TASWORD TWO

ADDITIONAL INFORMATION SHEET

02.07.85

Dear Sir or Madam,

We are unable to deal with individual enquiries by letter. The attached additional information sheet will probably answer your query land a lot more!).

If you need any further help please contact Mr PAUL MONICO who will be manning the TASMAN CUSTOMER SUPPORT DESK every weekday afternoon. Telephone Leeds (0532) 438301.

Contents

MAIL MERGE
A mail merge version of Tasword Two is available send s.a.e. for
information.

PRINTING £ SIGNS
The pound sterling sign is not a standard ASCII symbol. Several
different codes are used for pound signs depending on your
printer.

The common ones are 129, 35 and 96. (decimal)
TASWORD TWO normally sends a 35 and also traps 96 and sends a 35.
If you have a Tasman Interface, a Kempston S or an ADS you can
change the code sent by;

1.....LOAD Tasword
2.....Enter BASIC   (STOP b)
3.....POKE 58111,*   (* the code for the pound sign)
4.....RUN TASWORD
5.....SAVE your customised TASWORD
        If you have a Logic Seeking Tasword Two POKE 58320,*)

With other interfaces you can define a graphics character to be
the code for a pound sign as explained in the section above.
However this cannot be done if the code is greater than 128.

In some cases the pound sign coincides with a code sent by the
spectrum when a # or similar character is printed. In such cases
a pound sign can be obtained by placing this character in the
text. The screen display of this character can be altered using
the information on page 21 of the Tasword Two manual, but this is
difficult.

It is often necessary to alter an internal dip switch within the
printer. This normally selects a pound sign in place of a hash.

If none of these methods work your only method of obtaining a
pound sign is to change your printer interface.

MULTIPLE PRINT OUTS (full width printers)

Add the following lines to Tasword Two:

251 LET i=14:PRINT AT i,0;"No. of copies (1)":GOSUB 6000:
    IF a$="" THEN LET a$="1"
252 LET k=VAL a$
279 FOR i=1 TO k
281 NEXT i

If you are using Interface 1 then as above except;

279 FORMAT"b";x:OPEN #3;"b": FOR i=1 TO k   (x is baud rate)
281 NEXT i: CLOSE #3

If q is pressed to quit printing it must be held down for some
time and some of the start of the text will be repetitively
printed before printing stops.

LEFT MARGIN ON PRINTING

The following program line can be added by users who frequently wish to change the left margin on printing and avoids having to go through the "define graphics/printer option":

```
253 LET i=16:PRINT AT i,0; 'Left margin (";PEEK 60927;")":
    GOSUB 6000: IF a$<>"" THEN POKE 60927, VAL a$
```

MODIFYING THE HELP PAGES

To modify the normal mode help page enter Basic and execute

```
    FOR i=0 TO 1535:POKE (32000+i),PEEK (54784+i):NEXT i
```

The Spectrum takes several seconds to execute this statement. Now RUN Tasword and you will find the help page in the text file. Make the required modifications then enter Basic again and execute

```
    FOR i=0 TO 1535:POKE (54784+i),PEEK(32000+i):NEXT i
```

To modify the extended mode help page replace 54784 in the above expressions with 56320.

CHANGING THE TEXT FILE LOCATION

This information is primarily intended for owners of East London Robotics add on memories with two pages of locations from 32768 to 65536.

To change Tasword Two so that the text file begins at 32768 enter Basic and execute the following:

```
    POKE 64949,0
    POKE 64950,128
    POKE 64150,30
```

The text file length will be reduced by 12 lines.

NORMAL SIZED CHARACTERS ON THE ZX PRINTER

With the following program modification the text file can be printed out on the ZX Printer in two halves (a left hand half and a right hand half) with the characters at normal Spectrum size. Enter Basic and poke the locations given in the left hand column below with the numbers given in the right hand column.

```
63983 237    63987  58    63991 237    63995 205
63984  67    63988  26    63992  67    63996  67
63985   4    63989 243    63993   1    63997 250
63986 243    63990  79    63994 243    63998 201
```

Save your modified program !

To print the left half of the text ensure that the window is open (i.e. showing 32 characters of each line) and use the Extended

Mode <P> control key.

To print the right half of the text ensure that the window is open and set the LEFT margin to at least column 48. Then use the Extended Mode <P> control key.

These modifications prevent use of the block marker routines.

INCREASING THE NUMBER OF CHARACTERS PRINTED PER LINE

TASWORD TWO produces 64 characters per line which is ideal for A4 paper with attractive margins and a normal type face. Some printers produce condensed print and it is possible to make TASWORD TWO print 128 characters per line in this mode. The method used depends on the printer;

1... use STOP 9 to alter the carriage return and line feed code to 0 then define a graphics character to be these codes (usually 13,10).

2... define a graphics character to be the code your printer requires to turn on condensed printing.

3... the text can be typed in normally although the graphics character defined as the carriage return and linefeed codes must be inserted at the end of every alternate line.

There are dozens of permutations of this process and it requires experimentation. (Tasword Two was not designed with this process in view).

TASWORD TWO (SINCLAIR EXPANSION PACK VERSION) AND THE TASMAN TYPE A INTERFACE

The version of Tasword Two sold by Sinclair Research with the Spectrum Expansion Pack is set up to drive the Tasman type B interface. To use this version of Tasword Two with the Tasman type A interface follow this procedure:

1. Load Tasword Two from the cartridge
2. Place a blank formatted cartridge in drive number 1 and save the program using the t "Save Tasword" option from the menu.
3. Having saved the program go into BASIC and execute:

              ERASE "m";1;"tasword"

4. Execute: CLEAR 50000
5. Execute: LOAD "tasword" CODE and play the cassette version of Tasword Two
6. Once the machine code has loaded execute:
              SAVE *"m";1;"tasword" CODE 54784,10751

Tasword Two is now configured to drive the Tasman type A interface.

INTERFACES – ADDITIONAL INFORMATION

TASWORD TWO AND THE DK'TRONICS INTERFACE

To customise Tasword Two for use with the Dk'tronics centronics
interface follow this proceedure:

1. LOAD Tasword Two and enter BASIC
2. Change the memory address and number of bytes in lines 710 and
   790 from 54784,10751 TO 52720,12815
3. Execute: LOAD "EPSON" CODE 52720 and play the software
   supplied with the interface.
4. Execute: RANDOMIZE USR 52720
5. Execute: RUN. Select option 9 from the menu (define
   graphics/printer) and change interface control code 4 to 52853.
   Change the code for linefeed to 0.
6. SAVE your modified version of Tasword Two.

THE MAPLIN RS232/MODEM INTERFACE

1....LOAD TASWORD TWO
2....ENTER BASIC (STOP b)
3....POKE THE FOLLOWING DATA INTO CONSEQUETIVE LOCATIONS STARTING
     AT 57856 AND ENDING AT 57893

     62,3,50,252,60,62,22,50,252,60,42,79,92,1,15,0,9,17,249,252,
     115,35,114,201,0,245,58,253,60~203,79,40,249,241,50,254,60,201

4....RUN TASWORD TWO.
5....THE INTERFACE CONTROL CODES ARE THE SAME AS THOSE SHOWN IN
THE TASWORD TWO MANUAL FOR THE COBRA RS232 I/O PORT.
6....SAVE YOUR CUSTOMISED TASWORD TWO.

THE MICROFACE 1 INTERFACE

1....Use STOP g to define the Interface Control codes as follows;
          Control Code 1 27
          Control Code 2 0
          Control Code 3 0
          Control Code 4 64736

2....Use STOP b to enter BASIC, Execute LOAD""CODE 57856 and
     then play the Microface Tape.

3....Use STOP t to SAVE your new version of TASWORD TWO

THE TECHNOLOGY RESEARCH CENPRINT INTERFACE

Change the following lines in the BASIC of TASWORD TWO;

250 RANDOMIZE USR 14851
290 RANDOMIZE USR 14851: GOTO 10

TASWORD TWO AND SPECTRUM DISC SYSTEMS

TASWORD TWO AND THE OPUS DISC DRIVE (SPECTRADOS INTERFACE)

To convert Tasword Two to run on the OPUS disc drive with the
OPUS Spectrados interface make the microdrive alterations (see
Tasword Two manual) to the BASIC program except for the following
line. which should read:

```
  6 CLOSE #3
  8 OPEN #3,"b"
700 CLS: LETa$="tasword": SAVE *1;"run" LINE 15
710 SAVE *1;a$CODE 54784,10751
780 VERIFY *1;"run": PRINT AT 21,0;"tasword basic O.K.;"; AT
19,0;
790 VERIFY *1;a$CODE 54784,10751: PRINT AT 21,20;"m/code O.K.":
GOTO 25
```

TASWORD TWO AND THE OPUS DISCOVERY 1 DISC DRIVE

To convert Tasword Two to run on the Discovery 1 disc drive make
the BASIC alterations for the microdrive alterations as per the
Tasword Two manual and include the following two lines:

```
6 CLOSE #3
8 OPEN #3,"b"
```

TASWORD TWO AND THE ROTRONICS WAFADRIVE

To save Tasword Two onto the Rotronics Wafadrive execute the
following proceedure:

1. NEW the machine

2. Execute: NEW* followed by MERGE (The MERGE"" statement loads
the Tasword Two BASIC without the machine code which would
automatically be loaded if LOAD was executed). When the O.K.
message appears STOP THE TAPE.

3. Execute: CLEAR 33499.

4. Execute: LOAD "" CODE and start the tape.

5. Once the machine code has loaded execute:

```
                POKE 64949,220
                POKE 64950,130
                POKE 64150,18
```

6. Edit the Tasword Two BASIC as on the following page

7. RUN Tasword.

8. SAVE Tasword using option t (Save tasword) from the menu.

```
   5 LET d$="a:"
  11 delete this line
  15 POKE 23609,2: CLEAR 33499: GO SUB 4000: LOAD *"a:tascode":
LET a= USR 59081: GO TO 5
  25 CLS: GO SUB 4000: PRINT AT 4,0;"print text file p"
  60 PRINT AT 2,0;"Catalogue/change drive (";d$;")";AT 2,31;"d"
 175 IF b=100 THEN LET i=2
 670 IF b=100 THEN GO TO 5000
 700 CLS: PRINT AT 0,0;: LET a$="a:tascode": SAVE *"a:tasword"
LINE 15
 710 SAVE *a$,54784,10751
 770 delete this line
 780 VERIFY *"a:tasword": PRINT "tasword basic O.K.;"
 790 VERIFY *a$,54784: PRINT '"m/code O.K.": GO TO 25
 900 delete this line
1000 LET b=FN p(62216): CLS : CAT *d$
1005 INPUT "Name of text file for saving?";a$
1030 LET a$=dS+a$: SAVE *a$,b,a: CLS
1050 delete this line
1100 VERIFY *a$
2000 CLS: CAT *d$: INPUT "Type the name of the text file"'"and
press ENTER";a$
2010 delete this line
2020 IF a$="" THEN GO TO 2020
2030 LET b=FN p(622161): LET a$=d$+a$: LOAD *a$,a+b: GO TO 10
5000 CLS: CAT *d$
5010 INPUT "Type new drive specifier and"'"press ENTER. Just
press ENTER"'"for current drive. Type a: or b:"; LINE a$
5020 IF a$="" THEN CLS : GO TO 25
5030 LET d$=a$: IF a$<>"a:" AND a$<>"A:" AND a$<>"B:" AND a$
<>"b:" THEN GO TO 5010
5040 GO TO 25
```

Wafadrive CENTRONICS Port

To print via the Wafadrive Centronics port add the following two
lines to the Tasword Two BASIC:

```
279 OPEN #*3,"C"
281 CLOSE #*3
```

Wafadrive RS232 Port

To print via the Wafadrive RS232 port add the following two lines
to the Tasword Two BASIC:

```
279 FORMAT "R":X:OPEN #*3,"R"
281 CLOSE #*3
```

NOTE: Saving Tasword Two onto the Rotronics Wafadrive reduces the
length of available text file space by 24 lines. The new start
address of the textfile is 33500.

CHANGING THE INK, PAPER, BORDER AND MARGIN COLOURS

CHANGING THE BORDER COLOUR
To change the 64cpl border colour enter Basic and execute:

        POKE 64516,X

where X is the number corresponding to the desired colour (i.e. 0 for black and 7 for white etc.). To change the 32cpl border colour execute:

        POKE 60641,X

where X=0-7 as described above.

CHANGING THE INK AND PAPER COLOURS

The following pokes change the ink and paper colours in 64 cpl but not 32 cpl. The margins may not change colour when set.

        POKE 58512,54
        POKE 58513,x
        POKE 58521,54
        POKE 58522,x   where x=8*paper colour + ink colours.

CHANGING THE 64CPL MARGIN COLOURS

To alter the 64 character per line margin colours POKE both the locations below with one of the following values.:

        POKE 58509,X
        POKE 58518,X

where X=134 or 142 or 150 or 158 or 166 or 174 or 182 or 190.

The process requires some experimentation to establish which values produce which colours.

PRINTING – TECHNICAL DETAILS

(1)   Output to full width printers is by changing the channel 3 data and subsequent RST 10h calls;

(2)   The routine that changes the channel 3 data and the routines that are vectored to by this change must be written so as to work when located in a 632 byte region beginning at 64736d;

(3)   The above code should be located within Tasword at a 632 byte region beginning at 57856d. Tasword Two performs the necessary code relocation before and after printing;

(4)   Interface control code 4 (set by the user within the define graphics/printer option) is the address (when properly located) of the routine that changes the channel 3 data;

(5)   Interface control code 1 is the character (if any) that
        must precede any non-character code (i.e. printer control
        code) that is to be sent to the printer;

(6)   Interface control codes 2 and 3 are the codes that some
        interfaces use to turn tokenisation off and on
        respectively.

USING THE BLOCK GRAPHICS TO SEND PRINTER CONTROL CODES

The block graphics characters are placed in the text to control
the printer. Each character can be defined as a list of up to
four codes. The codes must be entered as decimal numbers, this
can lead to confusion as printer manuals use a number of methods
of writing down control codes.

Note that CR stands for carriage return

        LF linefeed
        FF formfeed
        ESC Escape (the decimal code is 27)

Finding printer control codes in printer manuals.
A letter h in this context implies an hexadecimal number, to
convert this to decimal use the table starting at page 135 in the
Spectrum manual. The decimal numbers are listed under code and
the hexadecimal equivalents under hex.

Example Code   Character   Hex

        42   *   2A

so 2A in hex is 42 in decimal.

If the control codes are given as letters in quotes or letters
without quotes or an h, use the decimal ASCII code for that
letter, these are listed on page 136 of the Spectrum manual.
E.g. "A" is 65.

Some printer manuals list codes in a square table with four
binary digits to the left and above. Put these two sets of four
digits together with the least significant bits to the right
(i.e. D7 D6 D5 D4 D3 D2 D1 D0 or b8 b7 b6 b5 b4 b3 b2 b1) Use the
BIN command on the Spectrum to convert this to decimal.

```
Example;    b8 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1
            b7 0 0 0 0 1 1 1 1 0 0 0 0 1 1 1 1
            b6 0 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1
            b5 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1
    b4b3b2b1              .
     0 0 0 0              .
     0 0 0 1              .
     0 0 1 0              .
     0 0 1 1              .
     0 1 0 0              .
     0 1 0 1              .
     0 1 1 0              .
     0 1 1 1.........    .
     1 0 0 0........ H
     1 0 0 1
     1 0 1 0
     1 0 1 1
     1 1 0 0
     1 1 0 1
     1 1 1 0
     1 1 1 1
```

So H has the binary ASCII code for H is 01001000.
Type the following line into your Spectrum,

             PRINT BIN 01001000   (ENTER)
             this gives the decimal code for H is 72.

PRINTING GRAPHICS CHARACTERS AS SPACES

A space can be included in the sequence of codes associated with
a graphics symbol. It is sometimes convenient to have graphics
symbols printed as spaces on full width printers in order to
maintain the right justification of the text on printing.
The ASCII code for a space is 32. To change the underline codes
to include a space change the symbol with code 140 (for Epson and
Star printers) from

          27   45   1   to   32   27   45

and the symbol with the code 131 from

          27   45   0   to   45   0   32

TASWORD TWO - ENHANCEMENT PROGRAMS

SENDING TEXT TO TASWORD FROM THE EP44

Please send a stamped addressed envelope to the following
address;   Kevin Dewane (software)
            51 Priory Road
            Hethersett
            Norfolk
            NR1 3EY

JUSTIFYING TEXT WITH EQUAL SPACES (PROPORTIONAL PRINTING)
TASPRO is a modification to TASWORD TWO which allows it to
justify text with virtually equal spaces between words, also
allowing the use of proportional characters while maintaining
right justification.

For details write to: Seven Stars Publishing
                         34 Squirrel Rise
                         Marlow
                         Bucks SL7 3PN   (SAE PLEASE)

WORD COUNT FOR TASWORD TEXT FILES
A fast machine code word count which can be merged with TASWORD
TWO is available from;
                    Mr T.C.Jennings
                    101 Smyth Road
                    Ashton
                    BRISTOL BS3 2DR   (SAE PLEASE)

FOREIGN VERSIONS OF TASWORD TWO
Tasword Two has been translated into many languages some versions
also produce the special characters required on the screen and to
printers.

Please write to;

        FRENCH
        Semaphore,
        CH-1283 La Plaine,
        Switzerland

        DUTCH
        Filosoft
        Postbus 1353
        9101 BJ
        Gronigen
        Holland

        NORWEGIAN
        Kelly Data
        Postboks 43
        Refstad
        OSLO 5

        PORTUGUESE
        Infornova
        Campo Grande 28 4 A
        1700 Lisboa
        Portugal

        SPANISH
        Indescomp
        P. de la Castellana 119
        Madrid 16
        Spain

```
        GERMAN
        Profisoft
        Sutthauser Str 50/52
        D 4500 Osnabruck
        West Germany

        ITALIAN
        JCE
        Via Dei Lavoratori 124
        20092 Cinisello Balsamo
        Milan
        Italy

for further information.
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