



SUMMING UP

To round off David Ellis's popular series for the Amstrad, we bring you a complete listing of m/c commands

RSX printing errors

HCW 99 Table 2
The eighth and ninth entries should read:

```
&82CA JR NZ LOOP 20 FB
&82CC DEC HL 1B
```

HCW 103 Listing 1
The first entry should read:

```
&82F0 LD B,1 6 1
```

Listing 3
The following lines should read:

```
20000 ADDRESS = &7E8C : X = 1 : WHILE X <> 0
20020 IF X<128 THEN PRINT CHR$(X); ELSE PRINT CHR$(X-128),
```

HCW 104
The complete listing for the words RIGHT and UP is missing, and has been printed on the letters page of HCW 106.

HCW 105 Column 1
The following line should read:

```
20 WIDE = 630 : WHILE WIDE > 0
```

In the summary of RSX words OFFSET should read:

```
OFFSET , @OFFSET%
```

David Ellis's series on RSX words for the Amstrad CPC464 proved very popular. So much so, that we thought we'd increase your enjoyment by summarising the machine code routines which set up all the RSX words you need. If you type out the listing up to line 3160, you'll recognise all the new words you discovered in the series, to be used from BASIC.

Whether you want a resume,

to help you clear up some minor confusion, or whether you only managed to catch a part of the series, this listing should make life easier.

We've also included some corrections. Minor printing errors may have confused you — unless you were smart enough to work them out for yourself. Here are the amended lines — and, for your information, David Ellis's articles were printed in HCW 95, 97, 98, 99, 101, 103, 104 and 105.

```
10 MEMORY &7CFA
20 location=&7D00:GOSUB 500:IF csum <> 12898 THEN PRINT "ERROR IN SUB 1000"
30 location=&7E88:GOSUB 500:IF csum <> 12897 THEN PRINT "ERROR IN SUB 2000"
40 location=&828A:GOSUB 500:IF csum <> 51473 THEN PRINT "ERROR IN SUB 3000"
50 CALL &7D00:END:REM Introduce the RSX to the firmware
500 REM ***** P&OKE values to memory *****
510 csum=0:READ code$:WHILE code$<>"-1"
520 code=VAL("&"+code$):P&OKE location,code
530 csum=csum+code:location=location+1:READ code$:W&END:R&TURN
1000 REM ***** RSX COMMAND TABLE DATA *****
1010 DATA 1,a,7d,21,fc,7c,cd,d1,bc,c9,8c,7e,c3,8c,82,c3,a2,82,c3,a6,82,c3,aa,82
1020 DATA c3,ae,82,c3,b2,82,c3,b6,82,c3,ba,82,c3,be,82,c3,d2,82,c3,e1,82,c3,f0
1030 DATA 82,c3,f6,82,c3,fc,82,c3,c,83,c3,15,83,c3,24,83,c3,2e,83,c3,46,83,c3
1040 DATA 5e,83,c3,68,83,c3,98,83,c3,d8,83,c3,1,84,0,-1
2000 REM ***** ASCII WORD TABLE DATA *****
2010 DATA 7d,54,8,7f,50,41,52,41,4d,45,54,45,d2,4b,45,59,57,41,49,d4,43,55,52
2020 DATA 53,4f,c6,49,4e,56,45,52,53,c5,47,52,41,50,48,49,c3,43,4c,45,41,d2,43
2030 DATA 41,53,4f,ce,43,41,53,4f,c6,57,41,49,d4,4c,52,4f,cd,55,52,4f,cd,55,52
2040 DATA 4f,4c,cc,44,52,4f,4c,cc,5a,45,52,cf,4d,4f,56,c5,4f,46,46,53,45,d4,53
2050 DATA 45,54,4f,46,46,53,45,d4,52,49,47,48,d4,55,d0,44,4f,57,ce,4c,45,46,d4
2060 DATA 42,4f,d8,53,4f,4c,49,c4,43,4f,4c,4f,d2,0,-1
3000 REM ***** MACHINE CODE TABLE DATA *****
3010 DATA b,84,dd,7e,6,dd,46,5,dd,4e,4,dd,56,3,dd,5e,2,dd,66,1,dd,6e,0,c9,cd,6
3020 DATA bb,c9,cd,84,bb,c9,cd,9c,bb,c9,cd,ba,bb,c9,cd,14,bc,c9,cd,6e,bc,c9,cd
3030 DATA 71,bc,c9,fe,1,c0,cd,9b,82,1,f0,4,b,78,b1,20,fb,2b,7c,b5,20,f3,c9,fe
3040 DATA 2,c0,cd,95,82,cd,6,b9,1a,77,cd,9,b9,c9,fe,2,c0,cd,95,82,cd,0,b9,1a,77
3050 DATA cd,3,b9,c9,6,1,cd,4d,bc,c9,6,0,cd,4d,bc,c9,fe,2,c0,cd,95,82,6,0,70,23
3060 DATA 1b,7a,b2,20,f9,c9,fe,3,c0,cd,8f,82,ed,b0,c9,fe,1,c0,cd,b,bc,e5,cd,9b
3070 DATA 82,d1,73,23,72,c9,fe,1,c0,cd,9b,82,cd,5,bc,c9,cd,8c,83,fe,2,20,5,cd
3080 DATA 95,82,18,5,cd,9b,82,54,5d,21,0,0,cd,f9,bb,c9,cd,8c,83,fe,2,20,7,cd,95
3090 DATA 82,d5,e1,18,3,cd,9b,82,11,0,0,cd,f9,bb,c9,cd,74,83,11,0,0,cd,f9,bb,c9
3100 DATA cd,74,83,54,5d,21,0,0,cd,f9,bb,c9,cd,8c,83,fe,2,20,6,cd,95,82,d5,18,4
3110 DATA cd,9b,82,e5,c1,21,0,0,ed,42,c9,fe,1,c8,f5,dd,7e,0,cd,de,bb,f1,c9,fe,2
3120 DATA 28,9,fe,3,c0,dd,7e,4,cd,de,bb,cd,95,82,21,0,0,cd,f9,bb,cd,95,82,11,0
3130 DATA 0,cd,f9,bb,cd,95,82,21,0,0,ed,52,54,5d,21,0,0,cd,f9,bb,cd,95,82,44,4d
3140 DATA 21,0,0,ed,42,11,0,0,cd,f9,bb,c9,fe,2,28,9,fe,3,c0,dd,7e,4,cd,de,bb,cd
3150 DATA 95,82,44,4d,78,b1,c8,c5,21,0,0,d5,cd,f9,bb,cd,cc,bb,23,cd,c9,bb,d1
3160 DATA c1,b,18,e9,fe,1,c0,dd,7e,0,cd,de,bb,c9,0,-1
4010 REM*****THESE ARE THE NEW WORDS*****
4020 REM: PARAMETER (machine-code use only!). KEYWAIT (wait for a keypress)
4030 REM: CURSOR (turn cursor off in program). INVERSE (swaps paper & pen)
4040 REM: GRAPHIC (reset graphic parameters). CLEAR (zero screen memory)
4050 REM: CASON (turn on cassette motor). CASOF (turn off cassette)
4060 REM: WAIT,n (wait n*1/100 secs).
4070 REM: LROM,address,@ROM% (return lower ROM value to variable ROM%).
4080 REM: UROM,address,@ROM% ( " upper " " " " " " ).
4090 REM: UROLL (scroll up 8 pixels). DROLL (scroll down 8 pixels)
4100 REM: ZERO,n,start address (zero n bytes).
4110 REM: MOVE,n,destination,source (move n bytes..from..to)
4120 REM: OFFSET,@OFFSET (return screen offset to variable OFFSET%)
4130 REM: SETOFFSET,n (set screen offset to n)
4140 REM: RIGHT,n,{color} (draw line right, n pixels, color optional)
4150 REM: UP ,n,{color} ( " " up " " " " " )
4160 REM: DOWN ,n,{color} ( " " down " " " " " )
4170 REM: LEFT ,n,{color} ( " " left " " " " " )
4180 REM: BOX {,color},width,height (draw rectangle...color optional)
4190 REM: SOLID {,color},width,height (draw solid....color optional)
4200 REM: COLOR ,pen number (set graphics plotting color).
4210 REM: all words must be prefixed by the | bar sign
4220 REM: For details of routines etc. see issues 95,97,98,99,101,103,104,105
4230 REM: To add further words to the RSX see BASIC listing in issue '97.
4240 REM: The above DATA contains all the 'pointers' needed for that listing.
4250 REM: In issue 104, Listing 1 has been omitted! See later issue for listing
```