# **154**GDS Helpsheet



#### Hardware

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

### ISCO 500D Pressure/Volume Pump

#### Required Settings for ISCO 500D Pump

## 1. Notes

\*These settings apply to both ISCO 260D and 500D pumps.

## 2. Hardware & Software Settings

The GDSLab .ini file should contain the following information to successfully communicate with the ISCO 500D pump (Baud = 9600, Parity = n, Data Bits = 8, Stop Bits = 2):

(1) The space generally used for the hardware device sub-type should be set to the ID number entered within the ISCO pump itself (typical values range from 0 - 7).

(2) The channel numbers for pressure and volume begin at 11 - if more than one ISCO 500D pump is connected to the system channel numbers 13 & 14, 15 & 16 etc should be used for additional pumps.

(3) The example .ini file shown below can be found within the GDSLab Sample Hardware Ini files.

```
E ISCO_500D.ini
     [ISCO 500D Pressure/Volume Pump]
  1
       *Test Type and Calcs
       CreateanObject,7,GDS ctTriaxialCalcs,Filename?,1,N/A
       *Create a Cell Type
  4
  5
       CreateanObject, 0, GDS TraditionalCell,,,
  6
  7
       *ISCO 500D PUMP
       CreateanObject, 1, GDS_TRANSDUCER, , 2, Cell Pressure
 8
 9
       CreateanObject, 1, GDS TRANSDUCER, , 3, Cell Volume
       CreateanObject,2,GDS_ControlParameter,Filename?,302,CP Cell Pressure
 11
       CreateanObject,2,GDS ControlParameter,Filename?,303,CP Cell Volume
       CreateanObject, 3, GDS_ISCO500D, ,6, ISCO 500D
 13
       CreateanObject,4,GDS ISCO500D, 6 ISCO 500D
 14

   ID # of pump (entered in pump hardware)

 15
       *Comms
 16
       CreateanObject, 5, GDS_COMMPORT, commport1.txt,, Comm Port 1
 17
     [][Connections]
 18
       *SET ALL CONNECTIONS
       *Type num type num
       *ISCO 500D PUMP
21
       SetConnection, 1, Cell Pressure, 3, ISCO 5000 (1)
 22
                                                              _ Channel # (begins at 11)
23
       SetConnection, 1, Cell Volume, 3, ISCO 500D, 12
       SetConnection, 2, CP Cell Pressure, 4, ISCO 500D, 11
24
25
       SetConnection, 2, CP Cell Volume, 4, ISCO 500D, 12
 26
       SetConnection, 3, ISCO 500D, 5, Comm Port 1, 1
 27
       SetConnection, 4, ISCO 500D, 5, Comm Port 1, 1
```