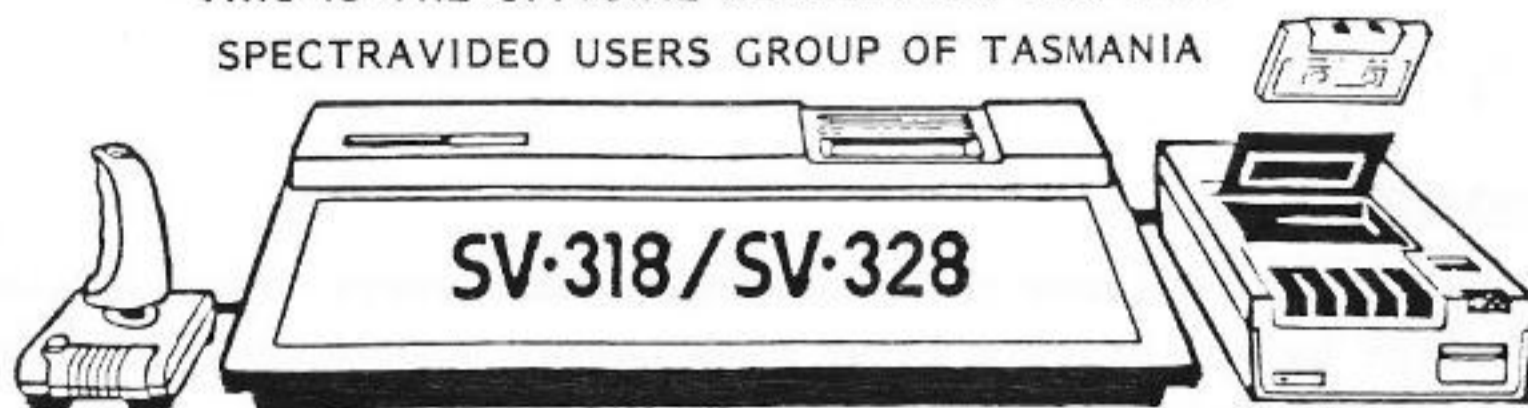


# SPECTRAVIDEO

THIS IS THE OFFICIAL NEWSLETTER FOR THE  
SPECTRAVIDEO USERS GROUP OF TASMANIA



## News Letter

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### ALL CORRESPONDENCE TO:

S. V.,  
48 Heather Street,  
Launceston,  
TAS. 7250.

### MEMBERSHIP FEES

AUSTRALIA ..... \$15.00  
OVERSEAS ..... \$20.00  
OVERSEAS AIRMAIL .. \$25.50

# SPECTRAVIDEO

COMPUTER USERS GROUP OF TASMANIA

## INTRODUCTION:

Hi! Welcome to the SpectraVideo Users Group Newsletter. Receipt by you of this first News Letter acknowledges that you are a fully pledged member.

You may like to know that your Subscription is used only to meet expenses of the newsletter, (such as Postage, Printing, Copying, etc.) the News Letter is run in line with standard practices for non-profit organisations.

The idea of the News Letter is to help each of us to learn more about the capabilities of the SpectraVideo (and ourselves?) and how we can put them to use. I would therefore like members to contribute articles, tips, programmes, etc., so they can be passed on via the News Letter, for the benefit of all members. Also, please let me have feedback comments about the material YOU would like to see in the News Letter.

Remember it is your group, and its success and the success of the News Letter will largely depend upon the efforts and contributions of members.

It is proposed that a list of the group be circulated to the members. It will contain Name, Address, and Telephone numbers and perhaps your area of special interest (e.g. Graphics, Sound Effects, Computer Control Systems, Games, CP/M, Small Business Systems, e.t.c.). If there is any reason you do not want your name in the list please contact me on (003 444836).

So I hope to hear from you all soon with ideas and articles.

BE ACTIVE.      CONTRIBUTE.

The Editor.

# SPECTRAVIDEO

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## THE SPECTRAVIDEO CLOCK

Do you know that you have a real time clock in your computer?  
Try this short program:

```
10 CLS
20 TIME = 0
30 BEEP
40 INPUT "PRESS ENTER AFTER A SHORT PAUSE";A$
50 PRINT
60 PRINT "IT TOOK YOU";TIME/50;"SECONDS TO PRESS 'ENTER'"
70 END
```

In the above program TIME is a special Variable that Unlike all the rest will update every 50th of a second. To explain, if TIME=0 to begin with then in 2 Seconds TIME=100 thus to convert the number to seconds you divide TIME by 50 (100/50=2).

The clock is also used in another command called INTERVAL but this is explained in the Users Manual.



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## THE ADDER PROGRAM

The program listed below is designed for education of the younger children in basic maths.

With this program your child can be patiently led through the art of simple addition by the Computer.

With a bit of Doctoring on your part the program could just as well teach Subtraction, Multiplication or Division.

```
10 REM -- The ADDER Program
20 REM -- This Program is designed to
30 REM -- teach addition to young
40 REM -- children.
50 :
60 SCREEN,0
70 DEFINT A-Z
80 CLS : B=RND(-TIME) : REM -- SEED RND
90 PRINT:PRINT
100 PLAY "L1S0M10000CA"
110 PRINT "HELLO. This program will
120 PRINT "      teach you to add.
130 PRINT "-----"
140 PRINT
150 INPUT "What is your Name ";N$
160 PRINT
170 PRINT "HELLO ";N$
180 PRINT
190 PRINT "I will give you 10 Sums"
200 PRINT
210 PRINT "Type (1) if you want 1 digit"
220 PRINT "      addition (1 - 9 )"
230 PRINT "Type (2) if you want 2 digit"
240 PRINT "      addition (1 - 99) ?";
250 A#=INKEY$
260 IF A#<"1" OR A#>"2" GOTO 250
270 IF A#="1" THEN A=8:H#="#"ELSE A=98:H#="##"
280 COLOR 1,1,1
290 FOR I=1 TO 10
300     L=0 : B#=""
310     B=INT(1+RND(1)*A)
320     C=INT(1+RND(1)*A)
330     SCREEN 2 : COLOR 11
340     PRINT : PRINT : PRINT " ";
350     PRINT USING H#;B) : PRINT "+";
360     PRINT USING H#;C) : PRINT "=";
370     D=0
380     A#=INKEY$
390     IF A#="" THEN 380
400     IF A#=CHR$(8) THEN 380
410     IF A#=CHR$(13) THEN 440
420     D=D*10+(ASC(A#)-48) : PRINT A#;
430     GOTO 380
440     IF D=B+C THEN 680
450     IF L=1 THEN 570
```

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```
460 SCREEN 2
470 COLOR 4
480 BEEP : PRINT
490 PRINT " THAT WAS"
500 COLOR 6 : PRINT
510 PRINT " WRONG"
520 COLOR 4 : PRINT
530 PRINT " TRY AGAIN"
540 L=1
550 FOR J=1 TO 1000 : NEXT J
560 GOTO 330
570 SCREEN 2 : COLOR 4
580 BEEP : BEEP
590 PRINT " I'M SORRY"
600 PRINT " THAT'S"
610 COLOR 6 : PRINT
620 PRINT " INCORRECT"
630 PRINT : COLOR 11 : PRINT " ";
640 PRINT USING H#;B; : PRINT "+";
650 PRINT USING H#;C; : PRINT "=";
660 COLOR 6 : PRINT B+C
670 GOTO 770
680 SCREEN 2
690 COLOR 13
700 PLAY "S3M15000L16CDEF"
710 IF L=0 THEN T=T+1
720 PRINT " WELL DONE"
730 PRINT : COLOR 15
740 PRINT " ";N#
750 PRINT : COLOR 13
760 PRINT " CORRECT"
770 FOR J=1 TO 1500 : NEXT J
780 NEXT I
790 COLOR 6,14,14 : SCREEN 2
800 PRINT " "; N#
810 COLOR 2 : PRINT
820 PRINT " YOU HAVE"
830 COLOR 6 : PRINT T;
840 COLOR 2 : PRINT "RIGHT"
850 PRINT
860 IF T=10 THEN COLOR 6 : PRINT " PERFECT":GOTO 910
870 IF T>8 THEN PRINT " WELL DONE":GOTO 910
880 IF T>5 THEN PRINT " NOT BAD":GOTO 910
890 PRINT " TRY AGAIN"
910 PLAY "S0M100003CDE04CDE05CDE06CDE"
920 FOR J=1 TO 4000 : NEXT J
930 SCREEN 0
940 COLOR 15,5,5
950 PRINT : T=0
960 PRINT N#;" Do you want to play again"
970 A#=INKEY#
980 IF A#="y" OR A#="Y" THEN 100
990 IF A#="n" OR A#="N" GOTO 1020
1000 GOTO 970
1010 REM
1020 PRINT
1030 PRINT "GOODBYE."
1040 PRINT
1050 END
```

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## RANDOM WORDS PROGRAM

Yes I hear you cry, we all know how to make random words. Well, here's news for you. Your program(s) may often come up with words such as: BLKMH, FRMGJ or AAEMGJL. In other words (pun intended), not very good. The problem in this case is that it is non-selective, that is that each letter is totally random. To produce more pronounceable words we must create a definite distinction between vowels (A,E,I,O or U) and consonants (the rest). We then produce words alternating a random vowel with a random consonant, for any length. Here is a simple program:

```
10 A$="AEIOU"
20 B$="BCDFGHJKLMNPQRSTVWXYZ"
30 INPUT "LENGHT";L
40 INPUT "NUMBER OF WORDS";N
50 FOR I=1 TO N
60 C$=""
70 FOR J=1 TO L
80 IF (J/2)=INT(J/2) THEN 110
90 C$=C$+MID$(A$,INT(RND(2)*LEN(A$)+1),1)
100 GOTO 120
110 C$=C$+MID$(B$,INT(RND(2)*LEN(B$)+1),1)
120 NEXT J
130 PRINT C$
140 NEXT I
150 END
```

This is a fairly simple example as it only produces words starting with vowels, but with modifications (e.g. to line 80) it can produce other more random words. With this program and programmes like it, I have seen words like YES, OZ or FAT produced.

# SPECTRAVIDEO

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## THE M.S.X. STANDARD

The proposed MSX standard announced by Microsoft, Spectra-Video and 14 Japanese computer manufacturers won't be the only attempt to define standard hardware and software parameters in the low-cost computer market. Digital Research is also backing a proposal to unify software standards and is talking with a number of Japanese manufacturers. To meet MSX standard, manufacturers must use a Zilog Z80 microprocessor, a Texas Instruments TMS9918A video processor a General Instruments AY-8910 sound processor, a Nippon Electric Co. (NEC) cassette interface chip, an Atari Joystick interface, 64K (318 ?) bytes of RAM and Microsoft's 32K-byte ROM-based extended BASIC. The following companies are reported by Microsoft and SpectraVideo to have supported the MSX standard.

NEC, Matsushita (Panasonic), Sony, Sanyo, Hitachi, Canon, Mitsubishi Toshiba, Fujitsu, Kyocera, General, Yamaha, Pioneer and JVC.

Software support has also been pledged by Microsoft, Spinnaker, Sierra On-Line and Sirius for the MSX standard.

---

## CHEAPER CASSETTE PLAYER FOR THE SPECTRAVIDEO

I am using a Commodore C2N Cassette unit with my SpectraVideo 328. I found that \$150 for the SpectraVideo Cassette Unit was too expensive so I looked around for a Cheaper unit. The Commodore unit is only \$49 and although not plug compatible I found that with a bit of re-soldering and the addition of a 10K trimpot and a 5 volt regulator it works just as reliably as the SpectraVideo Unit and I saved myself \$100. Full details of the conversion will be published in one of the following newsletters.

However members may contact the EDITOR if they require Conversion details sooner.

---

# SPECTRAVIDEO

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## '?' INSTEAD OF 'PRINT'

Use ? instead of PRINT when typing Programmes as it is much faster and uses less space on the screen while entering program lines.

E.G. ? 8+9 is the same as PRINT 8+9  
? "HELLO" is the same as PRINT "HELLO"

## PROGRAM SPACING WITH ':'

USE THE ':' Character instead of REM when you are spacing program lines. See the two examples below.

```
1)  5 REM THIS IS A TEST PROGRAM
    10 REM
    20 PRINT "hello"
    30 REM
    40 FOR I=1 TO 30
    50 PRINT I,
    60 NEXT I
    70 REM
    80 END
```

```
2)  5 REM THIS IS A TEST PROGRAM
    10 :
    20 PRINT "hello"
    30 :
    40 FOR I=1 TO 30
    50 PRINT I,
    60 NEXT I
    70 :
    80 END
```

Notice how the sections of the program are seperated more clearly with : then with REM.



# SPECTRAVIDEO

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## HELP

If Readers have trouble understanding any part of the SpectraVideo Manual please drop the News Letter a line and we will try to explain it to you. If enough Users have the same problem then special articles will appear in the News Letter trying to fully explain the Feature.

Problems could arise from : Sprites, Clocks, Sound Effects, Interupts E.T.C.



## THE BIG PROGRAM

It is hoped that in addition to the small programmes that appear with articles in this News Letter we will be able to present one large and complex program each month. These programmes will show off the power of the SpectraVideo Computer.

Our First follows on the next page.

---

# SPECTRAVIDEO

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## SPECTRAVIDEO MUSIC

For the first News Letter we decided not to put in a Graphic Program as might be expected but to show off the sound generator chip instead.

This program turns the SprectraVideo computer into a musical instrument. It's well worth the trouble of typing it in and who knows you might write a hit song.

```
10 CLICK OFF
20 ON KEY GOSUB 310,340,370,400,430
30 KEY ON
40 COLOR 8,1
50 PLAY "L15"
60 SCREEN,0
70 CLS
80 C#=CHR$(13)
90 KEY 1,"SOUND 1"+C#
100 KEY 2,"SOUND 2"+C#
110 KEY 3,"SOUND 3"+C#
120 KEY 4,"SOUND 4"+C#
130 KEY 5,"SOUND 5"+C#
140 LOCATE,,0
150 PRINT CHR$(27)+"p" : PRINT
160 PRINT TAB(12) "THE SOUND MACHINE";TAB(39)
170 PRINT TAB(5) "(c) SPECTRAVIDEO USERS GROUP";TAB(39)
180 PRINT : PRINT : PRINT
190 PRINT CHR$(27)+"q"
200 PRINT "PRESS THE FUNCTION KEY FOR THE"
210 PRINT
220 PRINT "SOUND YOU WANT."
230 PRINT
240 PRINT "LEGAL KEYS TO PLAY NOTES ARE"
250 PRINT
260 PRINT CHR$(27)+"p"
270 PRINT "(A) (S) (D) (F) (G) (H) (J)"
280 PRINT CHR$(27)+"q"
290 SCREEN,1
300 GOTO 300
310 A#="S1M1000"
320 B#="L1004"
330 GOTO 450
340 A#="S3M5000"
350 B#="L706"
360 GOTO 450
370 A#="S5M10000"
380 B#="L103"
```

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```
390 GOTO 450
400 A$= "S7M15000"
410 B$="L301"
420 GOTO 450
430 A$= "S11M20000"
440 B$="L507"
450 PLAY A$,A$,A$
460 PLAY B$,B$,B$
470 KEY ON
480 A$=INKEY$
490 IF A$="" THEN 480
500 IF A$="A" THEN PLAY "G","E","C"
510 IF A$="S" THEN PLAY "A","F#","D"
520 IF A$="D" THEN PLAY "B","G#","E"
530 IF A$="F" THEN PLAY "C","A","F"
540 IF A$="G" THEN PLAY "D","B","G"
550 IF A$="H" THEN PLAY "E","C#","A"
560 IF A$="J" THEN PLAY "F#","D#","B"
570 GOTO 480
```

Well as you can see the program is not that long. But this is not due to the fact that the program is simple but that the power of the Spectravideo BASIC allows complex programs to be written in a minimum of lines.

The sounds produced in the program have only been inserted to demonstrate how to create them, it is your job now to alter lines 310 to 440 by changing the values behind S, M, L, and O. Thus you can create any sound you wish.

```
S from 0 to 15
M from 1000 to 20000
L from 0 to 15
O from 0 to 7
```

The cords in lines 500 to 560 can be altered also and more keys can be added if you wish EG.

```
565 IF A$="P" THEN PLAY "G","F#","C#"
```

and so on.

NOTE: When using the program the SHIFT LOCK key MUST be down.



# SPECTRAVIDEO

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## INVERSE VIDEO DISPLAY

It is often useful to display text in inverse video that is the character is the background color and the background is the character color. I used this in the Music program. I find it makes heading stand out on the video display.

To get inverse characters type.:

```
10 PRINT CHR$(27)+"p"
```

To get normal characters back type :

```
20 PRINT CHR$(27)+"q"
```

---

## TURNING OFF THE CURSOR

When printing large amounts of text onto the screen it is very distracting to have the cursor flying all over the screen.

To turn off the cursor type :

```
10 LOCATE,,0
```

To turn on the cursor again type :

```
20 LOCATE,,1
```

---

## TURNING OFF THE DEFINABLE KEY PROMPT

We all know that to define one of the 10 user definable keys we can use the following `10 KEY 1,"HELLO"+CHR$(13)` etc.

But it is not always advantages to have the prompts showing at the bottom of the screen.

To turn off the prompts type :

```
10 SCREEN,0
```

To turn on the prompts type :

```
20 SCREEN,1
```

NOTE: this does not apply to all screens only screen 0.

# SPECTRAVIDEO

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## THE SOFTWARE LIBRARY

We are now accepting software for inclusion in the Spectravideo Users Group Library.

The Club charges will be \$3.00 per copy on Cassette  
and \$9.00 per copy on Disk

additional software on the same Cassette or Disk will be an extra \$0.75c per program. Also some authors may require royalties for their software and this will also be added to the cost. The club charges cover the cost of Cassette or Disk, Instruction Sheets, Postage e.t.c.

All programs must be submitted on cassette or disk and must be BUG free. The programs will be scrutinized before they are accepted to the library.

If accepted a blank cassette or blank disk will be returned to the author.

If not accepted the original will be returned with a copy of the scrutineers remarks for modification. (To remove bugs e.t.c.)

We hope for a good response soon as software at a reasonable price is needed.

More on the Library next month.

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## NEWSLETTER ARTICLES

We want to hear from you the reader !!!!

It is your newsletter and it needs your articles in it to make it a success. If you have anything you believe other readers can benefit from please drop them into an envelope and send them to the Newsletter. Have you written a clever little program or maybe you use your Spectravideo for an unusual job. Perhaps you have a Printer attached that you think may be worth buying.

Please print all articles or even better type them in the same form as this Newsletter. Any programs should be on cassette or disk as they will be checked before inclusion in the Newsletter. All cassettes and Disks will be returned as soon as possible.

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