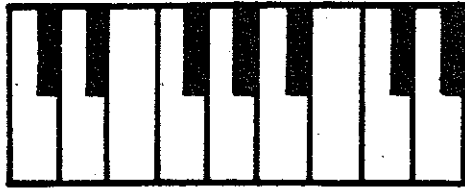




alphaSyntauri Users Newsletter



SUN



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EDITOR'S NOTE

A lot of time has passed since the last issue and for that we apologize. I had to move across country and start a new job. Now that things are settled down, we should be able to get the SUN back on a regular schedule.

Interest in the group is high, and we appreciate all of the notes and requests for membership. Keep those program modifications and tips coming in, and we will make sure that they are printed for all to experiment with and use. In this issue, we have a number of technical notes, the solution to the crossword puzzle, and more.

SUN-DISK

SUN-DISK is yet another idea we are working on for the use of all alphaSyntauri Users Newsletter group members. What has been done is that we have secured the permission of the publishers of SOFTDISK to use their format for a publication of our own. The idea here is that SOFTDISK has shared their production software with us. For those of you who do not know about SOFTDISK, it is a monthly publication for APPLE II owners that provides news, tips, program ideas, and lots of programs to its subscribers for only \$5.00 an issue (actually a dual-sided disk of information). They send you a disk for a given month of issue -- you then send back their mailer with the last month's issue inside. You then keep the current issue until the next issue arrives.

The new disk version of the SUN would then become SUN-DISK. We would still only publish on a bimonthly basis until such time that information flow dictated increased frequency. The big question probably in your mind about now is how much will it cost? To be honest, we are not yet really sure of the total costs involved. We are fairly certain that we can keep it at or below the current price of SOFTDISK -- \$5.00 an issue.

With the advent of SUN-DISK, we will be able to more freely exchange program ideas, note files, FX modes, and anything else that we may wish to share with one another. So, we ask that you consider the possibilities and let us know how you feel. We here at SUN are already working on the first issue of SUN-DISK and look forward to providing better and more effective methods of sharing information with each and every owners of the alphaSyntauri synthesizer. If there is enough interest shown on the part of the membership, we will convert from the old tried and true method of paper printing the SUN and give the disk approach a go for it.

The alphaSyntauri Users Newsletter (SUN) is an unofficial publication of the Syntauri Corporation. The views and opinions expressed are not necessarily those of the Syntauri Corporation.

The editor reserves the right to make any editorial change in manuscripts he feels will improve the material without altering the intended meaning. Contributions are welcome/encouraged as are comments and criticism; however, no payment can be made for articles submitted for publication. Address all correspondence to Editor, SUN, Post Office Box 909, Redlands CA 92373. Bob Bowman, Editor and Founder; Sally Spears, David Housh, and Beni Bowman, Assistant Editors.

TECHNICAL NOTES

M.C. WAVE FILE TO ALPHA FILE PROGRAM
by M. A. Bromwich of the
Polytechnic Department of Music,
England

Our friends from across the Atlantic Ocean sent us this simple but useful program for the converting of M.C. wave files to Alpha files with the useful addition of being able to look at the waveform from the disk. (Note again a word to the wise is to experiment on an extra copy of your software -- keep the master somewhere else in case things don't go as planned.)

```

4 HOME
5 PRINT "PROGRAM TO CONVERT M.C.
  WAVEFILES TO ALPHA SYNTAURI
  WAVEFILES"
7 PRINT "WRITTEN BY MARK BROMWICH
  DEC. 1981"
8 PRINT "HUDDERSFIELD POLYTECHNIC
  ELECTRONIC MUSIC STUDIO, ENGLAND."
10 AD = 3840
15 FOR T = 1 TO 3000: NEXT T
20 HOME
25 SPEED = 100
30 PRINT "TYPE IN THE WAVE YOU WISH
  TO"
31 PRINT "PLOT/CONVERT"
35 SPEED = 255
50 INPUT N$
70 D$ = CHR$(4)
90 PRINT D$;"BLOAD WAVE.";N$;"A";AD
110 HOME
120 HGR2
150 HPLOT 0,96
170 FOR I = 0 TO 255
190 Z = PEEK (AD+I)
210 R = .75 + Z
230 RI = INT (R)
250 HPLOT TO I,RI
320 NEXT I
340 T = 1 TO 2500
341 NEXT T
400 TEXT
401 SPEEN = 100
404 PRINT "DO YOU WANT A PRINTED COPY
  OF YOUR WAVEFORM?"
406 INPUT K$
408 IF K$ "Y" THEN 440
410 PR#5

```

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```

411 POKE - 12525,64
412 POKE - 12524,0
413 M$ = CHR$(17)
414 PRINT M$
415 PRINT "WAVE.";N$
415 PR#0
420 HOME
440 PRINT "DO YOU WISH TO CONVERT M.C."
450 PRINT "WAVEFILE TO AN ALPHA
  WAVEFILE?"
470 GET F$
490 IF F$ "Y" THEN 600
500 PRINT "TYPE IN NEW WAVE NAME."
510 INPUT G$
520 PRINT D$;"BSAVE WAVE: ";G$;"A"
  ;AD;"L256"
550 HOME
600 PRINT "END OF PROGRAM"
605 HOME
610 SPEED = 125: VTAB 17
620 HTAB 20: PRINT : PRINT: PRINT
  "THANKYOU"
630 PRINT: PRINT: PRINT "GOODBYE"
640 SPEED = 255
650 END

```

MODIFICATION - DISPLAY CURRENT SONG
by Bob Moore, Las Vegas, NV

With the following line modifications to SUPER PLUS, Bob says that you will be able to see the name of the current song that is loaded. A "R"ecord or a "B"egin command will clear the song display. He is also working on an album mode for the SUPER PLUS in case you didn't notice that it is missing.

SUPER PLUS MODIFICATION:

```

4 DIM SS$(25)
147 VTAB 22:TAB 19:PRINT "OCT: ";X:TAB
  2: PRINT "SONG: ";SS$;
931 PRINT "LOAD/SAVE/QUIT/MERGE (RET
  TO CONT): ";: INPUT I$: IF I$#"
  THEN 937
937 IF I$ = "B" OR I$ = "R" THEN SS$
  = ""
9000 CALL - 936: INPUT "LOAD NOTES FILE:
  ";I$: IF I$ = "" THEN RETURN: IF
  I$#"?" THEN 9020:SS$ = I$: GOSUB
  1100: GOTO 9000
9020 CALL - 936: PRINT "LOAD NOTE FILES:
  ";I$: PRINT D$;"BLOAD NOTES: ";I$;
  "A";STRT:SS$ = I$

```

TECHNICAL NOTES

MODIFICATION - USE TWO DISK DRIVES
by Richard E. Peschke, Seabrook, TX

Have you been frustrated by the inconvenience of having to switch disks in Drive 1 when you want to access another disk to load in a NOTE: file because there is no direct command to CATALOG Drive 2?? The code modifications and additions that I present here will allow you, through a single keystroke, to access either DRIVE 1 or DRIVE 2 as your needs dictate. These modifications are the same whether used with SUPER PLUS, NEW PLUS, ALPHA PLUS, or ALPHA III.

I elected to use the "/" key to access the CATALOG on Drive 2 for several reasons. First, it is not used anywhere else within the alpha's software (that I am aware of). Second, it allows access with a single keystroke (I like simplicity). Third, if you use a keypad during operation of your alpha-Syntauri, you can use the 'divide' key on the keypad to CATALOG drive 2 and will not have to return to the computer's keyboard. Fourth, I have my system set up with disk drive 2 under disk drive 1. The "/" is UNDER the "?" on the same key so I have a logical reminder of what key to press.

Here are the lines of code that you will have to ADD/MODIFY:

```
>945 IF I$="L" THEN 985: IF I$="S"
THEN 990:
IF I$="F" THEN 995: IF I$="Q"
THEN 999:
IF I$="?" THEN GOSUB 1100:
IF I$="/" THEN GOSUB 1160

>1120 PRINT D$;"CATALOG,D1": PRINT:
PRINT "PRESS THE SPACE BAR TO
RETURN..."

>1140 GOTO 1200
>1160 REM CATALOG, DRIVE 2
>1170 IF ACTIVE THEN POKE DMA,0:
ACTIVE=0: TEXT: CALL-936:
PRINT "PRESS THE SPACE BAR TO
CONTINUE..."

>1180 PRINT D$;"CATALOG,D2": PRINT:
PRINT "PRESS THE SPACE BAR TO
RETURN..."

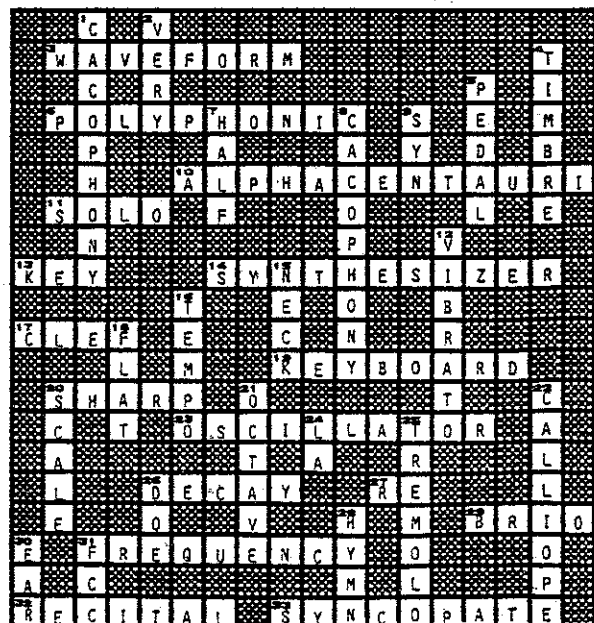
>1190 IF PEEK (-16384)<128 THEN 1190:
POKE -16368,0
```

That's it! Notice in line 945 that the "/" has been incorporated into the program and directs the computer to do a GOSUB routine to line 1160. Line 1120 has been changed only slightly with the addition of ",D1" within the CATALOG command to insure that drive 1 will indeed be accessed. Line 1140 jumps over the drive 2 catalog commands after a drive 1 access. Lines 1160 through 1190 are almost identical to the lines of code which access disk drive 1 (1100-1130) except that ",D2" is identified in line 1180 and line 1190 loops on itself. After you have entered the code above and checked your typing, all that is left to do is UNLOCK SUPER PLUS. SAVE SUPER PLUS. LOCK SUPER PLUS. (or NEW PLUS, or ALPHA PLUS, or ALPHA III)

I hope this modification will improve the utility of your alphaSyntauri just a little. Until next time, keep playing happy! REP.

NEW ADDRESS - SUN now has a new address to which all articles, questions, and inputs should be sent: P.O. Box 909, Redlands, CA 92373. Bob Bowman, editor.

SOLUTION TO MUSIC CROSSWORD PUZZLE



MORE TECHNICAL NOTES

PROGRAM MODIFICATION:
 MODIFICATION - PRESET/INSTRUMENT DISPLAY
 FOR USE WITH "ALPHA PLUS"
 by Russ Streifert, Woodside, NY

Ever load a Preset Master and wonder exactly WHAT ten presets (instruments) made up that Preset Master or what their numbers were? No, because you simply went through and pressed each of the ten digits to find out. So what if it took a couple of seconds for each Preset to appear. What's time got to do with having fun?

WRONG!

Now, with the following program modification, you can immediately call up a list of all ten instruments (or Presets) and also see at a glance which numbers they are.

Essentially, we are adding a SUBROUTINE, and changing only one line. This new subroutine is called when the user types →Y (Control-Y).

Line 445, the only "REAL" program modification, sets up a condition to determine if the user has selected →Z. [IF K=26 THEN 4010.] If "yes," then the computer jumps to 4010.

Lines 4010 and 4020 clear the screen and print a fancy heading. Lines 4030 through 4060 set up a loop to determine the ten instruments and then print them on the screen, with a corresponding number. Lines 4070 and 4080 skip a couple lines and prompt the user to hit the RETURN key to return to the main program of Alpha Plus.

Lines 4110 and 4120 simply restore the display screen for Alpha Plus and tell the computer to actually go back to the main program. This is where that ol' infamous problem solver, "GOTO 100," got its start.

Before you change any SYNTAURI SOFTWARE, please be sure to modify ONLY the backup copy!!

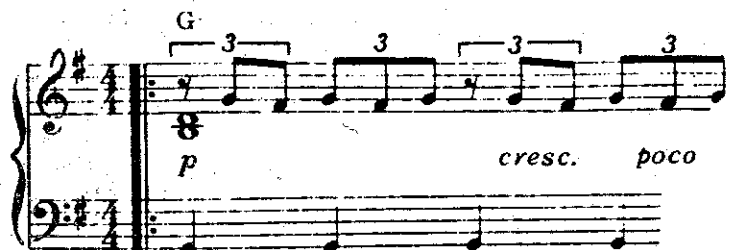
Remember that Alpha Plus is in INTEGER BASIC.

1. Type LOAD ALPHA PLUS, <RETURN>
2. Type UNLOCK ALPHA PLUS, <RETURN>

3. Change line 445 to read:


```
>LIST 445
  445 IF K=23 THEN 7000: IF K=15
      THEN 31100: IF K=5 THEN 8000:
      IF K=25 THEN 4010: IF K#63
      THEN 400: GOSUB 1100: GOTO
      100
```
4. Add new lines of the subroutine.


```
>LIST4000,4999
  4000 REM DISPLAY PRESETS
  4010 TEXT : CALL -936
  4020 TAB 6: PRINT "PRESET MASTER:"
      ;MP$: TAB 6: PRINT "-----
      -----": PRINT
  4030 FOR ZZ=0 TO 9
  4035 P+ZZ*14
  4040 P$=M$(P+1,P+14)
  4050 TAB 11: PRINT ZZ;" - ";P$
  4060 NEXT ZZ
  4070 PRINT : PRINT
  4080 TAB 7: PRINT "PRESS <RETURN>
      TO CONTINUE"
  4090 PRINT : TAB 19: INPUT ZZ$
  4100 REM RESTORE COLOR SCREEN
  4110 POKE -16298,0: POKE -16300,
      0: GR : CALL -936: COLOR=2
  4120 HLIN 1,38 AT 37: FOR I=1 TO
      37: COLOR=I/2 MOD 15+1: PLOT
      I,37: NEXT I: GOTO 100
```
5. Type SAVE ALPHA PLUS, <RETURN>
6. Type LOCK ALPHA PLUS, <RETURN>



ANALYZER PRINTOUT
 by Russ Streifert, Woodside, NY

If you own a printer, you can modify Charlie Keilner's "Analyzer" program to give you a hard copy of the results of his waveform analysis. I store the copies in my reference notebook and use them as a guide to building new waveforms.

Many of you may not remember that waveforms are based on the SINE waveform and that by introducing Harmonics of various amplitudes, we can build TRIANGLE, SQUARE, SAWTOOTH, or any other waveforms. The Analyzer dissects a given waveform into its SINE wave harmonics and tells us the amplitudes of these harmonics.

To modify the "ANALYZER":

1. Place the Alpha Plus disk in the drive.
2. Load "ANALYZER"
3. Change LINE 10 to read-
10 TEXT:HOME:DIM H\$(20)
4. Change line 310 to read-
310 T=0:H=1:X=1
5. Add line 355-
355 H\$(X)=STR\$(A):X=X+1
6. Change line 420 to-
450 HTAB17:INPUT"ANOTHER WAVEFORM?"
";A\$: IF A\$="" THEN 100
7. Change line 430 to-
460 IF LEFT\$(A\$,1)<>"Y" THEN HOME:
VTAB10:HTAB19:"END":end
8. Change line 440 to-
470 GOTO 100
9. Add line 420-
420 INPUT"PRINT-OUT? (Y/N): ";A\$
10. Add line 430-
430 IF A\$="Y" THEN 1010

This completes the modification. Now add the following statements:

```

1000 REM -----
1001 REM PRINTER
1002 REM ROUTINE
1005 REM -----
1010 HOME : VTAB 8: HTAB 7
1020 PRINT "PLEASE TURN YOUR PRINTER
ON"
1030 PRINT : PRINT TAB( 6)"AND PRESS
<RETURN> WHEN READY"
1040 VTAB 20: HTAB 20: GET R$
1050 IF R$ < > CHR$( 13) THEN 1040
1060 HOME
1070 PRINT D$
1100 PRINT D$;"PR#1"
1110 PRINT " "
1120 PRINT "-----
-----": PRINT "FOURIER WAVEFORM
ANALYSIS"
1130 PRINT TAB( 8)"(C) 1980 BY" :
PRINT TAB( 6)"CHARLIE KELLNER"

```

```

1140 PRINT "-----
-----": PRINT " "
1150 PRINT "WAVE:";W$: PRINT " " :
PRINT "HARMONIC AMPLITUDE":
PRINT " "
1160 FOR X = 1 TO 20
1170 IF H$(X) = "0" THEN H$(X) = " "
1180 PRINT TAB( 7)X; TAB( 17)H$( X)
1190 NEXT X
1200 PRINT " ": PRINT "TOTAL AMPLI-
TUDE:";T
1210 PRINT " ": PRINT "-----
-----": PRINT " "
1220 PRINT D$;"PR#0"
1230 GOTO 450

```

Now type SAVE NEW ANALYZER <Return>. Then type LOCK NEW ANALYZER <Return>.

This routine should work with most printers if they are connected to SLOT #1 of the Apple II. (I use a CENTRONICS 730-1.) If your printer is connected to a different SLOT NUMBER, change lines 1100 and 1220 to correspond to your SLOT NUMBER. If your printer uses other codes in addition to or instead of the above, be sure to include them.

COMPOSER'S ASSISTANT™

Another first from Syntauri: professional polyphonic transcribing, plus, with the touch of a button, a printout of your musical composition! As you sit at your composing work station - your alpha-Syntauri digital synthesizer - you'll play, compose, print out, or view your composition on the video screen...fast, accurate, and affordable.

Additional features provided with this computerized professional transcribing tool include: 1/16th note and rest resolution, special triplets mode, variable accidentals, and measure tie markings. Built-in text editing lets musicians and lyricists add expression, special instructions, lyrics, and chords. Composer's Assistant works with popular printers, including the IDS and Epson MX-80. Suggested retail is \$295.00.