up box will appear on the screen (as seen below) showing the current pressure reading, offset & quanta.



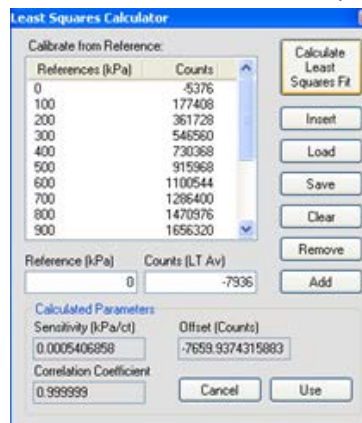
- 6) Select 'Least Squares Calculator', again another pop up box will appear.



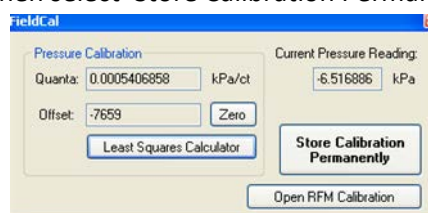
- 7) The purpose of this box is to record the known pressure applied to the transducer with the 'counts' received.
- 8) Making sure the controller is at atmospheric pressure, (i.e. no pressures are applied), write the reference as '0' and select the button 'Add', this will add the counts received from the controller when at 0kPa/kN.
- 9) Using your reference pressure transducer (i.e. Buddenburg) increase the pressure in known intervals, using the tool to 'Add' them to the list.



- 10) When all the known pressures have been recorded, select 'Calculate Least Squares fit' making sure the 'Correlation Coefficient' is as close to 1 as possible.



- 11) Save the data (Using the save button on the right of the pop up box).
- 12) The select 'Use'.
- 13) Close that pop up box and then select 'Store Calibration Permanently'.



- 14) Disconnect the controller (Use the disconnect button from the first pop up box)

15) Reset the Smart Keypad on the controller (press and hold the stop button)

16) Check the calibration data has been stored on the controller (press CMD Menu – 0 (system menu) – System Calibration.)