

# APPENDICES

## APPENDIX - A

### PROGRAM FOR AC MAGNETIC SUSCEPTIBILITY DATA ACQUISITION

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

```
50      OPEN "COM2:1200, N,B,I,CS,DS,CD"AS # 1
100     UDNAME$ = "dvm"
200     CALL IBFIND (UDNAME$, DVM%)
400     PRINT " CURRENT ", " VOLTAGE ", " TEMPERATURE"
500     BA = &H2E8
510     N = 0
520     OUT BA, N
530     FOR DELAY = 1 TO 100 !
540     D = 0 !
600     NEXT DELAY
601     BA = &H2E8
602     N = 64
603     OUT BA, N
630     FOR DELAY = 1 TO 100 !
640     D = 0 !
700     NEXT DELAY
800     CALL IBCLR (DVM%)
900     CALL IBTRG (DVM%)
1000    WRT$ = "R2MIT1X" : CALL IBWRT (DVM%, WRT)
1100    RD$ = SPACE $ (18)
```

```

1200     CALL IBRD (DVM%,RD$)
1300     D1$ = RIGHTS (RD$,14)
1400     PRINT # 1, "T"
1410     PRINT #1, CHR$ (13)
1420     PRINT #1, CHR$ (10)
1422     FOR DELAY = 1 TO 100 !
1424     NEXT DELAY
1430     INPUT #1, TEMPER$
1440     TEMP$ = RIGHTS (TEMPER$, 5)
1600     CALL IBCLR (DVM%)
1700     WRT$ = "R2M1T1X" : CALL IBWRT (DVM%, WRT$)
1800     BA = &H2EB
1900     N = 192
2000     OUT BA, N
2100     FOR DELAY = 1 TO 100 !
2200     D = 0 !
2300     NEXT DELAY
2400     RD2$ = SPACES$(18)
2500     CALL IBRD (DVM%, RD2$)
2600     D2$ = RIGHTS (RD2$, 14)
2635     D21 = VAL (D1$)
2640     D22 = VAL (D2$)
2649     C = 0.0001
2650     DR = (D21 - D22)/2
2660     D = DR/C
2700     PRINT C, DR, TEMP$
2750     PRINT
2800     OPEN "PWROFF.SAV" FOR APPEND AS #3
2810     PRINT #3,C, DR, TEMP$
2900     CALL IBCLR (DVM%)
2950     CLOSE #3

```

3300

CLOSE #1

3500

END