

## The Program Load Program

The program for the automatic program load is listed below.

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000000 .LOC 0

00000 060477 BEG:  READS  0      ;READ SWITCHES INTO AC0
00001 105120      MOVZL  0,1    ;ISOLATE DEVICE CODE
00002 124240      COMOR  1,1    ;-DEVICE CODE - 1

00003 010011 LOOP:  ISZ    OP1    ;COUNT DEVICE CODE INTO ALL
00004 010031      ISZ    OP2    ;IO INSTRUCTIONS
00005 010033      ISZ    OP3
00006 010014      ISZ    OP4
00007 125404      INC    1,1,SZR ;DONE?
00010 000003      JMP    LOOP   ;NO INCREMENT AGAIN

00011 060077 UP1:   060077      ;START DEVICE; (NIOS 0) - 1
00012 030017      LDA    2,C377 ;YES, PUT JMP 377 INTO LOCATION 377
00013 050377      STA    2,377
00014 063377 UP4:   063377      ;BUSY?: (SKPHN 0) - 1
00015 000011      JMP    OP1    ;NO, GO TO OP1
00016 101102      MOVL  0,0,SZC ;LOW SPEED DEVICE? (TEST SWITCH 0)
00017 000377 C377:  JMP    377    ;NO, GO TO 377 AND WAIT FOR CHANNEL

00020 004031 LOOP2: JSR    GET+1  ;GET A FRAME
00021 101065      MOVC  0,0,SNR ;IS IT NONZERO?
00022 000020      JMP    LOOP2 ;NO, IGNORE AND GET ANOTHER

00023 004030 LOOP4: JSR    GET    ;YES, GET FULL WORD
00024 046027      STA    1,0C77 ;STORE STARTING AT 100
00025 010100      ISZ   100    ;COUNT WORD - DONE?
00026 000023      JMP    LOOP4 ;NO, GET ANOTHER
00027 000077 C77:  JMP    77    ;YES - LOCATION COUNTER AND
;JUMP TO LAST WORD
;CLEAR AC1, SET CARRY

00030 126420 GET:   SUBZ   1,1
000000 UP2:
00031 063577 LOOP3: 063577      ;DONE?: (SKPDN 0) - 1
00032 000031      JMP    LOOP3 ;NO, WAIT
00033 060477 UP3:   060477      ;YES, READ INTO AC0: (DIAS 0,0) - 1
00034 107363      ADDCS 0,1,SNC ;ADD 2 FRAMES SWAPPED - GOT SECOND?
00035 000031      JMP    LOOP3 ;NO, GO BACK AFTER IT
00036 125300      MOVS  1,1    ;YES, SWAP AC1
00037 001400      JMP    0,3   ;RETURN WITH FULL WORD

.END

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