



Volume 2

Number 2A

SOFTWARE CATALOG

Enclosed along with this newsletter is The 99/4 Program Exchange Owner Written & Translated Software Catalog containing excellent programs of which most are clearly third party quality. Each program is priced at the unbelievably low cost of ONLY \$2.00! Unless otherwise specified, all programs in this catalog will operate on the 99/4 and 99/4A consoles. They are available on cassette tape or floppy disk.

You will note that part of this catalog is contains of new April 1 expansion. For convenience, we have implemented adaptations to many catalog programs, making them compatible to systems not equipped with Joysticks.

Because of the tremendous scope of our software library, we will be releasing programs in a number of different expansions which will arrive with future Newsletters. In conclusion, we must ask you, why go out and pay \$10.00 or more for a program when you can obtain programs as good or better for only \$2.00 each?

PRODUCT LIST

Enclosed with this newsletter is our T.I. & 3rd Party Product List. It is three-holed punched to be kept along with other Program Exchange literature. You will notice that our prices are substantially reduced from retail. Enclosed along with the product list is The 99/4A Program Exchange T.I. & 3rd Party Product Order Form. Please use this form for placing your orders for products.

PROGRAM SPOTLIGHT SPACE SCOUT - T.I. BASIC

Space Scout is an excellent space game written in T.I. BASIC. It has all of the features necessary for a good game - challenge, user interest, good graphics and good speed. The game begins with your spacecraft docked to the mothercraft in an asteroid belt. You must maneuver your craft in the playing field and pick up fuel modules while avoiding the asteroids and watching out for black holes. After each refueling, you are only allowed a limited number of maneuvers before your craft will self-destruct. Once you have picked up the modules, you must rendezvous with the mother-craft. If by then you have aquired enough points, you proceed to the next level of play.

The scoring is based on the time taken up, the number of modules gathered, and the amount of fuel remaining. Space Scout is well a written and well thoughtout game which is a must for all game players. Because the program is so large, it is only available on cassette tape, however owners with the 99/4 console can obtain it on floppy diskette because the 99/4 has 256 more bytes of available memory.

To order this excellent program you should specify:

1032 SPACE SCOUT (GRAPHICS, T.I. BASIC, 99/4A CASSETTE ONLY)

GRAPHING AIDS

In our last newsletter, we spotlighted our High Resolution Plotting routines for T.I. BASIC and Extended BASIC. Due to the overwhelming interest that was generated by these routines we would like to spotlight another routine which we feel will be very helpful for programming members. The routine is called Medium Resolution Plotting and it is available in a T.I. BASIC version and an Extended BASIC version. This routine allows for plotting with 64 x 48 independent pixels which is 4 times the resolution available with the normal 32 x 24 character display. This routine has many features superior for graphing data than the High Resolution routine. It is considerably faster, has no limit to the amount of the display that can be plotted, and only makes use of character sets 9 and 10.

The program numbers for reference in our catalog are as follows:

6026 and 6027 High Resolution Plotting Routines
6028 and 6029 Medium Resolution Plotting Routines

DEMONSTRATION PROGRAM

Although not listed in the April 1 expansion, we are now offering a new and unique demonstration program. The program plays the Japanese song Kojo No Tsuki which translates to Moon Over the Castle Ruin. During the execution of the program, the screen depicts an ancient castle ruin with a bright moon overhead. The really unique thing about this program is the highly unusual musical effects which the computer generates. It's an excellent example of the 99/4A's sound synthesis abilities. To order, specify: 2050 KOJO NO TSUKI.

AVAILABLE RAM FROM T.I. BASIC

The following routine can be very useful to T.I. BASIC programmers. The routine will determine the amount of RAM available from T.I. BASIC.

```
>1 M=M+1  
>2 GOSUB 1  
>RUN
```

*MEMORY FULL IN 1

```
>PRINT M*8
```

The screen will now display approximately how much memory in bytes is available after line 1 and 2 are deleted.

RUN "CS1"

This is an undocumented command available in Extended BASIC. The command kills two birds with one stone - it will load a program from cassette as usual, then it will automatically RUN the program.

UNWANTED GRAPHICS

On occasion, users may notice unwanted graphics when operating an Extended BASIC program. The unwanted graphics appear as characters defined in previously used programs, or as the characters predefined by the computer. If you notice this problem, type FNCT CLEAR (or SHIFT CLEAR on the 99/4) and type the following:
>FOR X=96 to 143 :: CALL CHAR (X,""):: NEXT X :: RUN then press enter.

CASSETTE LOADING

Are you having problems loading cassette programs? Well if you are, you're not alone. We have found cassette loading to be one of the most troublesome areas of computer use. There are two major sources to the problem: either the recorder is maladjusted or the program is too large to be loaded into the available RAM. The following information is designed for those beginning users that haven't yet been able to solve their loading problems through trial and error.

You will know if either of those two main problems occur when you receive an ERROR DETECTED IN DATA while attempting to load the program. If the recorder is maladjusted, the error statement may appear at any time. However, if the program is too large to be loaded into the available RAM, the error statement will only appear shortly after the computer has begun to read the data.

PROGRAM TOO LARGE

REASON: Program is too large to be loaded into the 99/4A which has 256 less bytes of RAM available than the 99/4.

REASON: Program is too large to be loaded from Extended BASIC which has less available RAM than T.I. BASIC.

REASON: Program is too large to be loaded with certain peripheral devices activated. To solve this, any unrequired peripherals should be deactivated. If you wish to reSAVE the program to disk, attempt the following before turning off the disk-system:

>CALL FILES(1) then press enter
>NEW then press enter

If you still are having problems loading, deactivate your disk system completely.

REASON: Extended BASIC program is in file format and therefore cannot be loaded through T.I. BASIC. This type of program can only be loaded via Extended BASIC with the 32K memory expansion activated.

REASON: Extended BASIC program too large to load without properly activated 32K memory expansion.

RECORDER MALADJUSTED

The cassette recorder must have its tone and volume controls properly adjusted to correspond with the recorder which was used to record the program. We recommend a relatively high volume and tone setting. It may take a lot of trial and error to set your recorder properly, so we recommend that you keep a log of the appropriate settings for your library of cassettes.

On occasion, you may encounter DATA NOT FOUND. This problem has two roots - either the volume on the recorder is set too low or the volume on the recorder is set too high. Often users who keep the volume of their T.V. or monitor too low can barely hear the data from the T.V. or monitor speaker. As a result of this, they will put the volume to maximum on their recorder. This can cause problems as much as having the volume set too low.

STATIC ELECTRICITY PROBLEMS

We at The 99/4A Program Exchange have found an excellent substitute for commercial anti-static preparations. DOWNEY fabric softener put in a spray bottle and then applied to the necessary areas does an excellent job of combatting static electricity problems. You'll probably prefer to use it since it is less expensive and easier to obtain than commercial anti-static preparations.

INSTRUCTIONS

As a reminder to members, the instructions to many programs in our catalog are within the program in the form of REMark statements (or ! in Extended BASIC). Also, many programs that have instructions as part of the program, also have more concise instructions within the program as REMarks. In order to observe the REMarks, you must use the LISTing features or the editing features of the computer.

DISK MALFUNCTION

Disk system owners may occasionally come upon the following problem: you attempt to load a program and instead of it loading as usual, the disk drive just keeps on running until you receive an I/O error 56 or 66. Having encountered the problem numerous times, we have finally developed a simple solution:

- 1) Press QUIT
- 2) Turn your disk controller off, then on again.
- 3) Turn the console off, then on again.

When you re-enter BASIC, the problem should not occur again.

SPLIT KEYBOARD PROBLEM

Many programs that were originally written on the 99/4 console which make use of split keyboard feature of the computer may cause some confusion to the owners of the 99/4A console. The problem is due to the fact that the program indicates that certain keys are to be pressed, but when those keys are depressed, there is no apparent response from the computer. The following is a chart of the problem keys and the correct key to depress to cause the desired result:

99/4	99/4A
SPACE	G
SHIFT	B
B	/
G	:
.	'
ENTER	.

24 HOUR PHONE SERVICE

To help those who wish to contact The 99/4A Program Exchange directly, we have programs from cassette isloading programs from cassette is thing programs from cwill respond in writing in a timely fashion.

THE 99/4A PROGRAM EXCHANGE, INC.
(2 1 3) 3 2 0 - 9 7 6 0



EXCERPTS FROM PREVIOUS NEWSLETTERS

FIVE-FOR-ONE PROGRAM EXCHANGE FEATURE

Another important feature of The 99/4 Program Exchange is the five-for-one program exchange. Any member that submits a program that operates as intended without problems may choose five programs from The 99/4 Program Exchange Owner Written and Translated Software Catalog. The service charge for this five-for-one program exchange is \$3.00 per program submitted.

The policy of the five-for-one program exchange is as follows:

1. We cannot accept programs which have appeared in the 99'er Magazine unless accompanied by permission from the appropriate copyright holders.
2. We cannot accept programs that are presently in our catalog or in our inventory. We also cannot accept a resubmission of a catalog program that we feel has not been substantially enhanced.
3. We cannot accept programs originally written in a T.I. BASIC language i.e., T.I. BASIC and Extended BASIC, that have been previously copyrighted by Texas Instruments or a third party.
4. We will accept a program that has been translated from another BASIC language such as Microsoft, Applesoft, Atari, etc., regardless of copyright.
5. We will accept a program that has been originally written by a user/owner that operates as intended, without problems, and has the potential of qualifying for our software catalog.
6. We cannot accept a series of programs in which each program is not substantially different than the other. Example: using the same central program with different DATA statements that have the same general purpose.
7. The service charge for the five-for-one program exchange is \$3.00 per program submitted (non-refundable).
8. We can only accept up to three programs per submission for the five-for-one exchange.

TDK CASSETTES

Everyone knows a major pitfall in loading programs from cassette is the quality and brand of cassette used. Our experience over tens of thousands of cassette loadings has led us to believe TDK cassettes are superior. Clearly, the data is read with fewer problems. Consequently, The 99/4A Program Exchange, constantly attempting to improve, uses only TDK cassettes for its members.

Besides using a quality tape we strongly urge members to play it safe and make back-up cassettes for all your programs - naturally on TDK quality tapes.

PROGRAM EXECUTION SPEED

Are your Extended BASIC programs executing far too slow? The problem may be the version of the Extended BASIC module which you are using. The older Extended BASIC modules (version 100) in some cases execute the program code much slower than the newer modules. In some cases, the newer modules execute twice as fast as the older modules! To find out if you have the older module, type `CALL VERSION(X):: PRINT X` while in the Extended BASIC monitor. If 100 prints out on the screen, you have the old module. If you have the 32K RAM expansion the problem can be solved easily with the following information:

1. If the program makes no use of sprites add this line to your program: `1 CALL INIT :: CALL LOAD(-31878,0)`. This will increase the execution speed of your program considerably. Note: be sure line 1 in the program isn't being used or isn't required.
2. If the program includes sprites, use the statement `1 CALL INIT :: CALL LOAD(-31878,n)` where n equals the highest sprite value used in the program. Also, if the program uses the statement `CALL DELSPRITE(ALL)`, replace it with `CALL DELSPRITE(#1,#2,#3,...#n)` where n equals the highest sprite value used in the program.

It is important to note that the higher execution speed makes the programs FAR more enjoyable and satisfactory to the user and therefore increases the usefulness and value of your computer system.

PROGRAM SPOTLIGHT INVASION - T.I. BASIC

Arcade games written in T.I. BASIC seldom offer such speed and quick responses as Invasion (#1203). In this game, moving alien saucers attempt to evade your orbiting fighter and move into their attack formation. When enough aliens accumulate, the leading spacecraft will make a suicide dive towards your fighter to destroy it. Invasion has a real arcade atmosphere and makes excellent use of animated graphics. It is contained within our April 1 expansion, and is an example of the quality programs we offer.

To order this excellent program you should specify:

1203 INVASION (GRAPHICS)

PROGRAM SPOTLIGHT HIGH RESOLUTION PLOTTING

We are highlighting an extremely high resolution plotting subroutine that we consider an essential aid to all programmers. With this High Resolution Plotting subroutine, users will be able to plot graphs, etc. on the screen in high resolution (256 X 192 independent pixels) rather than the 24 X 32 character resolution that is presently available on the computers. This subroutine come in an Extended BASIC version (program 6026) as well as a T.I. BASIC version (program 6027).

