

"Indiana's First Recognized 99/4A User's Group"

# MIAMI COUNTY AREA 99/4A HOME COMPUTER USER'S GROUP

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P.O. Box 1194  
Peru, IN 46970

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## NEW LIBRARY LISTING AVAILABLE

One function of our User's Group is to provide members with a library of software. Thanks to our members this library is constantly expanding. To help members keep up with the ever growing array of software, Tom Weir, our software librarian has compiled an updated listing of all available programs.

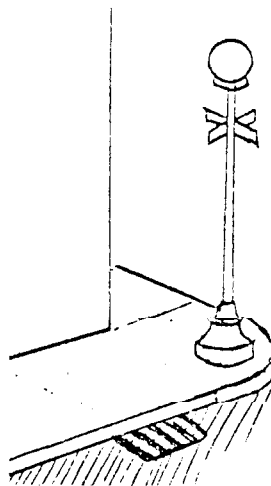
This new listing contains the titles of over 300 programs ranging from games to music to home management, in both console extended basic. We hope that those of you who haven't, will come to a group meeting and pick up one of these updated program listings. After all, how can you take full advantage of your user group's library if you don't know what it offers.

## PRESIDENT'S CORNER....#2

Things are looking up! We still have our problems, money is short, membership, although improving, is still short of being impressive, and we still don't have people fighting over who gets to do what, but as I said, Things are looking up!

Why am I so upbeat this month, you ask? The answer is simple. It all started at our February 14th meeting. There seemed to be a positive atmosphere at that meeting. People were eager to help, discussion was active, and the group seemed to have a common direction. If we don't look out this thing just might work!

Now after all the praise it's time for a mild scolding. If this group is going to move forward we are going to have to get more people involved. It seems that whenever a project comes up that requires manpower, the same people do the job. This situation can't continue without someone getting burned out. Please don't let this happen! The next time something needs done just stick up your hand and say "I'll do it!" Wouldn't that be fun?



See you at the next meeting!

DAVF

### COR-COMP BEGINS SHIPMENTS OF PERIPHERALS

A California based company, Cor-Comp has begun to ship TI compactical peripheral cards to their distributors. Their selection of cards include a 32K memory expansion, a RS232, and soon a disk controller. All these cards fit into the TI Peripheral Expansion.

Cor-Comp is also developing their own P-Box which will provide a method of system expansion to those of you without TI's box.

This, together with their previous announcement of a TI compatible home computer would seem to indicate that Cor-Comp is out to pick up the development of the 99/4A where a certain Lubbock-based company left off.

### ATTENTION ADVERTISERS

The Miami County Area 99/4A Home Computer Users Group is now accepting advertising for Third Party Software and Peripherals. Ad rates are based on a 5x8 inch page at \$20.00 per page, prorated according to the size of the ad in quarter page increments.

For example a) one 2.5x4 inch or 5x2 inch ad would cost \$5.00 per publication.  
b) one 2.5x8 inch or 5x4 inch ad would cost \$10.00 per publication.

Ad copy should be received in correct size and be camera ready. A copy of the newsletter in which your ad appears will be sent to you.

The Miami County Area 99/4A H.C.U.G. reserves the right not to publish ads for products which are determined to be of poor quality or workmanship.

Note: Since the Miami County 99/4A Home Computer Users Group is a "not for profit" organization, all proceeds from the sales of advertising will be reinvested into the group's activities.

### CONSTITUTIONAL AMMENDMENT

At our last meeting a constitutional amendment was proposed which would change the term of our dues period. The amendment would read as follows:

"DUES SHALL BE PAID TO COVER A MEMBERSHIP PERIOD OF TWELVE MONTHS, BEGINNING THE MONTH PAID AND RUNNING FOR THE NEXT TWELVE MONTHS."

This change will not affect those who have already paid for this year, your dues will be due for renewal in January, 1985. We will be voting on this at our next meeting (March 28th) and if it passes we will be notifying each member as their dues become payable.

### TI ADVENTURE COPIES?

There is a use for the Tunnels of Doom cartridge that TI may not have intended. Those who bought a number of TI's Scott Adams Adventure games on tape and have since purchased disk drives may be frustrated by the fact that they can't copy the tape to a disk. Not to mention that it would be more convenient to have all the adventure files on one disk. We know of a third party cartridge that allows you to copy the data files, but you may be able to do it with the Tunnels of Doom cartridge, too.

Here's how it's done: With the Tunnels of Doom cartridge in the console, load the adventure game data from tape. After it's loaded, do not start the game. Instead, press Function BACK and then save the data to disk, giving it whatever file name you'd like. Allow about 52 sectors for storage.

Then, when you want to play the newly transferred program, insert the adventure cartridge into the console and load the program out of disk. The adventure appears to play normally, though there may be some random graphics characters that may have gotten transferred.

### SPEAKING OF BASIC

If you've got a Terminal Emulator cartridge and speech synthesizer you can have your programs listed via the computer's "voice." We don't recommend this for long programs, but if you've been locked up in a cabin in the out-back for months and miss the sound of a human-like voice, this may be of interest. This hint comes from the Rocky Mountain 99ers group in Littleton, Colorado.

- 1-Install speech synthesizer and Terminal EmulatorII
- 2-Load program in BASIC.
- 3-Type in List "SPEECH".
- 4-Listen closely.

Be warned, however, that once you start this routine the computer will go on talking until it has finished the program. The Los Angeles 99ers Computer Group says you may run only selected portions of the program by adding a colon followed by the line number you want to start with, a dash, and the line number you'd like it to stop talking. This is the same technique used to list programs to the screen or printer. Failing this, if you get the TEII started on a long program, the only way to get out of it is to turn the computer off.

## Micro processor Basics Part 1

This is the first of a series of articles through which I will attempt to explain how your computer works. I will start with the Basics, and work up to the processor and other components, and how they work together to make a Home Computer.

# P.J.'s

## CONSOLE COMMENTS

### Digital Logic Basics

The circuits in a digital computer (like the 99/4A) use Binary Logic. This means the circuits operate in two distinct states. The low state is typically represented with a voltage of 0 - .8 volts and the high state is represented by a voltage of 2.4 - 5 volts. These are the common "TTL", or transistor-transistor-logic levels. There are other logic systems which use other voltages to represent the two states. From now on I will refer to the low state as logic 0 and the high state as Logic 1.

A single "1" or "0" is a "Bit". Numbers are represented by groups of bits. (Usually 8 or 16 in Home Computers).

For example: 0000 = 0

0001 = 1

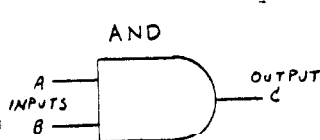
0010 = 2

0011 = 3

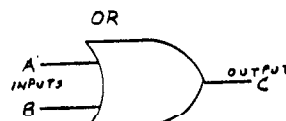
0100 = 4

0101 = 5 and so on

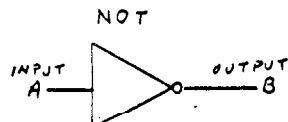
"Gates" are circuits which perform logic functions. They are the building blocks of any digital system. Here are the basic types.



AND		
A	B	C
0	0	0
0	1	0
1	0	0
1	1	1



OR		
A	B	C
0	0	0
0	1	1
1	0	1
1	1	1



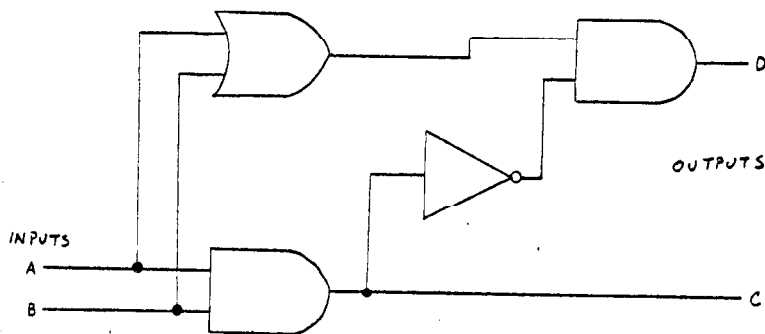
NOT	
A	B
0	1
1	0

These gates can be interconnected to perform various functions. For example, this binary adder, which takes two input, A and B, and devopopes and output equal to the sum of A and B. ("10" in binary equals 2).

Inputs Outputs

A B CD  
 0 0 00  
 0 1 01  
 1 0 01  
 1 1 10

(Try tracing the 0's and 1's through this circuit).



A	B	C	D
0	0	0	0
0	1	0	1
1	0	0	1
1	1	1	0

R.I.P. A certain member damaged his computer while trying to install the pause switch from last months column. I wish I could be more comforting, but is the chance you take when you open up your computer. Your computer contains many very sensitive devices, so use extreme caution when working on it. I do not recommend working on your computer unless you have had some experience in working in similar electronic circuits. It is safer to connect the switch to and edge connector (available from many electronics houses) BEFORE the connector is plugged into the computer.

In order to put out a good column, I need some good correspondence. Send any questions, comments, circuits, etc. to Paul Johnson c/o the Users Group.

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## PROGRAMMING HINTS

### KEYWORD SEARCH

Often times we write programs containing large amounts of data that is stored in files. One tool that we can use to manage that data with is a keyword search.

Basic has a string function called POS that makes a keyword search very easy. Try this:

```
100 CALL CLEAR
110 DIM N$(20),A$(20)
120 REM INPUT 20 NAMES AND ADDRESSES
130 FOR I=1 TO 20
140 INPUT "NAME= ":N$(I)
150 INPUT "ADDRESS= ":A$(I)
160 NEXT I
170 CALL CLEAR
180 REM KEYWORD SEARCH
190 INPUT "NAME YOU WISH TO FIND= ":K$
200 FOR J=1 TO 20
210 IF POS(N$(J),K$,1)=0 THEN 240
220 PRINT N$(J)
230 PRINT A$(J):::
240 NEXT J
250 GOTO 190
```

In line 210 your computer begins looking for K\$ within N\$(J). If no match is found it goes to the next N\$(J) and tries again. If K\$ is found the computer prints N\$(J) and A\$(J) on the screen. One nice thing about this setup is that your keyword does not have to be complete, just a few letters are enough to find the name you want.

### KEEPING TRACK

Extended BASIC programmers can use the exclamation point at the end of a program line to enter remarks. In BASIC, however, REM is supposed to come at the beginning of a line. For programming purposes, the computer ignores anything that follows a REM statement until it reaches the next programming line. However, the Hoosiers Users Group of Indianapolis says the REM statement can be written on the same line as a program statement, with a few limitations. First, the program line, including the REM statement, cannot be longer than one screen line. This may limit this technique to remarks following GOSUBS, GOTOS, and other short commands. Here's an example: 100 GOSUB 200 REM DRAW LINE. The Hoosiers caution that the line must end with a blank space.

## REVIEW

The problem with many third party software items is that they tend to try to be so close to the real arcade version that they often say they can produce more than they actually can. However, this may not be true with the new atarisoft cartridges for the 99/4A. In investigating this further I found half a dozen very good software packages that are currently available. The three I found on the shelves of area distributors are: Pac/Man, Donkey Kong, and Centipede.

When I first started to play Pac/Man I thought that it was quite slow and cumbersome, but as time went on I realized that is was the game's way of letting everybody in the playing audience have a chance of getting the ghosts with little difficulty. But for the more avid Pac/Man fan you can merely depress the + button to allow you to start on a more difficult level. Overall the game played very closely to the arcade standard.

Unlike Pac/Man where the game starts out slower than usual and then picks up, Donkey Kong is a really fast game from start to finish. For those of you who aren't familiar with Donkey Kong let me introduce you. You are Mario, a handyman, whose girl has been captured by the most rotten ape of them all: Kong. The object of the game is to rescue the girl by jumping over the barrels, knocking out rivets, and walking along conveyor belts. All this and more is waiting for you in Donkey Kong.

My last review is on Centipede, a fast paced game in which you must shoot as many sections of the centipede away as possible. Then when the centipede (which by the way moves from one side of the screen to the other, jumping down a row when he gets to a side) a new one appears.. All along the game you will meet the scorpion which is worth bonus points when you hit him, and then what I call the mushroom restocker comes down the screen placing mushrooms at strategically located places on the screen. This is really a fun and action packed game that will provide you with continual fun and entertainment.

All of these games also have really great graphics and sounds that surprised me at first but in the long run they proved to me that the TI really is a good computer despite what Commodore has to say about that. Oh, By the way, you can expect to pay around \$21.97 for any of them.

NOTICE...GROUP MEETINGS ARE HELD ON THE SECOND TUESDAY AND FOURTH WEDNESDAY OF EACH MONTH AT THE NIPSCO OFFICE IN PERU.

SPECIAL THANKS TO ALL THOSE WHO CONTRIBUTED ARTICLES TO THIS MONTH'S NEWSLETTER.

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