

```
1 ARUN :GOTO 0049
49 END
50 "AD_INIT"Q=256*XPEEK &789E+XPEEK &789F+&12,R=Q+&33,T=Q+&807B
52 RETURN
100 "K"CLS :WAIT 0:GOSUB "AD_INIT"
110 PRINT "* A/D-Calibration SV2.1 *"
120 LINE (0,0)-(155,6),X,&FFFF,BF
130 ON ERROR GOTO 1420
140 DIM KB(1,7)
150 DIM TT(3)
160 KB(1,7)=KB(1,7)
170 CH=0,BL=0:FOR I=0TO 3:TT(I)=0:NEXT I
180 GOSUB "GRA":GOSUB "MARK"
190 GOSUB "PNOKEY2":GOSUB "PNOKEY3":GOSUB "PCUKEY":GOSUB "PCRKEY"
200 GOSUB "CLRLINE":PRINT " Select Channel !";
210 IN$=INKEY$:IF (IN$>="A")AND (IN$<="D")GOSUB "TTL"
220 IF IN$=CHR$ &8GOSUB "PCH"ELSE IF IN$=CHR$ &CGOSUB "NCH":ELSE IF IN$=CHR$ &
    DGOSUB "CAL":IF INKEY$ (1)<>CHR$ &18THEN 190
230 GOSUB "BLINK":IF (INKEY$ (1)<>CHR$ &18)AND (INKEY$ <>CHR$ &18)THEN 210
240 CURSOR 0,1:PRINT "Program terminated ..."
250 CURSOR 0,2
260 END
270 "CAL"GOSUB "MARK":GOSUB "CLRLINE":GOSUB "PNOKEY2":GOSUB "BATTTEST"
280 IF X<4.5THEN 590
290 CURSOR 0,1:PRINT "Short A/D-Input !":GOSUB "PCRKEY"
300 GOSUB "CRKEY":GOSUB "PNOKEY3"
310 CURSOR 0,1:PRINT "Measuring OFFSET ..."
320 S=0
325 X=CH+TT(0)+TT(1)+TT(2)+TT(3):XCALL Q,X
330 FOR I=1TO 10:XCALL R,X:S=S+X:NEXT I
340 GOSUB "CLRLINE"
350 IF ABS S>20THEN 640
360 KB(1,CH)=INT ((S+5)/10)
370 BEEP 1:PRINT "OFFSET =";KB(1,CH):GOSUB "PCRKEY"
380 GOSUB "CRKEY":GOSUB "PNOKEY3"
390 CURSOR 0,1:PRINT "Apply Full-Scale-Signal !":GOSUB "PCRKEY"
400 GOSUB "CRKEY":GOSUB "PNOKEY3"
410 CURSOR 0,1:PRINT "Measuring FULL-SCALE ..."
420 S=0
425 X=CH+TT(0)+TT(1)+TT(2)+TT(3):XCALL Q,X
430 FOR I=1TO 20:XCALL R,X:S=S+X:NEXT I
440 GOSUB "CLRLINE"
450 IF (ABS S>81800)OR (ABS S<76000)THEN 680
460 KB(CH)=4000/(ABS S/20)
470 BEEP 1:PRINT "FULL-SCALE =";USING "##.#####";KB(CH):USING :GOSUB "PCRKEY"
480 GOSUB "CRKEY":GOSUB "PNOKEY3"
490 GOSUB "CLRLINE"
500 PRINT "Measuring Stability ..."
510 S=0
520 FOR I=1TO 10:XCALL R,X:S=S+X:NEXT I
530 GOSUB "CLRLINE"
540 IF (KB(CH)*ABS S>40020)OR (KB(CH)*ABS S<39980)THEN 720
550 BEEP 1:WAIT 100:PRINT "STABILITY =";USING "##.#####";4000/(KB(CH)*ABS S/1
    0):USING :WAIT 0
560 GOSUB "CLRLINE"
570 BEEP 1:WAIT 100:PRINT "Calibration completed":WAIT 0
580 RETURN
590 CURSOR 0,1:BEEP 3:WAIT 100:PRINT "Battery low (";USING "##.##";X;USING "; "V
    ) !"

```

```

600 GOSUB "CLRLINE"
610 CURSOR 0,1:BEEP 3:WAIT 100:PRINT "Calibration impossible !":WAIT 0
620 KBUFF$ =CHR$ &18+CHR$ &18
630 RETURN
640 CURSOR 0,1:BEEP 3:WAIT 100:PRINT "Large OFFSET (";S/10;" ) !"
650 GOSUB "CLRLINE"
660 CURSOR 0,1:BEEP 3:WAIT 100:PRINT "Calibration impossible !":WAIT 0
670 RETURN
680 CURSOR 0,1:BEEP 3:WAIT 100:PRINT "Out of Range (";ABS S/20;" ) !"
690 GOSUB "CLRLINE"
700 CURSOR 0,1:BEEP 3:WAIT 100:PRINT "Calibration impossible !":WAIT 0
710 RETURN
720 CURSOR 0,1:BEEP 3:WAIT 100:PRINT "Signal unstable !"
730 GOSUB "CLRLINE"
740 CURSOR 0,1:BEEP 3:WAIT 100:PRINT "Calibration impossible !":WAIT 0
750 RETURN
760 "TTL"TT(ASC IN$-&41)=ABS (TT(ASC IN$-&41)-2^(ASC IN$-&41)*&10)
770 GOSUB "GRA_TTL":X=0:FOR I=0TO 3:X=X+TT(I):NEXT I:X=X+CH:XCALL Q,X
780 IF INKEY$ <>" "THEN 780
790 RETURN
800 "BATTTEST"X=0:CALL T,X:X=X/255*6.048
810 RETURN
820 "GRA"LINE (0,16)-(0,23):LINE (0,23)-(108,23):LINE (108,23)-(108,16)
830 FOR I=1TO 10
840 LINE (9*I,24)-(9*I,31):LINE (9*I,31)-(9*(I+1),31):LINE (9*(I+1),31)-(9*(I+
1),24)
850 LINE (9*I+2,27)-(9*I+3,28),S,&FFFF,BF:LINE (9*I+6,27)-(9*I+7,28),S,&FFFF,B
F
860 NEXT I
870 RESTORE "CH_DATA"
880 FOR I=0TO 7
890 READ GP$
900 GCURSOR 12+I*9,15:GPRINT GP$
910 NEXT I
920 GOSUB "GRA_TTL"
930 RETURN
940 "GRA_TTL"RESTORE "TTL_DATA"
950 FOR I=0TO 3
960 READ GP$:IF TT(I)>0READ GP$
970 GCURSOR 81+I*5-(I>1),15:GPRINT GP$
980 IF TT(I)=0READ GP$
990 NEXT I
1000 RETURN
1010 "MARK"LINE (12+CH*9,22)-(16+CH*9,22)
1020 RETURN
1030 "UNMARK"LINE (12+CH*9,22)-(16+CH*9,22),R
1040 RETURN
1050 "BLINK"BL=BL+1:IF BL=5GOSUB "UNMARK":ELSE IF BL=10LET BL=0:GOSUB "MARK"
1060 RETURN
1070 "NCH"GOSUB "UNMARK":BL=0:CH=(CH+1)MOD 8:GOSUB "MARK"
1080 RETURN
1090 "PCH"GOSUB "UNMARK":BL=0:CH=(CH+7)MOD 8:GOSUB "MARK"
1100 RETURN
1110 "CLRLINE"WAIT 0:CURSOR 0,1:PRINT " ";CURSOR 0,1
1120 RETURN
1130 "PCRKEY"GCURSOR 121,24:GPRINT "7F4100";
1140 GPRINT "3E2A2A2A22003E0408103E0002023E0202003E2A2A2A22003E0A0A1A24";
1150 GPRINT "00417F";
1160 RETURN
1170 "CRKEY"IF INKEY$ <>" "THEN 1170

```

[illegible]