

APPENDIX - B

PROGRAM FOR DC FOUR PROBE RESISTIVITY DATA ACQUISITION

At the beginning of the program, the IEEE-488 driver declaration functions need to be loaded.

```
5      M = 0
6      L = 1
7      NOOFDATA = 6000
10     INPUT "Enter a file name : " ; A$
15     OPEN "O",2,A$
20     IF (A$ = "q") OR (A$ = "Q") THEN GOTO 3250
50     OPEN "COM2:1200, N,B,I,CS,DS,CD"AS # 1
100    UDNAME$ = "dvm"
200    CALL IBFIND (UDNAME$, DVM%)
400    PRINT " TEMPERATURE", " RESISTANCE", "F-VOLTS",
          "R-VOLTS", "SL.NO."
600    IF M > NOOFDATA THEN GOTO 3200
601    BA = &H2E8
602    N = 40
603    OUT BA, N
630    FOR DELAY = 1 TO 5000 !
640    D = 0 !
700    NEXT DELAY
```

```

710     J$ = INKEY$
720     IF (J$ = "Q") OR (J$ = "q") THEN GOTO 3200
800     CALL IBCLR (DVM%)
900     CALL IBTRG (DVM%)
1000    WRT$ = "R2MIT1X" : CALL IBWRT (DVM%, WRT)
1100    RD$ = SPACE $ (18)
1200    CALL IBRD (DVM%,RD$)
1300    D1$ = RIGHT$ (RD$,14)
1400    PRINT # 1, "T"
1410    PRINT #1, CHR$ (13)
1420    PRINT #1, CHR$ (10)
1422    FOR DELAY = 1 TO 5000 !
1424    NEXT DELAY
1430    INPUT #1, TEMPER$
1440    TEMP$ = RIGHT$ (TEMPER$, 5)
1600    CALL IBCLR (DVM%)
1700    WRT$ = "R2MIT1X" : CALL IBWRT (DVM%, WRT$)
1800    BA = &H2EB
1900    N = 43
2000    OUT BA, N
2100    FOR DELAY = 1 TO 1000 !
2200    D = 0 !
2300    NEXT DELAY
2400    RD2$ = SPACES$(18)
2500    CALL IBRD (DVM%, RD2$)
2600    D2$ = RIGHT$ (RD2$, 14)
2635    D21 = VAL (D1$)
2640    D22 = VAL (D2$)
2649    C = 0.01

```