

I.O.U.G. - First Program Supplement

February 1986 ~~1985~~
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1REM *****
2REM * LOAD JOYSTICK ROUTINE *
3REM *****
4REM * INTRODUCTION
5REM * This program allows the machine code routine for the ORIC/IJK
6REM * Joystick Interface to be loaded into a chosen area of memory.
7REM * Only cursory checks are made on the area chosen therefore care has
8REM * to be taken over where the routine is placed.
9REM * Obviously, the routine cannot be placed between locations #C000 and
10REM * #FFFF which is the ROM area. The routine is 74 bytes (Hex #4A) long,
11REM * therefore, if you do not use the ORIC MICRODRIVE then locations #400 to
12REM * #4B6 may be used for the Start Address of the routine. Otherwise, it
13REM * may be placed in the area normally reserved for your BASIC program
14REM * i.e. between #500 and #97B6, depending on the size of the program and
15REM * its variable space. This can be determined by DEEKing location #A0.
16REM * e.g. this program, with its REMs, uses up #156F bytes of memory
17REM * therefore the Start Address must be placed above location #1570.
18REM * If the 'GRAB' command is used in your program then the highest
19REM * location may be extended to #B3B6.
20REM * The program starts off by requesting the start address for the
21REM * routine. Then it requests the location for the first byte of the two
22REM * bytes required to hold the values returned from the joysticks (left
23REM * and right).
24REM * OBTAIN START ADDRESS *
25CLS
26PRINT:PRINT"Enter the Start Address for the":PRINT"joystick routine. ";:INP
27T SA
28IF SA<#400 OR SA>#B3B6 THEN ZAP:GOSUB600:GOTO110
29PRINT:PRINT"Enter the first of the two locations"
30PRINT"required to hold the left and right":PRINT"joystick values. ";:INPUT
31OC
32IF LOC>#BFFE OR (LOC)=SA AND LOC<SA+#4A) THEN ZAP:GOSUB600:GOTO130
33REM * LOAD ROUTINE *
34AD=SA
35REPEAT
36: READ D$:IF D$="END OF CODE" THEN 210
37: POKE AD,VAL("#"+D$):AD=AD+1
38UNTIL D$="END OF CODE"
39DOKE SA+#2A,LOC:DOKE SA+#35,LOC+1
40CLS:PRINT:PRINT"The routine is now loaded and ready to":PRINT"use"
41PRINT:PRINT"The Start Address to be CALLED is:-";SA;"(Hex ";HEX$(SA);")"
42PRINT:PRINT"The location to be PEEKed for the left":PRINT"joystick is:-";LOC
43"(Hex ";
44PRINT HEX$(LOC);")"
45PRINT:PRINT"The location to be PEEKed for the":PRINT"right joystick is:-";LO
46+1;"
47PRINT "(Hex ";HEX$(LOC+1);")"
48PRINT:PRINT>Note: Two variables could be assigned to these values."
49PRINT"E.g. J1=PEEK(";HEX$(LOC);"):J2=PEEK(";HEX$(LOC+1);")
50REM * TEST FOR INTERFACE *
51CALL SA
52IF (PEEK(LOC) AND 32)<>0 THEN PRINT:PRINT"The interface is not connected.":G
53TO500
54PRINT:PRINT"The interface is connected."
55REM * JOYSTICK TEST *
56PRINT:PRINT"Would you like to test your joysticks?":PRINT"(Y/N)"
57REPEAT:GET A$:UNTIL A$="Y" OR A$="N"
58IF A$="N" THEN 500

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CLS:PRINT CHR$(17);@4,6;"LEFT JOYSTICK";@21,6;"RIGHT JOYSTICK"
PRINT@6,25;"Press ESC to end the test."
DIM DIR(8,1):FOR X=1 TO 7 STEP 3:DIR(X,0)=1:DIR(X+1,0)=-1:NEXT
FOR Y=3 TO 5:DIR(Y,1)=1:DIR(Y+3,1)=-1:NEXT
X=9:Y=1:GOSUB700:X=26:GOSUB700:X=10:Y=126:GOSUB700:X=27:GOSUB700
OX=9:OY=15
450 REPEAT
460 : CALL SA:J1=PEEK(LOC):J2=PEEK(LOC+1)
470 : J=NOT(J1 OR #E0):X=9:GOSUB800
480 : J=NOT(J2 OR #E0):X=26:GOSUB800
490 UNTIL KEY$=CHR$(27)
500 REM * SAVE ROUTINE *
510 CLS:PRINT CHR$(17)
520 PRINT"Do you wish to save the Joystick":PRINT"routine? (Y/N)"
530 REPEAT:GET A$:UNTIL A$="Y" OR A$="N"
540 IF A$="N" THEN PING:END
550 PRINT:PRINT"Press RECORD and PLAY on your cassette recorder then press any k
ey on"
560 PPINT"the computer.":GET A$
570 CSAVE"JOYSTICK",A(SA),E(SA+#4A)
580 PRINT:PRINT"The routine has been saved."
590 PING:END
600 REM * Sub-routine Error Message *
610 PRINT:PRINT"You cannot use this area of memory."
620 PRINT"Please choose a different location."
630 RETURN
700 REM * Sub-routine Cardinal Points *
710 FOR X1=0 TO 8:PLOT X+5*DIR(X1,0),15+5*DIR(X1,1),Y:NEXT
720 RETURN
800 REM * Sub-routine Analyse Joystick *
820 IF(J AND 4)=4 THEN SHOOT
830 J=J AND #1B
840 IF J>15 THEN J=J-10 ELSE IF J>7 THEN J=J-5
850 X1=X+5*DIR(J,0):Y1=15+5*DIR(J,1)
870 PLOT OX,OY,1:PLOTX1,Y1,0
880 OX=X1:OY=Y1
890 RETURN
1000 DATA 78,48,AD,0F,03,48,AD,03,03,48,AD,00,03,48,AD,02
1001 DATA 03,48,09,10,8D,02,03,A9,00,8D,00,03,A9,C0,8D,03
1002 DATA 03,A9,7F,8D,0F,03,AD,0F,03,8D,F0,97,A9,BF,8D,0F
1003 DATA 03,AD,0F,03,8D,F1,97,68,8D,02,03,68,8D,00,03,68
1004 DATA 8D,03,03,68,8D,0F,03,68,58,60,"END OF CODE"

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Allan Whitaker.

Credits in order of appearance are:-

Load Joystick Routine - Allan Whitaker from Staleybridge, Cheshire.

Oric Golf - Chris Ward from Hitchin, Hertfordshire.

The Ball Puzzle - Alan Northcott from Wokingham, Berkshire.

Keyboard article - Steve Brunton from Camberley, Surrey.

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Let me know what you think about the supplement and about my plans to bring the next one out on cassette.

