

Topics

LA 99^{ers} COMPUTER GROUP

Newsletter

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T O P I C S

LA & HARMONIC CONVERGENCE

There really are some good and positive things emanating from Southern California, just read on.

Super Extended Basic, reviewed inside, this valuable addition to our 99/4A gem is the result of a positive forward sighted influence within our community, Triton. Gathering the talents of some of the more positive producing programmers, this module is now available to us all, even those of us who already own TI's extended basic. In cooperation with TI, the original has been built on and improved and we the LA 99ers through our Marketplace and the continuing effort to bring to the User Group member quality products at a discount are marketing this as a club fund raiser for only \$50.00, plus Ca. tax and \$2.00 S&H.

The review welcomes one of the most recognized assets in our community to the pages of Topics. Ron Albright, long a valued and trusted friend, brings along his reputation for candid comment not tainted by any financial affiliations. Ron has long been respected for his honesty and tenacity. We do not always agree with all he says, but certainly recognize his right to express his opinions. Sure glad to read you Ron. If you have not yet read either of Ron's 99/4A publications, Orphans Chronicles, or Orphan Survivor Handbook, both are available through Marketplace and are priceless.

LA 99ers BBS now online in two separate locations. Danny Nelson at 213 755-7239 and Steve Chalcraft at 213 864-2488. We had intended to also locate a BBS in the 714 area with John Williams, but unfortunately for now John's health precludes that. We welcome PC Pursuiters to also communicate with us. LA 99ers we had a long hard pull getting us up and running, now we can communicate more frequently than the once a month meeting and newsletter. All questions posed will be answered by the members most qualified to do so. We expect this to be a learning tool also, so call and ask and patience until we all get our feet wet. Our raffle and library are used to

support our efforts please continue to support both.

Along with this newsletter members will receive a notice of a every other month raffle donation. This first one is for a Rave 99 keyboard. The donation to the club will be \$5.00, sent in with the flyer filled in by mail. The winner every other month will be drawn prior to the publication of the second month forward newsletter. This will allow our overseas members a fair amount of time to participate. Donations will cover the purchase of future items (9640, Turbo-xt) as well as support the BBS. We ask for your support in this activity.

Five Wednesdays in September, yes we usually stick to our 4th wednesday of the month meeting EXCEPT this one. Out of respect to our Jewish members we will recognize the holy days and meet September 30. This has already been arranged with the Library, so please circle your calendars and meet us the 5th Wednesday Sep. 30 1987.

Library reorganization and the monumental work of Fred Moore. Once again Fred has shown his sensitivity to the needs of the members. The Library has been completely revamped, and Fred did it all ALONE. Wow! we now can offer the library list in two formats, printed and on diskette. The cost either way is \$4.00 plus \$1.00 S&H. A bargain in either format. Thanks again Fred.

Speaking of bargains, I recently fielded a question of membership cost for in as well as out of town, why the same. Well we try to avoid increasing the local dues, by being creative in our methods of funding the club. In the case of the newsletter before the newsletter is even printed we are at each and the postage is at least \$.39 cents, then add to that the cost of printing 11 or 12 pages and you can see why. We have a quality newsletter and welcome the quality contributors to it. Even those who take vacations and miss deadlines.

George Steffen is wandering around the hills and dales of Pennsylvania, look for him at the Harrisburg fest, easy to spot him just look for Santa Claus out of season.

SETTING YOUR PRINTER

=====

by Tom Freeman, LA 99ers
 from an idea by Ed Machonis, QB-99ers

My article this month is going to go "back to basics" - literally! It began with a "BASIC Tinygram," as he called it, sent to us by Ed Machonis of Floral Park, NY, to show what could be done with just 10 lines of Basic code. It follows this paragraph in exactly the form that Ed sent it to us, with two exceptions: for some

reason I typed an extra space before the ? in line 5, and I have provided the XBasic Checksums for all the programs in this article. Although this is a program that can be run in Basic as well as XB, I advise you to do your typing in XBasic and use the Checksum program, so as to ensure accuracy.

```

1 DIM P$(15):!155          EST", "2 ELITE", "10 EXIT", "3
2 READ P$(1),P$(2),P$(3),P$(4),P$(5),P$(6),P$(7),P$(8),P$(9),P$(10),P$(11),P$(12),P$(13),P$(14),P$(15):!254
3 OPEN #1:"PIO" :!253      2 LINE SP6 ITALIC      14 L
4 PRINT : "1 PICA/RESET", "9 T MARGIN 137 D'BLE STRIK 15 R
                    MARGIN 678 UNDERLINE    ?":
1 :!221                  9 IF I<>10 THEN 4 :!244
6 PRINT #1:CHR$(27)&P$(1):!16 10 DATA @,M,W1,E,4,6,-1,"QU
0                          ICK BROWN FOX JUMPS OVER THE
7 IF I<>4 THEN 9 :!203      LAZY RED DOG 1234567890 TIM
8 PRINT #1:CHR$(27)&CHR$(15) ES",,S0,S1,1,1,QC :!012
: !233
    
```

Ed's notes for this program included a warning that the next to last data item is the lower case letter l, not the number 1, and that the space following the quotation mark in line 10 is important (because each string sent to the printer is preceded by Esc - ASCII 27 - and Esc Q has an affect on the printer, whereas Esc space does not). Naturally you will need to check the specific codes for your printer - these are for an Epson RX-80 but most modern printers are compatible with it. The program is used by combining successive entries.

turn off underline with the Esc @ code, 3) there were no options to pick the left and right margins or the line feed- the C following the Q in the data for P\$(15) defined a right margin of 67 and the carriage return that automatically followed the l defined a left margin of 13, and 4) typing line 2 was a pain! Therefore I revised the program slightly to fix these problems. The first was solved by opening the printer file as PIO.CR so there would be no line feeds (but note that I then had to add a carriage return and line feed to the test line), the second by putting in a specific option to turn off underline. For the third I put in a second input request to pick the actualy number desired, and for the fourth I read the data statements in a loop. What follows is my first revision of the program.

After I typed in the program and ran it, I found that there were a few minor problems: 1) because the printer was opened as PIO, each time a code was sent to it, a line feed ensued, which you may not want, 2) for some strange reason my printer (Citizen MSP-10) would not

```

100 DIM P$(16):!156          !156
110 FOR X=1 TO 16 :!126      160 PRINT "5 EMPHASIZED 13
120 READ P$(X):!208         SUBSCRIPT 6 ITALIC      14
130 NEXT X :!238           X/72 IN.LF 7 D'BLE STRIK 15
140 OPEN #1:"PIO.CR" :!195  L MARGIN X" :!026
150 PRINT : "1 PICA/RESET 9 170 INPUT "8 UNDERLINE 16
    NO UNDRLINE2 ELITE", "10 TES R MARGIN X ":!032
    T", "3 EXPANDED", "11 EXIT", "4 180 IF I>16 THEN 150 :!205
    COMPRESSED 12 SUPERSRIPT" 190 IF I<14 THEN 210 :!006
200 INPUT "X?":M :!244      270 IF I<>11 THEN 150 :!135
210 IF I<>10 THEN 240 :!224 280 DATA @,M,W1," ",E,4,6,-1
220 PRINT #1:P$(10)&CHR$(13) ,-0," QUICK BROWN FOX JUMPS
&CHR$(10):!163            OVER THE LAZY RED DOG 123456
230 GOTO 150 :!229         7890 TIMES",,S0,S1,1,1,Q :!17
240 PRINT #1:CHR$(27)&P$(I)! 2
160                        290 CLOSE #1 :!151
250 IF I<14 THEN 270 :!067
260 PRINT #1:CHR$(M):!216
    
```

Some things to note about this version. It is still a Basic program, although again I have provided checksums so you can type it with accuracy in XBasic. Also, the fourth data item did not have to be separately defined. Where you see a space on this page you should type CTRL O. Although you will still see a blank on the screen what is actually there is ASCII 143, which is an acceptable printer code for compressed mode. By the way, I believe I made a mistake in this version - the third to last data item which is presently a 1 should be an A.

```

100 DIM P$(16):: FOR X=1 TO 120 DISPLAY AT(7,1):"5 EMPHA
16 :: READ P$(X):: NEXT X :: SIZED 13 SUBSCRIPT 6 ITALI
OPEN #1:"PIO.CR" !163 C 14 X/72 IN.LF 7 D'BLE
110 DISPLAY AT(3,1)ERASE ALL STRIK 15 L MARGIN X 8 UNDER
:"1 PICA/RESET 9 NO UNDERLI LINE 16 R MARGIN X" !168
NEZ ELITE", "10 TEST", "3 EXPA 130 ACCEPT AT(11,1)VALIDATE(
NCED", "11 EXIT", "4 COMPRESSE DIGIT)BEEP:I !026
D 12 SUPERSCRIPT" !131 140 IF I>16 THEN 110 ELSE IF

```

For the last version I decided to take a completely different approach. I noted that many current printers have a "master" print control code, usually Esc ! n. Seven of the eight bits in the number n each control a print mode. For the Citizen MSP-10, starting with the rightmost bit, they are elite/pica, no effect, compressed, emphasized, double strike, expanded, italics, and underline. The advantage of this method is that each mode can be toggled on and off separately by toggling the appropriate bit on and off. All bits "off" (ASCII 0) is the equivalent of resetting to defaults, except that I continued to have the problem that even when I did this the underline was not turned off - must be some quirk in my printer! I decided that I would also like to be able to toggle near letter quality on and off, and that I wished to display on the screen what the current "settings" are.

To understand how I did this, you need to know how XBasic handles "logical operators." This will also be applicable to assembly language programming. There are four such expressions: AND, OR, XOR, and NOT. When used on numbers, they operate on full 16 bit numbers (which because the highest bit must be reserved for the sign of the number range from -32768 to 32767). NOT operates on a single number and reverses each bit in it. The other three work on two numbers and produce a third. In the case of AND, corresponding bits are compared in the original two numbers, and a 1 put in that "place" if both bits were 1, otherwise a 0. For OR, the result is a 1 if either number contained a 1 - only if both were 0 is the

Type it the "wrong" way first, to get the correct checksum, then make the substitution.

My next version (which follows the 2nd below) merely put the above program into true XBasic format, with multiple statement lines. It actually takes up one byte MORE of code, despite being 11 program lines shorter, but it should be easier to type in. Note that the mistake mentioned above is corrected here, and that the 4th data item is still CTRL O.

```

I>=14 THEN DISPLAY AT(12,1) $(M)!036
:"X?" :: ACCEPT AT(12,3)VALI 170 IF I<>11 THEN 110 ELSE C
DATE(DIGIT)BEEP:M !225 LOSE #1 !119
150 IF I=10 THEN PRINT #1:P$ 180 DATA 0,M,W1," ",E,4,6,-1
(10)&CHR$(13)&CHR$(10):: GOT , -0," QUICK BROWN FOX JUMPS
0 110 !072 OVER THE LAZY RED DOG 123456
160 PRINT #1:CHR$(27)&P$(I): 7890 TIMES",,S0,S1,A,1,Q !18
: IF I>=14 THEN PRINT #1:CHR 8

```

result a 0. And finally XOR will place a 1 in the proper position in the result only if one of the numbers had a 1 there. If both were 1 or both were 0 then the result is a 0. For you assembly language programmers exactly the same procedures apply, but see your manual for addressing modes.

Now we can combine these operators with the ASCII codes that must follow Esc ! to the printer. Since we want to treat each bit independently, the logical operators make it easy to reverse them or test them. Note that the first seven data items are numbers each of which have only one bit on, namely bit 1 and 3 to 8 (2 is not used). By using AND on this value and the current value of Q all the bits of Q except the one of current interest are turned off, and this particular bit is also off if it was off in Q (remember that AND insists that the bit be on in both numbers). The resultant number will still be a power of 2 however. By using the SGN function it becomes either a 1 or a 0 and this is listed on the screen to indicate the current state of the particular print mode. This is all done in line 130.

The rest of the lines through 170 complete the setup of the menu. Note that I have also read some of the menu lines into an array with data statements - this was done so that I could use the SIZE command in line 150 and not erase to the end of the lines on the screen. Line 180 accepts the input number, and also sets M=0 (used in menu items 10 to 13) because CHR\$(M) will always be sent to the printer, but we want it to have meaning only for

10-13 - CHR\$(0) has no effect on the printer, unless it is needed by a previous code. Line 190 now sends the program to the appropriate line number. Line 200 is for NLQ mode. The logical operator XOR is used here. Since it requires that only one of the two numbers operated on have a 1 in the bit position under consideration, we can reverse the state of the bit by doing an XOR with 1. Similarly line 230 does an appropriate bit reversal for each of the first 7 menu items by using XOR on Q and the current data item, which has only 1 bit turned on.

The rest of the program follows closely those that appear above. However please note the quoted string in line 290. What looks like two spaces following the numbers is NOT - you should type CTRL J and CTRL M !! Also, type line 300 carefully, or the screen setup will

not be correct. The program is presented in 28 columns here, so "what you see is what you get" and the checksum should also help.

I might add that with careful attention to these operators you can use one variable to represent 16, if they are to be only 1 or 0. Each variable that you are interested in can be one bit in the program variable, and you can use the logical operators to manipulate them.

This program was written more out of my interest in programming techniques and in teaching them to our readers. Hopefully it may also be of some use to you. Just remember not to turn off your printer after sending the codes to it!

```

100 DIM P$(16):!156          AT(X+3,14):SGN(Q AND VAL(P$(
110 FOR X=1 TO 16 :: READ P$ X))):: NEXT X !180
(X):: NEXT X :: FOR X=1 TO 4 150 DISPLAY AT(11,1):"8 SUPE
:: READ T$(X):: NEXT X :: N RSCRIPT": "9 SUBSCRIPT" :: FO
LQ$(1)="ON" :: NLQ$(0)="OFF" R X=1 TO 4 :: DISPLAY AT(X+1
:: OPEN #1:"PIO.CR" !141    2,1)SIZE(18):T$(X):: NEXT X
120 DISPLAY AT(3,1)ERASE ALL !233
:"MODE", "1=ON,0=OFF", "1 ELIT 160 DISPLAY AT(17,1)SIZE(23)
E/PICA": "2 COMPRESSED": "3 EM : "14 NEAR LETTER QUALITY" !2
PHASIZED": "4 DOUBLE STRIKE": 19
"5 EXPANDED": "6 ITALICS": "7 170 DISPLAY AT(18,1):"15 TES
UNDERLINE" !109           T": "16 RESET": "17 EXIT" !251
130 DISPLAY AT(13,19):"12" : 180 ACCEPT AT(21,1)VALIDATE(
: FOR X=14 TO 16 :: DISPLAY DIBIT," ")SIZE(-2)BEEP:I ::
AT(X,19):"0" :: NEXT X !007 M=0 !081
140 FOR X=1 TO 7 :: DISPLAY 190 IF I>17 THEN 180 ELSE ON
I GOTO 230,230,230,230,230, IF I=16 THEN 130 ELSE 140 !
230,230,250,250,240,240,240, 201
240,260,260,220,280 !032    270 PRINT #1:CHR$(27)&"! "&CH
200 P=P XOR 1 :: IF P THEN P R$(Q):: GOTO 140 !008
$(14)="x1" ELSE P$(14)="x0" 280 CLOSE #1 !151
!026           290 DATA 1,4,8,16,32,64,128,
210 GOTO 250 !073          S0,S1,A,1,Q,N,x1,"QUICK BROW
220 Q,P=0 :: GOTO 250 !214    N FOX JUMPS OVER THE LAZY RE
230 Q=Q XOR VAL(P$(I)):: GOT D DOS 1234567890 ",e !095
Q 270 !109           300 DATA 10 X/72 IN. LF X=,
240 ACCEPT AT(I+3,19)VALIDAT 11 L MARGIN X=,12 R MARG
E(DIGIT," ")SIZE(-2)BEEP:M ! IN X=,13 SKIP X LINES X=
226           !061
250 PRINT #1:CHR$(27):: DISP
LAY AT(17,24):NLQ$(P)!213
260 PRINT #1:P$(I)&CHR$(M)::

```

X-10 POWER HOUSE 99

=====

by George Steffen, LA 99ers

Among the items I saw at the Las Vegas Consumer Electronics Show in January, 1985, was the X-10 Powerhouse, a device to allow a computer to control lights and appliances in the home. I talked to one of the personnel at the X-10 booth who indicated that there was no interface for the TI 99/4A but that CORCOMP was working on one. He also indicated that no programming information was available. I knew I wanted one of the devices, but decided to wait and see what interfaces came out.

price of \$79.80 for the Powerhouse and 99 Home Sentry discouraged me from purchasing anything. Recently, DAK, a discount electronics retailer, opened a branch in Torrance and I noticed that they had the Powerhouse, with interface, for various computers (not including TI), for only \$19.90. I finally broke down and bought a 99 Home Sentry and then purchased a Powerhouse with a Macintosh interface from DAK. I should have purchased the Powerhouse first, because the package included programming information. Unfortunately, the interface cable was not right for the 99/4A. One of the interfaces may contain a proper RS232 connector cable.

When CORCOMP released their 99 Home Sentry, the

RS-232 card.

While still working out the best program for my Powerhouse, I ran across two articles in newsletters from other clubs which mentioned another interface between the Powerhouse and the TI 99/4A. The first article I saw was by Thomas Lefay in the West Jax 99ers News and the other was by John Johnson in the Greater Omaha TI User Group Newsletter. Both gave credit to Ken Gladyszewski of the Northcoast 99ers for the original article. What follows is a combination of both articles with contributions of my own regarding 99 Home Sentry and Powerhouse. I do not yet have Home Control 99, but nothing in the Powerhouse programming book contradicts anything said about that program.

The Home Control 99 program definitely is superior if you have a fully expanded system (Disk drive, Memory expansion, RS 232). It is indeed a nifty bit of Extended Basic programming! It uses text exclusively instead of the "crude" icon picture system used by the CORCOMP Home Sentry. In fact, it emulates the IBM version's capabilities very closely. The user types in any amount of locations and device descriptions up to the controller's limit of 256 devices. In comparison, the cartridge allows only 14 choices of rooms and 9 choices of device locations for a total of 126 (still quite a few though).

Have you ever wanted to control your lights, TV, coffee maker? Do your kids leave the lights on all night long? Did something go bump outside at night and you wanted to turn on the lights outside, or even the whole house, without getting out of bed?

Using the Home Control 99 Software, the controller can be programmed for up to 128 timer events. Each timer event consists of an on, off, or dim command for up to 16 devices within a single house code. The best feature of the program though, is the ability to save collections of timer events to disk as a file. This allows one to have a file for vacation, summer, winter, etc. The files can be edited, sent to a printer for a hard copy, and downloaded to the controller.

Is the cost too prohibitive? Well, how about this? The X-10 Powerhouse can now be interfaced with the TI-99/4A at a very reasonable cost.

Since I have observed the Home Sentry 99 in operation although I have not studied the program, I believe that the 120 events which may be programmed from this module consist of only 128 individual switching events. Two items with different module numbers, even on the same house code, can not be controlled by one control sequence. On the other hand, Home Control 99 takes full advantage of the capabilities of the X-10 Powerhouse.

The X-10 POWERHOUSE Model CP290 Computer Interface is part of a complete energy management and security system for residential and small business applications distributed by X-10(USA), INC. The unit works by sending pre-programmed signals over normal existing house wiring to remote modules into which lamps, appliances, etc are plugged.

Of course, every device you want to control, ie: lamp, radio, coffee pot, etc., must have a module to accept the signal from the controller to turn the device on or off. These can be purchased locally at Radio Shack, Heathkit, or Sears stores. There may be other places I am not aware of too. Or they may be mail ordered from X-10(USA) directly, also from DAK Industries, TRITON, and TENEX catalogs. The following addresses are listed for your convenience.

X-10(USA), INC. is marketing the device in this country with disk based programming software for Apple IIe/IIc, Commodore 64, and IBM PC's. TENEX and TEXCOMP list the X-10 Powerhouse for \$39.95 and the 99 Home Sentry module and cable for \$39.95. Tenex also has lamp and wall switch modules for \$13.95 and appliance modules for \$19.95.

The cheapest source of modules is DAK: Lamp Module, Order # 9779, \$9.90 + \$1.00 P&H; Appliance Module, Order # 9781, \$10.90 + \$1.00 P&H; Wall Switch Module, Order # \$12.90 + \$1.00 P&H. Other X-10 equipment is priced proportionally.

Eagle Software is now marketing a program by Paul Wheeler of Eastlake, OH, called Home Control 99. This disk based program which retails for \$10.00 eliminates the need for the Home Sentry Interface. It is provided on a SSSD disk with documentation, including instructions on how to rewire the IBM RS-232 cable to work with the TI

DAK Industries, Inc.	X-10(USA), Inc.
8200 Resnet Ave.	105A Le Grand Ave.
Canoga Park, CA 91304	Northvale, NJ 07647
1-800-DAK-0800	1-201-784-9700

EAGLE SOFTWARE
1269 E. 348th St.
Eastlake, OH 44094

9640, Enlightenment

by J. Peter Hoddie, Boston Computer Society

I would like to set the story straight on hardware compatibility with the 9640. First of all, the TI, Cor-comp, and Myarc disk controllers will all work. It doesn't matter which eprom you have in the card. The TI controller can handle 80 track drives (just not in double density), the Cor-comp controller and the Myarc controller can handle 80 track and 16 or 18 sectors per track. The new reason for this is that the EPROM or ROM in the disk controller is not used by the 9640, but is replaced with code in the operating system. This allows the TI and Cor-comp controllers to run as fast as the Myarc currently does. The speed of disk access is really impressive - you may not recognize your disk drives. Any RS232 card from TI, Myarc or Cor-comp will work. Print spooling is built into the system for all cards, and the size of the spooler can now be set by the user. The print spooler is accessed just like a normal drive, such as PIO, rather than SPPID as on the Myarc 512 card. The Horizon Ram disk will work, however, at this time in order to boot the system from it, it must use the HORIZON EPROM from Genial Computerware. This is not a ploy for me to make lots of money, but a decision made because of several unfortunate characteristics of the ROS distributed with the Horizon card. Currently there is support for only one Horizon Ram Disk, although this could change in the future. The Myarc 512 card can not be used as it is. However, for \$15.00 Myarc will convert it so that it can be used as additional memory for the 9640. Once this change is made, the 512 card can not be used with the /4A, so carefully consider having this modification made. The speech synthesizer is supported but you have to buy a special card to put it into the expansion box. Such a card is available from Rave 99 for about \$40.00. Your TI 32k or other memory cards such as Foundation will not work. Since the 9640 has over 600K of memory in its minimal configuration, this should not prove any great hardship. At this time, the Megatronics GRAM card is not supported. The Cor-comp triple tech card will work, except that because of a somewhat faulty hardware decision (works on the /4A but not the 9640) the triple tech card will eat up about 1/8 of your available memory. The 9640 also supports an internal RAM disk which can be set to any size by the user, within the constraints of available memory. The current Myarc Winchester Personality card is supported, and of course the new Myarc hard drive/floppy controller will be supported when it becomes available. I hope this paragraph has cleared up any misunderstandings you may have had about the 9640 and your present hardware setup. Please let me know if you have any further questions.

The documentation of the 9640 doesn't currently mention some of the more interesting features that are in the computer. For example, all disk files are available and date stamped at creation and at any update. This information is available on disk catalogs, and even from Basic using an extension of the current method of cataloging a disk. The RAM disk support is done similarly to the Myarc MPES (multi-peripheral expansion system), in that if you assign the internal RAM disk to drive 1, you can then make your physical drive 1 respond as drive 2. This means that all drives can be made always available, which is not always possible on the /4A. This is done independent of CPU base, thanks to the single master DSR (device service routine) created for the 9640. For the assembly programmer there is a wealth of system utilities for graphics available through XOPs, written by Chris Faherty. The operating system also supports a new powerful set of disk access commands designed by Paul Charlton, and implemented by both of us. These allow for easy file and disk access from assembly for disk and file copying and comparing. The operating system also supports multi-tasking when not in /4A mode. This means you could be editing a file with your word processor, while downloading a file from a bulletin board, while a graphic image of a Frog dances on the corner of your screen. Multi-tasking allows you to run several programs at once - and this should open up some exciting possibilities in the future.

Until the operating system is released for the 9640, I would recommend taking anything you read from outside Myarc sources with a grain of salt. That is to say, without naming names, that I have read numerous articles on the 9640 which contain information that is just plain wrong. The articles claim that the machine can't do certain things, or that it will eventually do somethings better than it does now - and they are just completely wrong. While articles on the 9640 by people who have them at this stage are rather popular because people are crying out for any information they can get, many of those writing are very badly informed. This problem is as much a fault of Myarc as anyone. To release the hardware with incomplete software to anyone but developers was a serious mistake in my estimation. It has calmed many people down, but it has started a new furor over "where is the operating system" which is just as bad as the old "when will it be released". Lou Phillips has a habit of saying things to calm people down. If someone asks him when a product will be ready he tends to give the absolute best case answer. Unfortunately in this business, that tends to be way off base.

Did Someone Call BINGO???

=====

by Steve Mehr, LA 99ers & Tri-Valley UG

Another meeting, another demo, yawn. FORGET IT! Not this time. If you missed the last meeting, you mind as well as they say, "Catch a Wave..." Last month Rodger Merritt, Fairware author supreme, returned to dazzle us with his latest programming efforts. But first a little background on his Fairware reputation. First it was a program called PRINTIT. Regarding PRINTIT, comments heard throughout the TI User Group world are things like, "Never knew my printer could do that!" PRINTIT came along with "a ton 'a stuff", graphic and character definitions and it's own script character set. WOW! Now there's a disk full of fonts for PRINTIT called PRINTIT+. That should keep you busy for a while. No wonder J. Peter Hoddie described PRINTIT as the Fairware alternative to FONT WRITER (and we all know how great FONT WRITER is.) With all the great things coming from Peter, he can't be wrong.

The reason we are discussing PRINTIT is to set the proper atmosphere for his latest treasure called BINGO. A simple name, but not just a simple program. Used for the raffle giveaway by at least two User Groups, the L. A. 99er's, and the Tri-Valley 99er's, Rodger really has done it again with BINGO. The only BINGO program for the TI that I was aware of was what TI attempted way back in 1980. Rodger has really brought the game up for us with BINGO's ability to screen dump BINGO boards in two sizes, AND screen dump the winning BINGO board after the game, utilize the Speech Synthesizer to call out the numbers, and even give the winning player an ovation (guitar not included). Two random BINGO boards are also displayed on the screen and automatically marked for you so you may even play the game between two people without the need to print out any boards! Thanks Rodger, what's next?

For all of you with a need to have your own custom LOAD programs, a demo was presented by yours truly. Having written a few "LOAD"s of my own, I was eager to share with all, the options one has besides having to write a LOAD program for yourself. There are as many different type of LOAD programs as there are different

Triton Turbo Time

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by Doug Moore, LA 99ers

I have had my Triton Turbo XT (a machine to "make the IBM connection to your TI-99/4A") for about six weeks. During the 30 day money-back-guarantee period, there were times when I thought I might ship it back. But I finally decided, with friendly help from Triton's toll free number, that I had checked everything out and that the machine was worth keeping. My first disappointment occurred when I first powered up in the XT mode and my TI color monitor showed a black screen with barely legible white print. It turns out that although the XT comes with an RGB/composite color graphics display adapter, you

programming techniques, but most of them fall into three main categories. First there are LOAD programs which are already written, you only need to alter a few program lines to customize them. Second there are programs that read a disk catalog, displaying the programs on the screen, and will load and run them at the touch of a key. Okay, as long as your disk... isn't too full, not much fun to scroll through page after page of program names to get to the program you want, or doesn't contain program types not designed to load through the type of LOAD program used. (Ever try to load a A/L program image file from an Extended BASIC program loader thinking it was XB?) And finally there are programs that read a disk catalog (nothing new so far) but actually WRITE the LOAD program for you! Some even give you other options to further customize the program it will write for you. You gotta' see it to believe it! My Extended BASIC program loader, along with LOADMAKER, and MENUBUILDER will be in the library by the August meeting. I hope to see BINGO there too.

Just got back from Las Vegas where I spent an evening with John Martin, President of S.N.U.G., the Southern Nevada User Group. Got a real close up look at the 9640. Yikes, what a machine! John took some time and showed me some of the special features of My-Word, the 9640 word processor. The Editor and Formatter are integrated, which means there is no need to swap from program to program. You get a full 80 column display, and it is very readable I might add. And you have the ability to, get ready for this, go to the Formatter, select the BUFFER as the input file, and select the SCREEN as the output file. This will allow you to see the Formatted output of your file on the screen, in 80 columns, before you sent it to your printer for a hard copy!

John, sorry for not calling you on Friday, I hope your wife had a very Happy Birthday. I know it isn't a very good excuse, but I had a slot machine follow me back to my room. Next stop...

can only get black and white on the TI color monitor. And the resolution on the TI monitor isn't good enough for the 80-column format. It was clear at the start then, that if I were going to keep the XT, I would want to buy a new monitor. So, O.K., I ordered Triton's Magnavox 13" RGB/composite Color Monitor (which hasn't arrived yet).

My next shock was to find that when I turned on the TI PE Box, the computer locked up! After several days of trying suggestions from Triton and blind experiments of my own, it occurred to me that the trouble might be from the

MYARC expansion card in the PE box. That was it! I then found a setting for the five DIP switches on the BRIDGE BOX (that connects the XT to the TI console) which would permit the PE Box and Computer to run with the MYARC card inserted. I gave Triton this information about the DIP switch setting.

I had ordered Triton's "Exclusive System Support Software Package." With that I had two ways of getting into MS DOS, through the SOFTWARE PACKAGE, or DIRECTLY using another System Disk that comes with the XT. When I tried going into MS DOS DIRECTLY and pressed letters on the keyboard, a strange code appeared on the TI Color Monitor screen (I still have no idea what that code is, but I found out how to avoid it, or get it again.) When I went into MS DOS through the Software Package, this strange code never appeared. The solution to this frustration was that there are two jacks on the back of the XT labeled XT VIDEO, one for black and white and one for monochrome or color monitors; when going into MS DOS through the SOFTWARE PACKAGE, it doesn't matter which jack you use. But when you go into MS DOS DIRECTLY, use the black and white jack, or you get this strange code. This problem will probably not occur with the new

monitor.

When the RS232 cable from the TI to the printer and the parallel cable from the XT to the printer are connected at the same time, you can still use the parallel cable, but the RS232 cable sends garbage to the printer. Simple solution--turn off the XT when you want to use the RS232 cable. Then it works as usual. It is apparently O.K. to turn off the XT when you're in the 4A mode, and turn it back on again when you want to go back to the XT mode.

There were other little difficulties due to my inexperience that Triton helped me with, such as my thinking that making something memory-resident was the same thing as saving it to disk. But why did I buy the TURBO XT in the first place? Because I wanted to be able to run IBM programs and become knowledgeable about the IBM PC, because I still wanted to use my TI 99/4A, and because I didn't want casual visitors to see two complete computer systems on my desk--the XT and 4A share the monitor, the printer, and the keyboard.

At the moment, I am pleased with my purchase. Are there any more Turbo trainees out there?

Super Extended Basic - A Review

by Ron Albright

When Miller's Graphics became simply "MG" and invented the MG/Triton Bridge Box for an XT-clone (a box that allows the TI console to control the hardware of an IBM-clone), many in the TI community lamented that one of our real ingenious people had gone the way of the "Big Blue" mentality. With the appearance of the latest offering from MG called "Super Extended Basic", those worries have been, at least partially, denied. The name of the product is no misnomer. This is, truly, what Extended Basic should have been from TI, but I am sure they didn't have the creativity to put it together. MG and its stable of elite programmers did.

Based on the work done by Mike Dodd of Knoxville, TN and Danny Michael of Muscle Shoals, AL with the incredible (and now extinct, thanks to the trade fights and rising chip prices) "Gram Kracker", the new software is a hybrid - all the compatibility of all the XB programs PLUS an incredible new array of enhancements. From "cutesy" stuff (like CALL CHIMES, and CALL HONK) to the indispensable (CALL CLOCK, MOVE and COPY), this new plug-in-and-run cartridge is an important upgrade to the XB programmer. Even with these enhancements, it would be a major upgrade in what is still the most popular programming language for the TI, but there is more. How about the "Draw 'n Plot" routines from Quality 99 Software? When you have the cartridge plugged and do a CALL FILES(2), NEW, CALL INIT, and CALL DRAWPLOT, 6K of tight code is sucked out of the module and into Low Memory Expansion. The 15 subroutines thus added to the XB environment can be used for some remarkable hi-resolution plotting, and graphing, and saving to disk as well as duaping to your printer. You can even control the graphics with joystick or trackball. Circles,

squares and lines are drawn easily straight from the XB environment - that is, from YOUR program. Further, with the CALL LINK("EDIT") command, you can directly edit, pixel by pixel, the drawing area using your joystick. Amazing stuff for sure. The art work you produce can, in turn, be called up and displayed from your XB programs (with a few restrictions) as well.

This is a tremendous addition to the XB programmer's toolbox. Combine this with Tigercub Software's Nuts and Bolts I, II, and III (156 Collingwood Avenue, Columbus, OH 43213), and anybody, and I mean ANYBODY (HEY! Yeah, I am talking to you!), can churn out some terrific code. This product is sold mail order through Triton (1-800-227-6900) and, I have been told, by Tex-Coop (818-993-5606) as well. Retail price is \$59.95 plus shipping. It is a real programmer's delight - enough to make even me (a.k.a. "technoklutz" as well as "programoklutz") burp out a several line ditty with some neat graphics. Amazing, how things keep getting better and better for us despite the rigors of the Orphanage. The bowls we use may be a bit cracked and the spoons a bit tarnished from age, but this ain't gruel we're eating, folks!

Thanks to Tom and Terrie and the LA 99ers for letting me drop by again. What a group! Love to write for and be among the core staff of writer's this publication has pulled together. The best from across the country (Howie Rosenberg, Mike Dodd, Barry Traver) have joined the genius of Tom and George Steffen and the other LA locals to make this a truly national publication. Great job guys! Thanks for having me.

Did you know that...?

by Chick De Marti



GEMS FROM KEN HAMAI
of the Riverside U.G.

No sound on your T.V.? Simply attach a Radio Shack "ARCHER MINI AMPLIFIER #3A6" to the white lead of your TI-Vidio/sound cable.

Instead of having 6 to 8 Fctn strips taped to your console, put two (2) of them, back to back (taped with clear plastic tape) and keep your two favorites in the channel TI made for them.

(Thank again Ken...)

<*><*><*><*><*><*><*>

WHEN WAS THE LAST TIME YOU USED ONE OF THESE

CALL_PEEK

A random number 0 to 99 (intergers only)

```
100 RANDOMIZE :: CALL PEEK(-31880,A)
```

NOTE--> A+1= 1 TO 100

Or how about:

-31879 increments itself every 1/16 of a Sec.
Used...

```
100 CALL PEEK(-31879,A):: IF
A<60 THEN DISPLAY AT(5,20):A
:: GOTD 100
110 FOR I=1 TO 5 :: DISPLAY
AT(10,10):" " :: DISPLAY AT(1
0,10):"TIME IS UP":: NEXT I
```

and instead of "END" have you tried...

```
800 CALL INIT :: CALL PEEK(2
,A,B):: CALL LOAD(-31804,A,B)
```

Your program will END by automatically return ing to MASTER TITLE SCREEN.

NOTE--> The above ideas require XBasix and memory expansion.

TI-WRITER Comment

Thank to JANE LAFLAMME of the OTTAWA U.G.

When using TI-WRITER, we've all become accustomed to .CO as a line of comment, however, ... "the formatter disregards all text after a (leading) period. The .CO is optional!"

(You programmers could use your distinctive astrisks to label a comment line. ie. ***** COMMENTARY ***** Chick)

<*><*><*><*><*><*><*>

PROGRAMMING HINTS

From BUG-BYTES of the Brisbane U.G.

If coloured graphics on a black screen look pale or colourless, try this:

```
100 CALL CLEAR
110 CALL COLOR(1,2,2)
120 CALL SCREEN(16)
130 CALL VCHAR(1,31,1,96)
140 FOR D=1 TO 900 :: NEXT D
```

The same trick will give you a professional looking bordered screen for your text:

```
100 CALL CLEAR
110 CALL SCREEN(5)
120 CALL VCHAR(1,31,1,96)
130 FOR SET=1 TO 12
140 CALL COLOR(SET,2,16)
150 NEXT SET
```

Now put your text on the screen with a blank on the 1st and 28th column of each line. The border is not affected by scrolling, but is erased with CALL CLEAR, so use CALL VCHAR(1, 3,32,672) instead.

NOTE--> To get the computer to hold 24 lines of text on the screen, put a semi-colon at the end of the 24th line.

<*><*><*><*><*><*><*>



(Did You Know ... cont.)

CALL WAITING AND MODEMS
from SNUGLETer U.G.

(Depending on which telephone Co. you have)

USING A MODEM ON A PHONE LINE THAT HAS CALL WAITING CAN CAUSE AN INTERRUPTION IN CARRIER TONE IF ONE RECEIVES AN INCOMING CALL. IF ONE ALSO HAS CALL FORWARDING AND WISHES TO USE A MODEM FOR OUTGOING CALLS, DO AS FOLLOWS.

- STEP 1: PICK UP RECEIVER AND DIAL 72
- STEP 2: WAIT FOR SECOND DIAL TONE
- STEP 3: DIAL YOUR OWN NUMBER
- STEP 4: YOU SHOULD GET A BUSY SIGNAL
- STEP 5: HANG UP
- STEP 6: LIFT RECEIVER WHEN YOUR PHONE RINGS
- STEP 7: HANG UP
- STEP 8: WITHIN TWO MINUTES REPEAT STEPS 1, 2, AND 3
- STEP 9: LISTEN FOR TWO SHORT TONES
- STEP 10: HANG UP

YOU CAN NOW MAKE OUTGOING CALLS WITHOUT BEING NOTIFIED OF AN INCOMING CALL, (CALL WAITING), AND THUS HAVE NO INTERRUPTION IN CARRIER TONE.

WARNING::::::::::SINCE NO ONE CAN NOW CALL YOU, YOU SHOULD CANCEL THIS FEATURE BY DIALING 73 AFTER USING YOUR MODEM FOR OUTGOING CALLS.

<*><*><*><*><*><*><*>

TI_SOUNDS
by P. Bruce

(Reprinted from MSP 99er...who reprinted it from Tasmanian TI U.G.)

The noises -4 and -8 vary the tone of the third tone specified in a sound statement. I have noticed that by use of -4 and -8, any noise can be created. Where -4 can create noises -1, -2, and -3 and where -8 can create noises -5, -6, and -7. The following program demonstrates this by using 129 different noises created by -4 to form the sound of an aeroplane taking off.

```

100 FOR T=110 TO 4000 STEP 30
110 CALL SOUND(-100,110,30,1
10,30,T,30,-4,0)
120 NEXT T
130 CALL SOUND(-100,110,30,1

```

Hence 89246 noises (not tones) are available on the TI, and you can hear them all. None are out of range of hearing. 44623 of the noises are generated by -4 and another 44623 are generated by -8.

<*><*><*><*><*><*><*>

Here are some interesting codes that I ran across this month:

```
IF N/2=INT(N/2) THEN PRINT...
```

This code has been around a long time. It let's you know if N is even or not. But try this one. It accomplishes same thing, but runs faster.

```
IF NOT N AND 1 THEN PRINT...
```

(*)(*)(*)(*)(*)

The code IF X THEN really means:

```
IF X<>0 THEN
```

With this logic we can come up with a neat flag toggle.

```
IF X THEN X=0 ELSE X=1
```

<*><*><*><*><*><*><*>

NOTE TO NEWSLETTER EDITORS

Most of us include an invitation in our newsletter that goes something like this: "Feel free to recopy any article...etc," and this we all do frequently. But please while a yellow newsletter may look fine, it is difficult to photocopy without getting a grey background. Chick

<*><*><*><*><*><*><*>

If you have a synthesizer try this:

```
CALL SAY("R+U+#+")
```

Well, I'm out of coffee. See you next month
Chick

DISK DIRECTORY

README

This letter was downloaded by Danny Nelson, who in turn, brought it to my attention. I present it to you. Read it, make up your mind, and do whatever steps you feel are necessary. CHick

3329 - Message 3329 Subject: continued
From: Stu Olson (Sysop) | Date: 06/11/87
--*-*-*

Virtually every letter has a comment of some type in it. Some of them are quite complementary, many of them just about what M/T can not do. What erks me worse is that the people DO NOT READ the docs. About 40% of the "I wish M/T had" features are already in it...they are just too lazy to open the docs and read up on what is available. In my opinion, releasing Ymodem was maybe the biggest mistake I incorporated into M.T. I have received a lot of "why did or didn't you do it this way" comments. Gee....until I wrote it, most of the TI community did not even know another protocol existed besides Xmodem and TEII. I thought it would be fairly well accepted. Now, I get about 20 complaints every couple of weeks about not being able to use Ymodem on a BBS. Gee, doesn't anyone ever do file transfers to other people any longer, or is it that they can only communicate to a BBS file? Maybe I expected too much from the TI population overall. This much I can say, I have been lied to more times than I can count, and from people I have known for several years...."I am going to send you \$10 this weekend....the check is in the mail"...kind of stuff. I can even name users you know personally that have promised and never came through at all. I did not write M.T. so I could be rich and famous. I originally wrote it because I wanted to be able to autodial my long gone 300 baud smart modem. The first version terminal version never even had a file transfer in it. (in fact, Xmodem was not yet known to the TI computer at that time)....cont.

3330 - Message 3330 Subject: cont.
From: Stu Olson (Sysop) | Date: 06/11/87
--*-*-*

Getting back to users.....I have had the "guilt trip" ones lay the big one on me about...."well, if you really don't care about any of us, go ahead and be that way...but if you really are a human being, then why don't you" and off it goes with another suggestion. Well, I have pretty much said my piece. I have stood behind M/T for over two years now...doing update after update. I never ONCE requested a single dollar from anyone. Everyone knows it is fairware software. What gets tiring is when users send you a letter, requesting the program for "evaluation" testing. Funny thing, they do

not include a disk, mailer, postage, or any money to cover any of those expenses. Tell me, why do I have to pay money to give my program away? If I don't respond, then I am the "jerk" who can't seem to "take care" of the users who support him. Hey folks, I am not dependent on anyone, except maybe those in my own family. I have had dozens of users who have expected me to call them long distance voice so I could explain to them something that they were too lazy to read in the docs. Hey.... Ma Bell doesn't give me FREE phone bills because I write software! You see Gary...everything has piled up over the past 2 years, and I am simply tired of it. I am tired of the abuse, the phone calls, complaint letters, etc. I am GRATEFUL to those users who were considerate enough to realize how much of my time (away from my family) was put into this software. Would you believe my wife and I have had serious fights many times over on the amount of time I spend when I was into a new update on M/T?cont

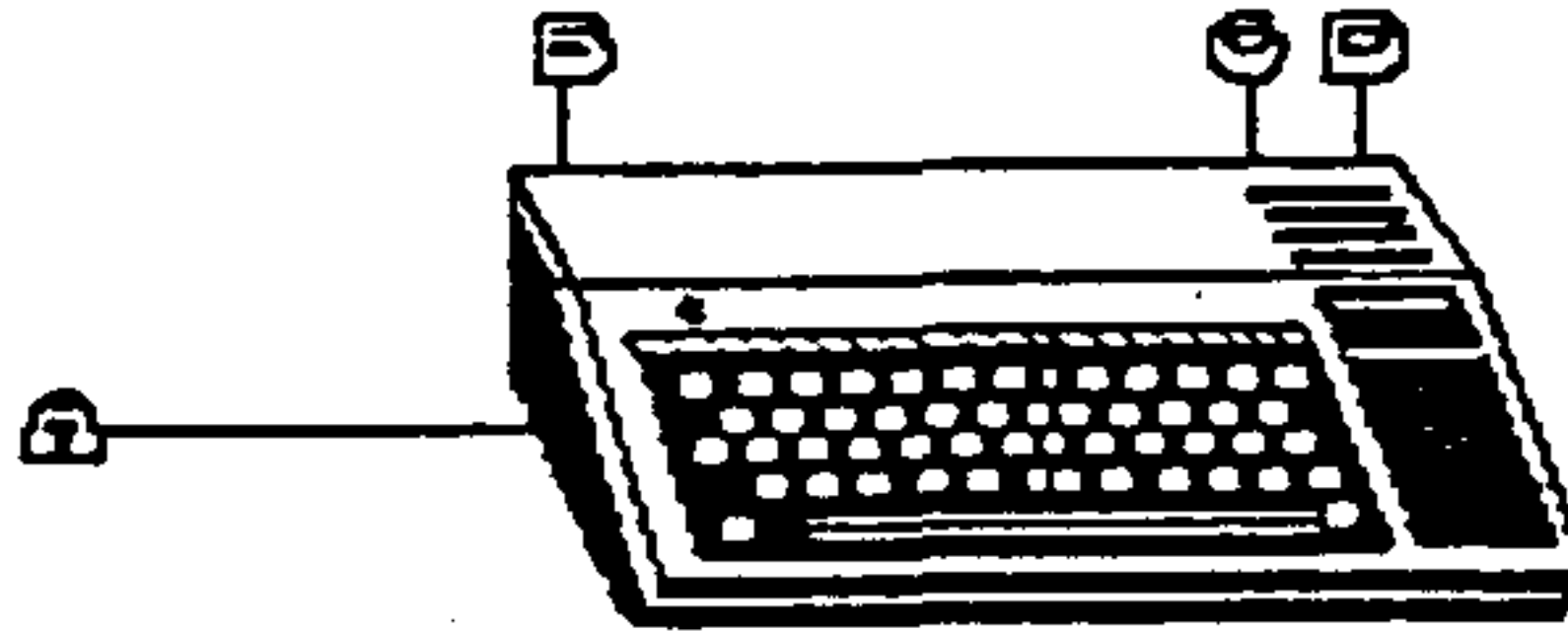
3331 - Message 3331 Subject: cont.
From: Stu Olson (Sysop) | Date: 06/11/87
--*-*-*

There are not enough \$10 checks out there that is worth my marriage. Don't get me wrong...my wife is very understanding, but when one neglects one's spouse for weeks at a time, something has to give. Version 4.2 was stretched over a much longer period of time than was needed. However, my marriage is going along just fine also. Now that I have sold my programming system, I will not have to worry about it any longer. It is not that I do not care about the TI user population, for if I did not, I would not be the V.P. of the user group here in Phx. (remember, the job pays \$0.00) At times though, the users do forget what it is like to be the programmer. I know what it is like, and I lived with it for over two years now. All I really wish to

do is just play with computers for now, not program for other people. I have found that doing that yields much more headaches than it does satisfaction. In closing...this message is not aimed at you. It is info for all the users who have been wondering why Stu doesn't seem to care anymore about M.T. Well, it is now out in the open...everyone knows why I am a retired programmer. As I said in my 4.2 update docs... it is time for a new programmer to try his/her hand at this trade, and just maybe, they will have better luck than I did. In my own words..."It has been real, and it has been nice, but it has not necessarily been really nice." catch you later.....

Editor's Note: As one who has been involved in freeware as well as attempted commercial distribution of a program I could not agree more with Stu. TI merely orphaned the computer - the pirates and the greedy users who don't even want to pay prices that are 1/10 those for software on other computers will orphan the orphans. Tom

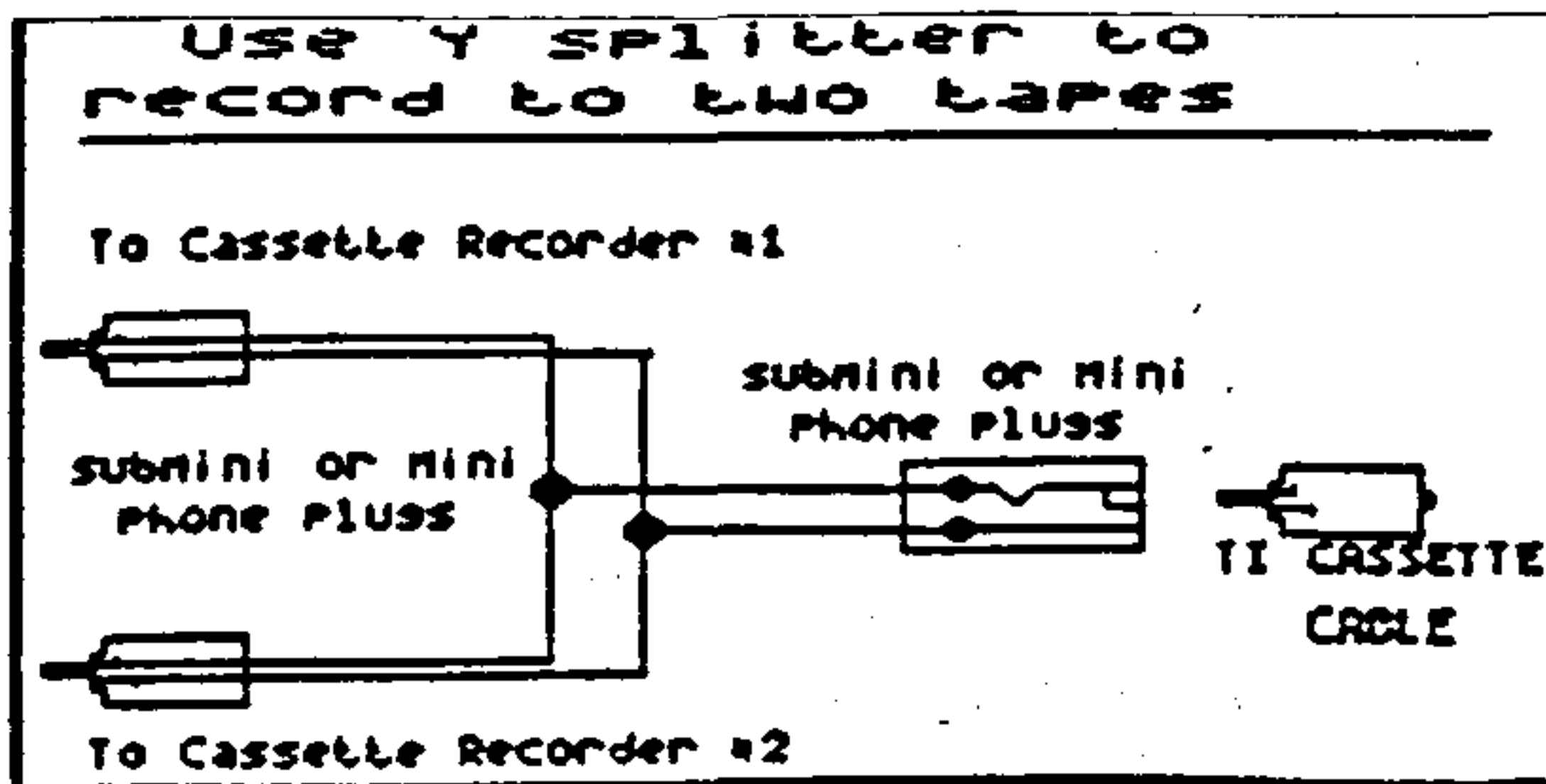
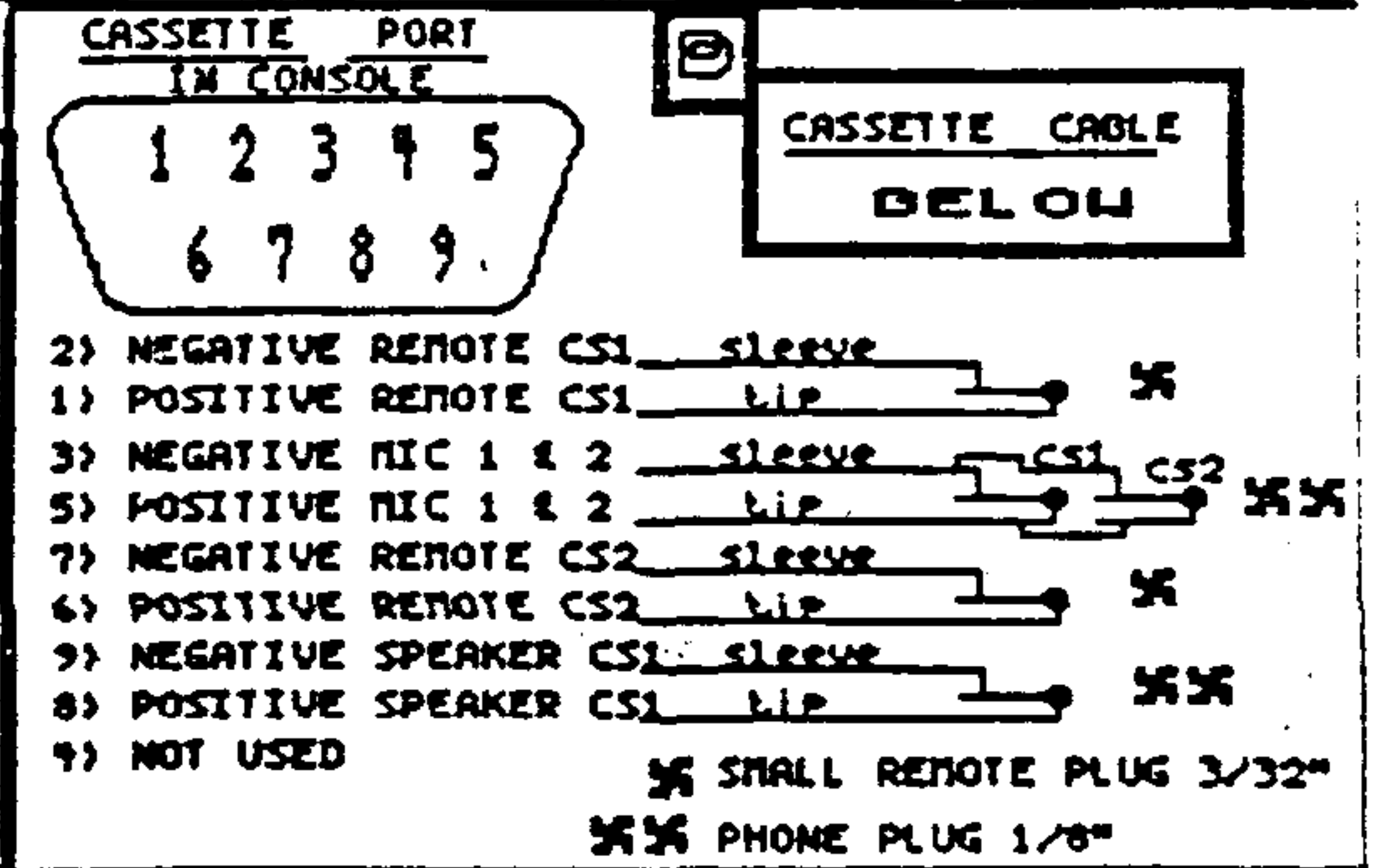
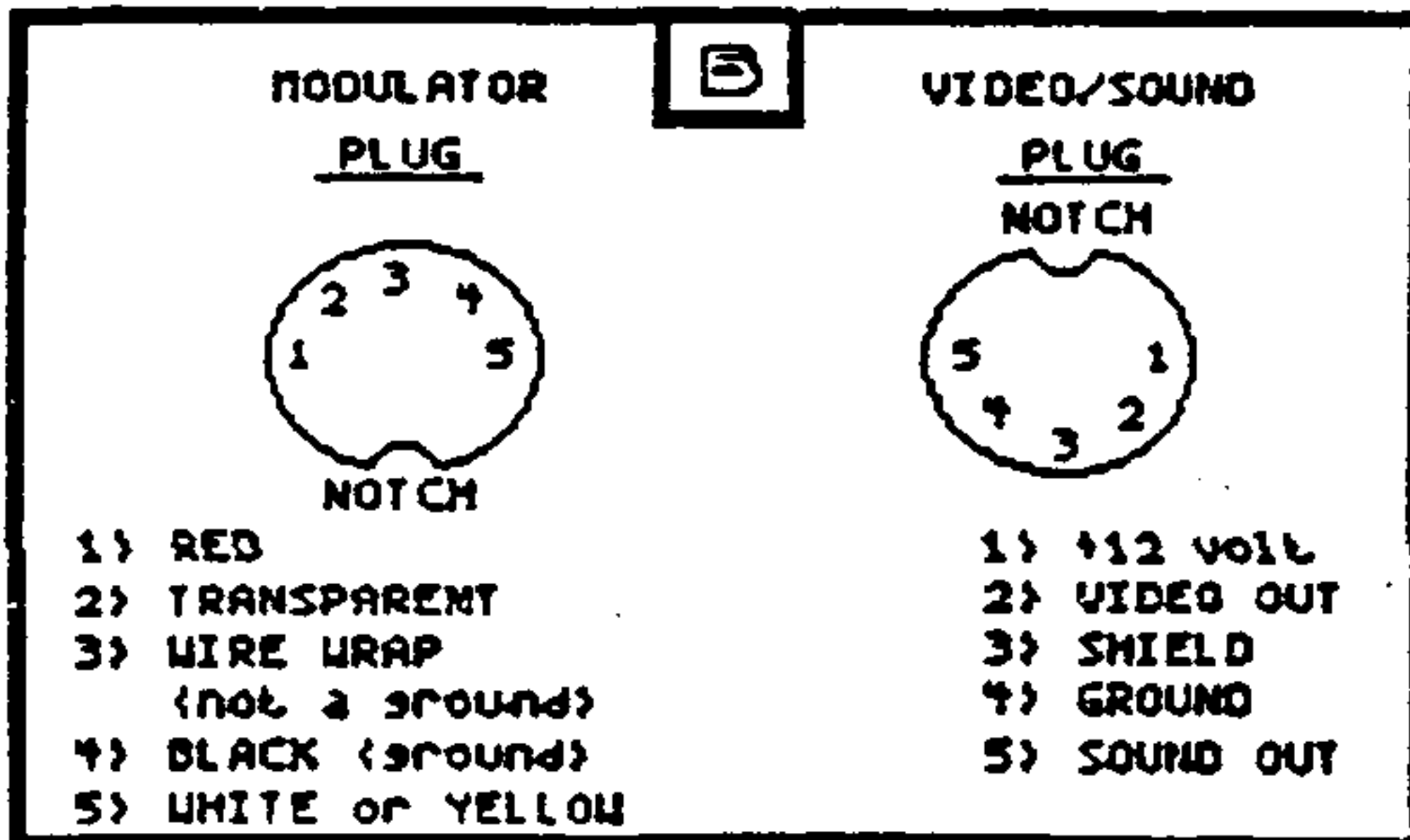
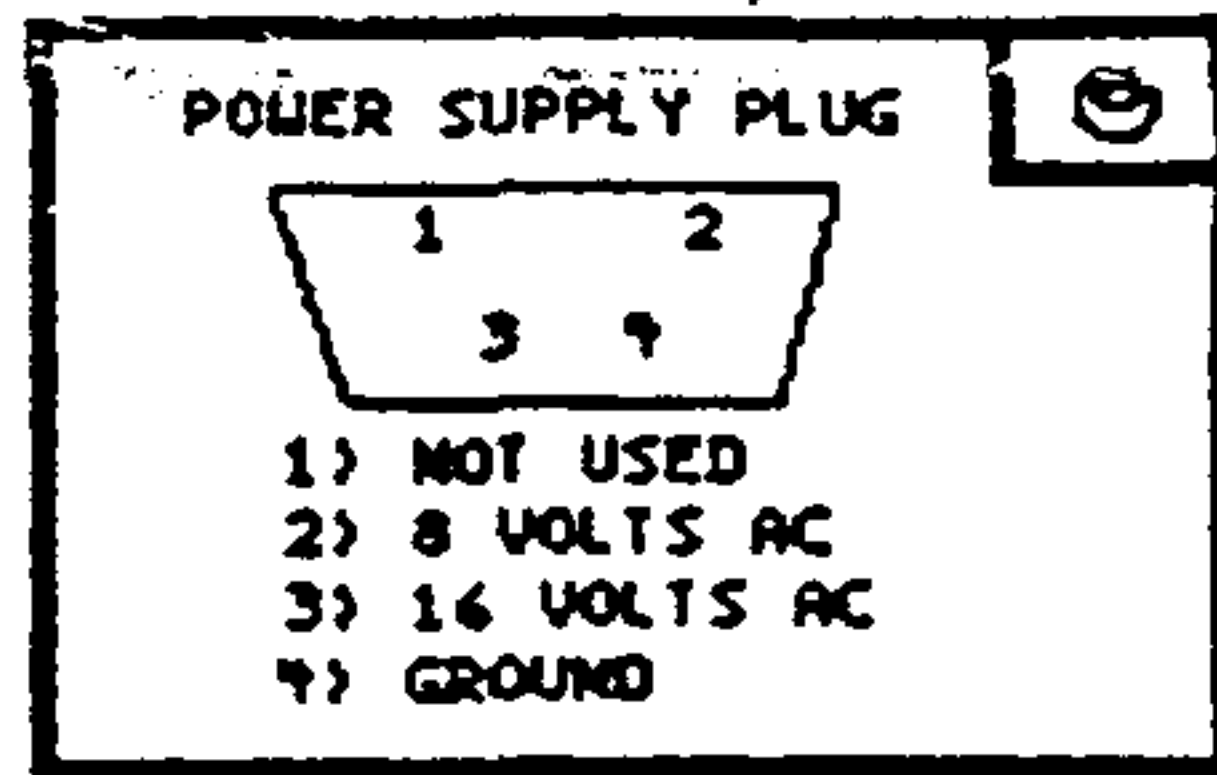
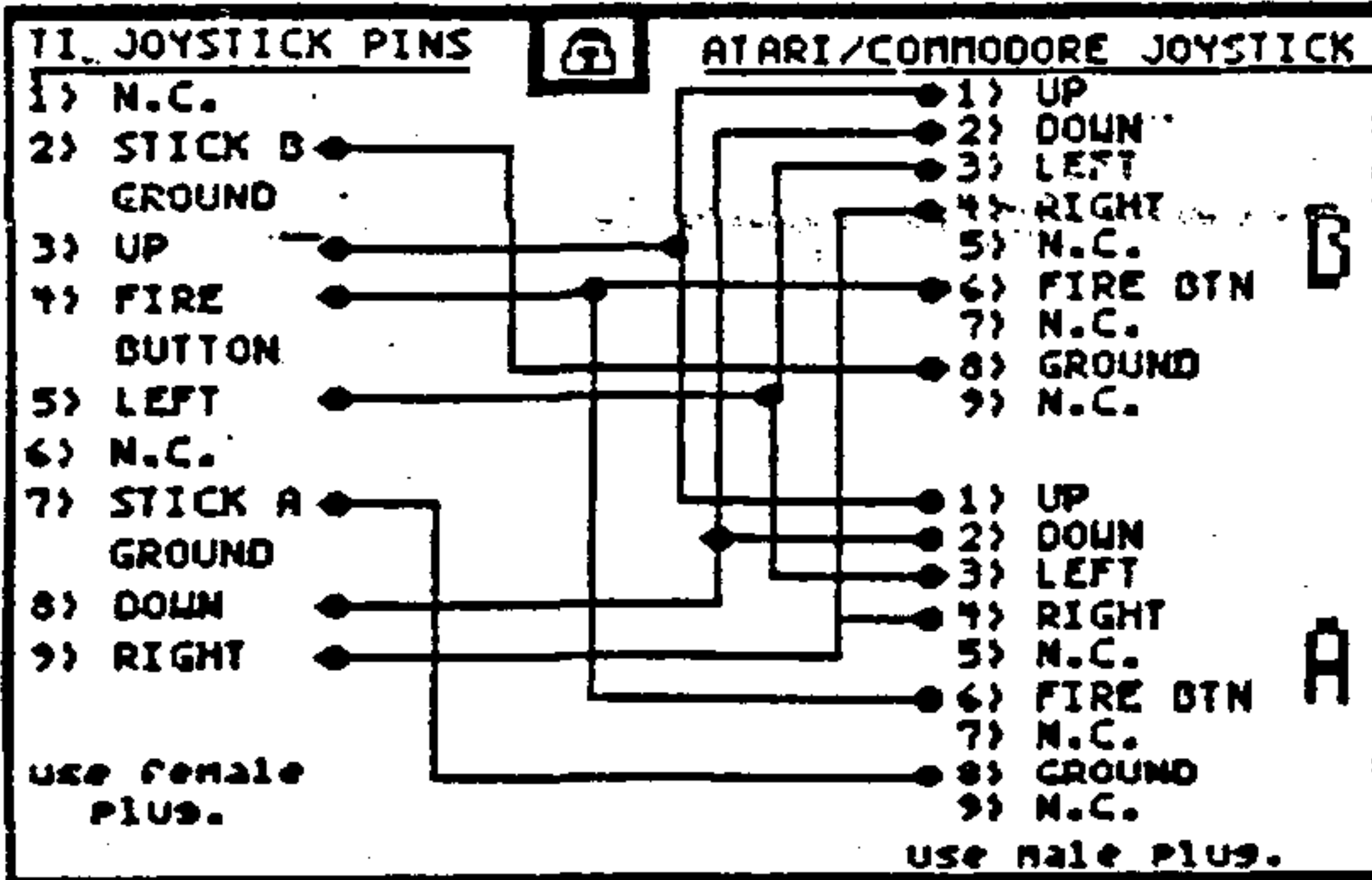
PIN ASSIGNMENTS



PIN ASSIGNMENTS APPEAR AS THEY WOULD IF YOU LOOKED DIRECTLY INTO THE PLUGS.

From:
CIN-DAY
MAY '87

FORT USER GROUP FEBRUARY, 1987



KIDS #####

W
O
R
L
D

#

* Catch It! *

This month's game is one that was from the Kansas City 99'er newsletter runs in Extended BASIC.

A THOUGHT FOR 1987

Found in the TIC TAC Newsletter...thanx.

#97730 SB/PRO News Views
31-Dec-86 15:53:42
Sb: #Thought for 1987
Fm: Roy Barte 71336,436
To: ALL

ALL I EVER NEEDED TO KNOW I LEARNED IN KINDERGARTEN ... by Robert Faughum
Kansas City Times Sept.17th 1986

Most of what I really need to know about how to live, and what to do and how to be, I learned in kindergarten. Wisdom was not at the top of the graduate school mountain but there on the sandbox at the nursery school.

These are the things I learned:

- Share everything.
- Play fair.
- Don't hit people.
- Put things back where you found them.
- Clean up your own mess.
- Don't take things that aren't yours.
- Say your sorry when you hurt somebody.
- Wash your hands before you eat.
- Flush
- Warm cookies and cold milk are good for you.
- Live a balanced life.
- Learn some and think some and draw and paint and sing sand dance and play and work every day some.
- Take a nap every afternoon.
- When you go into the world, watch for traffic, hold hands and stick together.
- Be aware of wonder.

Remember the little seed in the plastic cup. The roots go down and the plants go up, and nobody really knows how or why, but we are all like that.

UPLOADED TO THE COMPUSERVE TI FORUM

===== THANX, I NEEDED THAT =====

```

100 ! CATCH IT*
110 ! FAMILY COMPUTING
120 ! FEBRUARY 1987
130 ! TRANSLATED BY W. BLOOD
160 CALL CLEAR :: FOR T=1 TO
12 :: CALL COLOR(T,16,1)::
NEXT T :: CALL SCREEN(5)170
A$="" :: C$=CHR$(32):: DN$=
"X" :: UP$="E" :: M1$=C$&C$
:: F$=RPT$("F",16)
180 CALL CHAR(136,F$&"FF7F3F
1F0F070301FF0000000000000000
"):: CALL COLOR(14,7,1)
190 CALL CHARPAT(73,E$,84,B$
):: CALL CHAR(128,E$&B$&F$):
: CALL COLOR(13,11,1):: I$=C
HR$(128)&CHR$(129)
200 P$=CHR$(138)&CHR$(138)&C
HR$(137)&CHR$(136):: M2$=M1$
&M1$
220 DISPLAY AT(2,3)ERASE ALL
:"Welcome to CATCH IT!"
230 DISPLAY AT(4,1):"Use the
<"UP$;"> and <"DN$;"> key
s"
240 DISPLAY AT(5,2):"to move
your ";CHR$(34);"catcher";C
HR$(34)
250 DISPLAY AT(6,6):"up and
down."
260 DISPLAY AT(8,1):"The goa
l is to catch "&CHR$(34)&I$&
CHR$(34)
270 DISPLAY AT(9,1):"before
it hits the right"
280 DISPLAY AT(10,1):"border
of the screen."
290 DISPLAY AT(12,1):"Please
select the level"
300 DISPLAY AT(13,1):"of dif
ficulty you prefer."
310 DISPLAY AT(15,1):"Would
you like"
320 DISPLAY AT(17,1):"(1) ea
sy,"(2) moderate, or"
330 DISPLAY AT(19,1):"(3) ha
rd?::" )"
340 ACCEPT AT(21,5)BEEP SIZE
(1)VALIDATE("123"):K$
350 DD=VAL(K$)*.5
360 RD=1 :: SC=0
380 DISPLAY AT(11,9)ERASE AL
L:"Get Ready!"
400 FOR DE=1 TO 1000 :: NEXT
DE :: CALL CLEAR
410 CALL HCHAR(3,3,130,28)
420 CALL HCHAR(23,3,130,28)
430 CALL HCHAR(2,2,136,30)
440 CALL HCHAR(24,2,136,30)
450 CALL VCHAR(2,31,136,30)
460 CALL VCHAR(2,2,136,23)
470 CALL VCHAR(3,3,130,21)
480 CALL VCHAR(3,30,130,21)
490 DISPLAY AT(1,1):"Round:"
;RD
500 DISPLAY AT(1,13):"Score:
";SC
510 X=10 :: SA=4
520 Y=4 :: Z=INT(RND*16)+4 :
; SA=SA-(SA<100)
530 DISPLAY AT(X,24)SIZE(4):
P$
550 H1=Z :: HY=Y :: RANDOMIZ
E :: N=RND :: IF Y=22 THEN 6
90
560 Z=Z+DD*(N>.5)-(N<.5))
570 Y=Y+1 :: Z=Z-DD*(Z<4)-(
Z>22))
580 DISPLAY AT(H1,HY)SIZE(2)
;N1$
590 DISPLAY AT(Z,Y)SIZE(2):I
$
610 CALL KEY(5,K,S):: IF S=0
THEN 550
620 K$=CHR$(K)
630 IF K$<>UP$ AND K$<>DN$ T
HEN 550
640 H2=X :: X=X-(K$=DN$)+(K$
=UP$)
650 Y=Y-(X<4)+(X>20)
660 DISPLAY AT(H2,24)SIZE(4)
;M2$
670 DISPLAY AT(X,24)SIZE(4):
P$ :: GOTO 550
690 DISPLAY AT(H1,HY)SIZE(2)
;N1$
700 IF Z-X>2.5 OR Z-X<0 THEN
Y=Y+2 :: GOTO 810
720 DISPLAY AT(Z,23)SIZE(1):
A$
730 FOR T=5 TO 5A
740 CALL COLOR(2,RND*10+6,RN
D*5+1)
750 CALL SOUND(250,T*25+110,
0):: SC=SC+10*DD
760 DISPLAY AT(1,19):SC :: N
EXT T
770 CALL COLOR(2,16,1)
780 DISPLAY AT(Z,23)SIZE(1):
C$
790 FOR DE=1 TO 200 :: NEXT
DE :: GOTO 520
810 HY=Y :: Y=Y+.5 :: DISPLA
Y AT(Z,Y)SIZE(2):I$
820 DISPLAY AT(Z,HY)SIZE(2):
M1$ :: IF Y>26 THEN 810
840 RD=RD+1 :: IF RD<4 THEN
380
860 DISPLAY AT(8,5)ERASE ALL
:"Sorry, you, missed "&CHR$(
34)&I$&CHR$(34)
870 DISPLAY AT(10,9):"Three
times!"
880 DISPLAY AT(12,1):"Your s
core was";SC;"points."
890 DISPLAY AT(15,1):"Would
you like to"
900 DISPLAY AT(17,1):"(1) pl
ay again;" at the same l
evel."
910 DISPLAY AT(19,1):"(2) se
lect a new level, or"
920 DISPLAY AT(20,1):"(3) qu
it/return to BASIC?"
930 DISPLAY AT(22,1):"Enter
your choice."
940 DISPLAY AT(24,3):" )"
950 ACCEPT AT(24,5)BEEP SIZE
(1)VALIDATE("123"):K$
960 IF K$="3" THEN CALL CLEA
R :: END
970 IF K$="2" THEN CALL CLEA
R :: GOTO 290
980 GOTO 360

```

Word Play

=====

From The Disk Of... #5

by Mike Dodd, LA 99ers

Beware... of the dreaded "Trojan Horse" programs. These are programs that are designed to destroy data on your disks, or destroy disk drives. They have been around for the PC/XT/AT computers for ages, but are just now starting to hit the TI community. These programs usually come under the guise of a disk-access program, such as a track-copier or a sector or track editor program. (One could argue that if a supposed track copier eats your disks, that's what you deserve, but I won't get into that.) You can sometimes identify these programs by the fact that they often instruct you to remove the write protect sticker from the disk. If they ask you to do this, insert a garbage disk and keep your finger near the off switch. There is no reason what-so-ever that a program will require you to remove the write protect switch unless it is going to write to the disk. If a program says it reads only, then tells you to remove the write protect sticker, it's a killer program. Some, however, won't tell you to remove the write protect - they'll eat it if it's unprotected, and do nothing if it is. These programs also will often rapidly step your drives back and forth and attempt to slam the heads against the casing of the drive (it can be done, I assure you - I've done it myself at times). Needless to say, this isn't especially helpful for your disk drives, especially if the program does it rapidly at a fast step rate. So, as a general rule, for the first time you run a program, run it on a garbage disk. And be ready with that off switch! I have never been bitten by a Trojan Horse program, and if I can learn to follow my own advice (ha!), maybe I can keep that record.

Assembly shortcuts... here's another way to do more with less in assembly language. Often programmers will need to move a byte from the Most Significant Byte (MSBy) to the Least Significant Byte (LSBy), while setting the MSBy to >00. I have seen several methods of doing this, such as:

```
H00 BYTE >00
SWPB R0
MOVB @H00,R0
```

or, shorter:

```
SWPB R0
SB R0,R0
```

But the shortest and fastest way is:

```
SRL R0,8
```

If you look at your manual, you will see that SRL, Shift Right Logical, shifts a word a specified number of positions (in this case, 8) and fills the vacated positions with 0.

Another way to save bytes is in the method commonly used to return to the GPL interpreter from assembly language. The most frequent method used is:

```
LWPI >83E0 load GPL workspace
CLR @>837C clear the GPL status byte
B @>0070 go to the GPL interpreter
```

That's what TI said to do in the Editor / Assembler manual. However, you can eliminate the CLR @>837C

instruction, and change B @>0070 to B @>006A. The instruction at >006A clears the EQ bit in the GPL status register, which is all you really need to clear to prevent any unfounded errors.

Speaking of CLR @>837C... many programmers believe (as TI instructed in the E/A manual) that you must never touch >837D. Thus, when they clear the status byte, they always use MOV B @>837C, or, worse, SB @>837C,@>837C. All you need is CLR @>837C. It doesn't matter what >837D is - it is used only for temporary storage. By the way, you don't need to clear @>837C before DSR, GPL, or XML calls. I have seen many programs where the author Cleared @>837C before every DSRLNK, GPLLNK, and XMLLNK. Not needed - the DSR and XML routines couldn't care less, and GPLLNK clears it itself.

GRAM Kracker... I am working on a GRAM Kracker disk utility disk that I hope to release later this year. I plan for the disk to include modifications to Extended BASIC, the operating system, and any other cartridges I happen to change. The XB changes will include many additional key presses and CALLs. Currently, there is a bit over 1K left in XB - and you can do a LDT in 1K with GPL. The reason for the wait is user input - I want as much as possible on these changes. If you've thought of any changes you would like to see for any of the cartridges (or the operating system), please call or write me - Mike Dodd, 116 Richards Drive, Oliver Springs, TN 37840, (615)435-1667. I want to have this disk out by November at the absolute latest, so please let me know your suggestions as soon as possible. If I don't get some ideas on this disk, it may never be released. I do not personally consider it worth releasing in its current state.

Explorer... the unprotected version, as released by ByteMaster Computer Services, has a minor bug in it. It doesn't correctly write to GRAM - it writes to the byte previous to that of the one you wanted to modify. The 6K, if you will recall, came with a program to patch the Explorer to write to GRAM, but that was for the protected version. The unprotected version requires a different approach. Load up a sector editor (i.e. Advanced Diagnostics or DSKJ, my two favorites). Determine the start sector of the first program image file (either EXP or EXP1, depending on which version you're changing). Add 30 to that, so that you are editing the 31st sector. At byte 0 you will see the hex digits 0600, which is the object code for DEC R0. Change it to NOP, which means "don't do anything". To do that, change the 0600 to 1000. That's all it takes! I haven't tried to fix the DIS/FIX 80 object files, but it should be easy enough. The code in that section reads MOV R14,R0; DEC R0; BL @addr. (The address that is called will vary depending on the version). Fortunately, that code is not duplicated anywhere else in the program. The object code for that is >C00E >0600 >06A0. Again, you will need to change the DEC R0 (>0600) to NOP (>1000).

Understanding the Modem...

by Danny Nelson, LA 99ers

Your club now has two "BULLETIN BOARD SERVICES." One in Los Angeles & one in Norwalk, Calif. They are about 25 miles apart, but for the most part they will be the same. The reason for the placement was to give the members, easier access and fewer toll zones.

Ok... A modem is an electronic device that allows your computer or terminal to communicate with other computers or terminals using standard telephone lines. In order for computers or terminals to communicate with one another, they have to be "speaking in a language each computer understands. And in order for phone lines to carry that language, the electronic signal coming out of the computer must be transformed into the format used by the telephone system.

In the process of shopping for the modem, you may have heard a lot of strange terms used to describe what makes computers speak to one another using modems. These terms include baud rate, handshaking, auto-redial, etc. To explain what these words mean and the process of microcomputer communication (in English), the following story may help.....

Suppose you were the very first person to pick up a telephone set and try to make a call to someone. In order to make that call, you would, of course, require the telephone set, something to connect the telephone to (telephone line), a phone number to initiate a call, equipment at the other end of the line for the other party to use, and another person to answer the call and carry half of the conversation.

Let's say you get all these pieces of hardware connected and pick up the phone to make that historic first call. After you hear the dial tone, you tap in the phone number of the person you want to call and wait for a signal that the connection has been completed. Almost at once, the phone at your partner's place is ringing. Your partner picks up the phone but, instead of acknowledging your call with a "Hello," your partner throws in a new wrinkle and answers "Bon Jour." You find yourself facing the dilemma of communicating in the same language.

This little story illustrates both what your modem does and what you need to consider prior to beginning microcomputer communication. When you want computers instead of human beings to converse, you start with a modem, which serves the same basic purposes as the telephone in our story. The modem takes the words spoken into it (in this case, computerized data) and translates them into a form understood and transportable by the standard telephone lines found in the U.S.

The receiving computer, that is the one you communicate with, also has a modem. The receiving computer's modem translates the words of data to a format the computer understands.

The receiving computer, that is the one you want to

communicate with, also has a modem. The receiving computer's modem translates the words of data back to a format the computer understands.

The word "modem" is actually shorthand for MODulation-DEM-odulation and this abbreviation really explains the basic technology of communications. On each end of the conversation, a modem takes the incoming digital signal from the computer and modulates it to an analog signal so that the telephone lines can carry it. At the other end, the modem demodulates the signal, converting it back to digital form for the receiving computer.

Calling up the other party using a computer and modem is very much like calling on a phone. With your modem in place, that is connected to your computer and your telephone line jack, you're almost ready to begin a conversation. To go any further, however, you'll need one more item. That critical last component is your communication software. (Fast-Term, Omega-Term, Mass-Trans etc.....)

Communications software is the set of instructions that enable computers with modems to talk to one another. There are a number of different communications software packages available. These include MASS-TRANSFER, a powerful yet easy-to-use package, well matched to the capabilities of your LA99ers BBS's.

As soon as the other computer you are calling answers the line, it sends a signal that it has answered the phone. This signal is called the carrier signal and lets each computer know the other is almost ready to start a conversation.

Immediately after the carrier signal is sent the two computers begin a process of checking each other to see if they are both able to communicate. This process of checking is called handshaking, because the two computers are shaking on the common language and basis for communication. If one modem is saying "Hello" and the other "Bon Jour," you'll need to switch the settings on one of the modems to assure clear communication. There are no right or wrong settings for microcomputer communications and modems, but it is critical that both parties have matched settings.

During handshaking, the computers are checking that each computer shares three critical elements for communication. The first is what is called BAUD RATE. Baud rate is the speed of the communication. Our board will operate at 300 and 1200 baud.

The second element in the handshaking is called DUPLEX. Duplex wants to know how the two computers will be talking; either one at a time or simultaneously. If one computer talks and then stops before the other computer speaks, that's called HALF-DUPLEX COMMUNICATION. Half-duplex is the type of communication used with CB radio. In order for you to listen to what someone else

is saying, you must stop talking. The other type of duplex is called FULL-DUPLEX. Full-duplex allows for both computers to talk at the same time without loss of data. Most microcomputer communication will be in full-duplex mode.

The third important element of communication is DATA FORMAT. Data format is a bit more technical, so for now, lets think about it as issues of proper "vocabulary" and "grammar." Before communications begins, each computer tell the other how long are the "words" it will be sending, (that's the vocabulary part), and how the words will be organized, (that's grammar). All told, data format includes checking things like:

- *Data length
- *ASCII format
- *Start and stop bits
- *Parity bits

Don't worry, your communication software and hardware will handle all these data format issues.

Once you are all properly matched up, you're ready to begin communicating. At this point, you're considered to be on-line. On-line means you're properly connected and engaged in microcomputer communications.

Usually, after you are on line, you will make one of three communications moves. You will:

* Send a "data file" from your computer to another computer (called uploading). A data file is a program, DV80 file or any other information that can be transmitted to a BBS, Computer service, a friend or club member.

* Receive a data file from another computer to your computer. (this is called Downloading). This is the reverse of the send data. If the data is listed in the Download section (on our Board, it would be [Files section]). You may download it.

* Carry on and electronic conversation with someone at another computer. That is, send message back and forth via your computer. (on our BBS, you can talk to the Systems operator (Sysop) By pressing the [C]hat. Please not after 10:00 at night.)

To complete these communication moves, you need to send specific instructions to the modem such as "set the baud rate to 300, hang up this call or send a file named PROFORM to the computer." The instructions to execute these moves, called commands, are all found in your communications software package. Most advanced software packages, such as MASS-TRANS make it easy for you to select commands by presenting you with a menu that list your options.

Next month I will try to explain in step by step instructions, "How to use your BBS with MASS-TRANS and other Terminal Emulators."

MXting you.....Danny your Sysop.

Steve Mehr's New Labeler - A Review

by Jerry Steinberg, LA 99ers

Since Steve Mehr's first program became available I have been buying everything he makes... I have done this for two reasons.. First of all because I am fond of Steve and secondly because I have found his programs to be well written, simple, and they do what they are supposed to do with a minimum of trouble.

Therefore when I heard that Databiotics was releasing his latest effort..The Mehr Labelmaker vers.3.3., I naturally bought it immediately. It turned out to be no different than all his other programs..So easy to use it doesn't even need any docs, and as usual it does the job, which in this case is that it prints labels with a choice of one, two, or three across...

It is a simple matter to set the tabs so that the printout can be whatever you wish..There are even provisions to print one of the lines emphasized and double struck if you wish.. It will print four lines plus a message line..If you should get stuck, and I hardly see how that is possible, you can press aid and get whatever help you may need.

What annoys me however is that there are a million labelers on the market and none of them including Mr. Mehr's, has all of the things that I would want in a

labeler.. I will enumerate them here and hope that some genius labelmaker will see what I mean and program an all inclusive one. Here are the things I would want in a labelmaker:

1. Changeable fonts for the printout.
2. Ability to load graphics with the text.
3. Complete control of printer codes for each line available.
4. Ability to use all label sizes available.
5. Ability to print one to three across.

Let me say that almost all of the above prerequisites are now available from many sources that will do all of these things, but they are not available in one labelmaker. When the day comes that we do have all of these in one program, there will be no need of anybody designing another labelmaker.

However, Steve has written a program that at least does some of these things, and it does them well.. It certainly is one of the better ones around and it's real easy to use.. I especially like the tab arrangement he uses..Very convenient. I shall in the future, as in the past, continue to buy Mr. Mehr's output.

99 FORTRAN from LGMA Products

A Review of First Impressions
by Ralph Landrum, HUG member

Course today San Antonio

I recently bought the LGMA 99 FORTRAN package that is advertised in the new TENEX catalog. So far I've studied the manual and compiled and linked the example programs that come with the package. It is well planned for the user. The manual is well written. It will be clear to anyone the least bit familiar with FORTRAN at any level. It is clearly meant for people who use the TI99 in XBASIC, but who want compiled versions of their programs. Assembly language programmers can also use internal TI99 subroutines and their own assembled code within the structure.

WHY FORTRAN?

FORTRAN has a conversational syntax like BASIC, and is therefore easier to use for me than A/L or C. In fact, the LGMA package is actually a combination of BASIC and FORTRAN II, being a subset of FORTRAN 77, rather than FORTRAN IV as advertised. I am familiar with (though not a trained programmer in) several forms of BASIC, FORTRAN II, and IV.

FORTRAN uses true subroutines, which I need in what I want to do with a computer. XBASIC uses true subroutines also.

FORTRAN is a compileable language. I want to be able to compile to machine language for speed. BASIC is compileable in some versions (for example IBM PC), but no one has brought out a good compiler, using true subroutines, for the TI99.

SO, FORTRAN could let me have a more familiar language, using true subroutines, but compiled for operating speed.

THE LGMA 99 FORTRAN Package

LGMA Products, Box 210, RD4, Apple-Butter Hill Road, Coopersburg, PA, 18036, is a company unknown to me. Alan L. Beard signs letters for them. Their 99 FORTRAN package was advertised in the latest TENEX catalog for \$49.95. The package comprises two disks of ver. 2.1.3, and an excellent manual.

One disk has the boot (in E/A, M/M, BASIC, or TIW); the Full-screen Editor, Optimized Compiler, Linker, Debug, and example programs. The second disk has an excellent object module library with 78 functions and subroutines, including math functions (both single and double precision), and all the graphics and sound functions of TI BASIC. Included are: CHAR, CHARPA, COLOR, DELAY, DELETE, DELSPRITE, FILES, GCHAR, HCHAR, JOYST, KEY, MAGNI, MOTION, POSITI, SCREEN, SET32, SET40, SOUND, VCHAR, WAIT.

I find the manual to be VERY well written and organized. It explains things very simply for average programmers like me, but it also goes into detail for those excellent systems programs who will want to use internal subroutines of the TI99 roms, or want to add their own assembled routines to the library. Of course, you can write FORTRAN functions and subroutines, compile them, and add them to the library. Whoever did the manual must be an expert programmer AND user.

Your system requires 32K, at least one SSSD disk drive, and E/A, TIW, XBASIC, or MM.

Remember that this FORTRAN is a SUBSET of FORTRAN 77, with a few extra features. For example, it does not support the ENTRY statement of FORTRAN 77, but it does support the DOWHILE statement from PASCAL-- NOT FORTRAN 77. It is a subset in other ways, of course, being shoehorned into a small

computer. Its program limit it 2 segments of BK each. Integer constants take 2 Bytes as do logical constants. Single-precision constants occupy 4 Bytes, while Double-precision ones occupy 8 Bytes. The author includes a section of the manual explaining various tricks of the system to save space.

IS THE PROGRAM WORTH THE MONEY?

If you are comparing the too cheap cost of the programs from Clint Pulley, and the FREE and from the heart contributions of Warran Agee, Ron Albright, and many others who gave and taught us our c99 language, then you will look at \$50 as a lot. However, because of the quality of work, the completeness, and comparison with the cost of other commercial programs, I find it reasonable.

I have not tried to program and run benchmarks against other programs, nor have I yet tested the optimizer by comparing routines like double-nested DO LOOPS compiled from source and written in assembler, but my elation in finding the system to be 77 instead of IV, the first programs I've compiled, the obvious effort of the author to make the system comparable to the XBASIC system we know with graphics and sound, and the excellent manual make me vote overwhelmingly YES, the program is more than I expected, and worth the money.

In the little time I've had to exercise the program, I find only two things I hope can be improved in future. One is to have a scale on the screen to tell me where I am on the eighty-column line. The second is to allow the LINKER program to automatically scan through more than one library disk just as it automatically iterates to let you load more than one OBJECT file. Those are not big objections ... they could just be made more convenient.

NEW ADDS LA99 LIBRARY 1

ALL DISKS ARE \$3.00 EACH

4 FOR \$10.00

Mailing cost = 2 disk for \$1.00

Two copies if all program disks will be made available to the members at the regular meetings. If you plan to obtain any disks from the library at the meeting it is best to phone or write the LIBRARIAN in advance to be sure they will be on hand. I will put your name on them.

7039 MUSIC #39 Music you can get involved with. Set own tempo, learn notes, pitch, durations, play by using joystick or keyboards, write, clef scales. BACH, MERGE, CALL SOUND, JOYSTICK MUSIC, DEMO, EAR DRILL, MUSIC MAKER, NAME THAT NOTE, PLAY SOLO, TI-ORGAN, ETC. (SSSD)255

6015 HOME #15 12 Programs for around the HOME. Help keep track of your homebudget, checkbook, telephone numbers, credit cards expenses, list of your household items, and more. CHECK PROCESSOR, CHECK BOOK BALANCE, CREDIT CARD, CREDIT CARD MANAGER, PERSONAL FILE, HOUSEHOLD BUDGET, LIST #1, LIST #2, MAIL LIST, PHONE BOOK, RECORD & LIST, TELEPHONE DIRECTOR. (SSSD)358

6016 HOME #16 12 PROGRAMS TO HELP YOU AROUND THE HOME. BASEBALL magic number, BURGULAR use the TI to alarm the home, FURNITURE arrangements, DECISIONS help make Fuzzy decision. GROCERY keep list of what is on hand, ADDRESS print name street city state zip on letter envelope, LIBRARY locate books, MAIL LIST maintain and print list/label, MPG calculate MPG on your car, PHONE/GAS create graph of elec & gas input, VIDEO keeptrack of your VCR, WORLD enter 2 city location & distance between them are shown. (SSSD)306

2086 MASS TRANSFER 4.3 Freeware by Stuart Olson 6625 W. Coolidge St. Phoenix, AZ. 85033 UP DATED PHONEMAKER FILE TO MAKE IT EASER TO USE THE AUTO DIAL FEATURE and ALLOWS YOU TO UPLOAD & DOWNLOAD TO MULTIPLE RAM DISKS. An assembly language Terminal Emulator, menu drive, X & Y Modem capable of multiple transfers all at once. 2(SSSD)(404).

8055 FRACTAL EXPLORER V2.00 Freeware by Steve Langguth - UPDATED VERSION IMPROVED OPERATION AND MORE FONTS. E/A #3 DSKx.FRACTAL- Creates multicolor fractal (unusal designs) images. 2(SSSD)471

2145 PRINT IT V3.0 /// Rodger Merritt /// 1949 Evergreen Ave. Fullerton, CA 92635, - AN UPDATED DISK Create interest letters and reports. Labels small and big, Banners, Scrip writing, Graphics, many more and excellent printer program. 2(SSSD)538

2046 UTILITY #6 8 files from Brea Users Group- CONV/TABLE (Basic,x/b) converts hex, binary, decimal. DISASSEM (Opt 3 E/A START). DISK/COPY (Opt 3 E/A). DISK/PATCH (Opt 3 E/A START) fctn [(1=hex, 2=ascii, 3=exit, 4=down, 5=begin, 6=up, 8=new, 9=menu. HEXA/DEC (b or xb) converts hex, decimal. MERGE/READ (x/b reads a file saved as merge on screen. MINI/DUMP (basic with M/M module) dumps source code. RELOCATE (basic with M/M module) relocates assembly language. (SSSD)193

NEW ADDS LA99 LIBRARY 2

2047 UTILITY #7 9 files from Brea Users Group - CALENDAR (x/b) prints an appointment calendar. CARDPYMT (x/b load-dbm) credit card payment analysis. CARDTRANS (x/b load-dbm) credit card data base manager. COLOR-TV (b x/b) program to adjust color on tv. LOAD-DBM (x/b) loads both cardpyment & cardtrans. LTR-WRITER (x/b) word processor. OFFICE (x/b) disk file memo's. OFFICE/DOC documentation for office. THETIMEMGR (x/b) build in clock. (SSSD)334.

2048 UTILITY #8 13 Files ffrom Brea User Group - CATALOG (b x/b) displays or prints out disk listing. DATA/BASE (X/B) loads mrktdata4. DISK/LABEL (x/b) prints a disk index on a large label. DISKFINDER (b x/b) use with disklist to find a file. DISKLABELS (x/b) prints a disk list on a small label. DISKLISTER (b x/b) lists all your disk indexes on one disk. INDEX (b x/b) display disk index on screen. LOADER (x/b) loads a program from a menu, works with index program. MRKTDATA4 part of data/base program. READWRITER (x/b) will display or print a TI-Writer file. XB-BUDGET sample file for xbcalc. XB-LOAN sample file for xbcalc. XBCALC (x/b) spreadsheet like multiplan. (SSSD)193

2049 UTILITY #9 13 files from Brea User Group. CHARPAT, CLOCK, CLOCK/LOAD, CLOCK/S, CONVERT, CONVERTER, EXCLOCK, GRAPH/CAT, INDEX, LISTER, LOADMAKER, SHRINK, XLOADER (SSSD)166.

2050 UTILITY #10 12 files from Brea Users Group - BANNER/1 (x/b) prints large banners with 5 inch high letters. BANNERS/2 (x/b) prints large banners with 5 or 8 inch high letters. BANNER/3 (b) same as banner/2. CALDR (x/b) prints a planning calendar. CC/CAT/DOC (use ti-writer or readwriter on utility#8) doc for cc/cat/gen, cc/catter, cc/mpb/cat & cc/mpb/gem. CC/CAT/GEM same as cc/catter except for gemini printer. CC/CATTER (x/b) prints a 4 inch wide printout of your disk index that fits on front of your disk jacket. CC/MPB/CAT same as cc/catter except that it uses the mpb clock card. CC/MPB/GEM same as above using Gemini printer. CROSSREF (x/b) gives variables and line numbers of your program. GOTHIC (x/b) prints large English Gothic letters. XB/COLOR (x/b) changes screen color while you are entering a program. (SSSD)207

2051 UTILITY #11 14 files from Brea User Group - BREAKFILE (x/b) breaks up long TI-Writer files. CATLOAD (x/b) loads X/B*E/A. CURSORFLIP flips what is under the cursor with a mirror image. DATABASE loads as part of phrase. DISKRUNNER runs programs with single key. INDEX (b x/b) disk index. LOADER indexes & loads programs. PHASE (x/b) speaks any sentence. PR12 read and prints data files in dis/var, dis/fix, int/var & int/fix. SETUP loads as part of phrase. SPEAK loads as part of phrase. TEII/ASCII (x/b) gives you the ascii number for any key, ctrl & fctn. XB*E/A-CAT disk catalog called by call link. XLAT loads as part of phase. (SSSD)

*** * Topics - LA 99ers * ***
NEW ADDS LA99 LIBRARY 3

2052 **UTILITY #12** 29 files from Brea User Group. - DEMO/PLDMP loads dsrlnk. DSRLNK part of plot/dump & screenndump. DRSOURCE source code for dsrlnk. DUMP part of plot/dump demo. DUMPSOURCE source code for dump. JUSTFY part of text justification demo. JUSTFYSRCE source code for justfy. LOAD loads all demo programs. LOGO printer dump used with demo/pldmp. LOGOSOURCE source code for logo. PLOT used with demo/pldmp. PLOTSOURCE source code for plot. QUICKSRC source code for sort program. RECSCR used with screen recall demo. RECSCR/S source code for recscr. SAVSCR saves screen to disk. SAVSCR/S source code for savscr. SCREENS screen recall demo. SCROLL used by line scrolling demo. SCROLLDEMO screen scrolling demo. SCROLLSRCE source code for scroll. SORT used by quicksort demo. SORTDEMO quicksort demo. TEXTJUSTIFY text justification demo. TIME program used by recall demo. VDP used by vdpdemo. VDPDEMO demo for vpoke & vpeek. VDPSOURCE source code for vdp. VENUS program used by recall demo. (SSSD)358

2053 **UTILITY #13** 17 files from Brea Users Group - CASH/ASSET (b x/b). CHART/ACCT (b x/b) program to chart stocks. FUNSTOCK & FUNTEMP multiplan program. HOME/LIBRY (b x/b) inventory your books. HOME/MORT (b x/b) compute mortgage payments. HOMEBUGGET HOUSE/BUDG (b x/b) personal budget. INDEX (b x/b) disk index. PRINT/28 (x/b) print your program in 28 column form. STATEMENT, STATISTICS, STK/CHART, STOCK/ANAL, STOCK/MKT, TITLEGENTR. (SSSD)355

2054 **UTILITY #14** 22 files from Brea Users Group - ALFA-SORT (b x/b) list maker & maintenance. BASKETBAL1,2,3 maintain a basketball team's ststs. Group. BNDACTVFIL program to aid in band pass active filter stage design. BPUZZLE crossword puzzle maker. CALTEX-99U & CALTEX-ASC utility for caltex network. COND/PRINT displays a program in condensed record structure. EDITOR1 edits programs saved in merge format. GRADER/STU figures averages on data such as student grades. KMART-DEMO (speech) demo to sell 99/4A. LOAD disk index program. MAC-TI lods a joystick controlled calculator. MEMORYDUMP & MEMORYFILE a memory dump program. RANDOM/WIN picks the winning raffle number. RESISTOR converts ohmic value to colors & cisa-versa STATEMENT prints business statements. STATISTICS figure means, deviations, & more on data that you have enter. STR_CHART1 & STOCK-MKT1 a deviations, & more on data that you have enter. (SSSD)

2055 **UTILITY #15** 16 files from Brea Users Group - 40/COL/DOC 40/COLUMN 40COLSAMPL (x/b) editor assembly program in call loads to use 40 column screen. ADDRESS (b) address program. ANCESRTY, FAMILY, HUSB-FAML, WIFE-PEDG (x/b) family tree program. FLIGHTPLAN (b x/b) flight plan. HANDICAP (b x/b) horse race handicapper. MEDICALERT (x/b) medical program. METRIC (b x/b) metric conversion. RELATIVEIQ (x/b) measure your IQ. TICK (x/b) puts a clock on the screen. TRENDLINE (b x/b) trend line. XBIORYTHMB (x/b) biorythm program. (SSSD)332

2056 **UTILITY #16** 14 Freeware by Dan Guzsy 22 6th St. Sayreville, NJ 08872 - CONFIGHELP1 & 2 1st & 2nd screen aid for upu. DESIGN1&2 downloads character designer for Gemini. GENERALHELP brief instructions for upu. ICONVERTER converts TI Artist instance into merge format. MAIL-CALL creates list/address file. OKIDATA data file for upu. ONLINE game to be played on 2 TI's via modem. PINBALL (x/b) very rudimentary game. UPU (e/a #5) printer program to configure printers. UPU_TUTOR instruction for using upu. UPV part 2 of upu. UPW part 3 for upu. (SSSD)317

NEW ADDS LA99 LIBRARY 4

2057 **PITS** Freeware by Ted Whomsley 9932 Crist Ave. Anaheim, CA 92804
- A Printer Initiazation and Type Setting Program. Enable you to control your printer directly from the key board. Menu selections. Basic or X/B. Use with TI-WRITER OR MULTIPLAN. ROTTENHUT is a fun program included. (SSSD)118

2058 **CAD MASTER** From Brea Users Group - This program has features that will appeal to Engineers, such as on screen scling/measurement, and multiple line drawing. (SSSD)121

2059 **COUNT** Freeware by Jim Jagielski Route 2,box 626 Sanbornville,NH 03872 - Counts the number of words in a file. EA/COUNT1 A/L in uncompressed form. EA/COUNT2 A/l in compress form. WORD/CT/1 & 2 X/B version. WORDCOUNT call load version. (SSSD)154

2060 **X/B COPY** Freeware from Disabled American Veterans Cincinnati, ohio 45214 - This is an excellent two pass copier for those with only one disk drive. (SSSD)12

2061 **XMODEM** by Paul Charlton - (use E/A or M/M) A terminal program for sending XMODEM protocol. Can be used with TE3X or other TE programs. Knows all of the ADM3A controls codes and escape sequences. (SSSD)103

2062 **PRK MODULE** By Newt Armstrong - using the PRK Module in programming up to seven subprograms from TI basic. These are hidden capabilities of the PRK Module. To use PRKCONVERT, FRKWRITE, READPRK/ or SMPLPRKW/ files power up the PRK module access basic. Type call p(5000)enter, type call files(1) enter type NEW enter, load and run. With READPRK/ & SMPLRkW/ type CALL L("DSK1.MAIL/LIST",C)before loading basic. (SSSD)167

2063 **FORTH 5** By Bruce Carson (E/A opt 3 DSK1.FORTH) This is a fast loading Forth disk modified with PIO printer default. He has many good programs on this Forth disk. (SSSD)360

2064 **MPASCAL** This is a single sided PASCAL disk from MUCK - Has System Library file for use with the compiler. System Setup for correct printer configuration. SPRITE program before and after compiled. (SSSD)360

2065 **PILOT MANUAL** Freeware by Thomas Weithofer 1000 Harburg Dr. Cincinnati, OH 45224 - A 68 page manual for PILOT-99 disk. Use READWRITER program to print. (SSSD)350

2120 **TE3-DIALER** Freeware by Joe Freeamn - Update issue TE3 now has auto dial and coustic couple modem operations. Superior to TE2. Downloading 20 times as much info from any bullrtin boards. Save phone time when talking to the big ones such as COMPUSERVE OR SOURCE. (SSSD)353

9058 **BINGO** Freeware by Roger Merrill 1949 Evergreen Ave. Fullerton, CA 92635 - an excellent game with good graphic and color. Program will display and announce (Speech Synthesizer) as the numbers are chosen. Computer will keep track of numbers picked. Program will print large or small BINGO CARDS. (SSSD)

NEW ADDS LA99 LIBRARY 5

2177 HORIZON RAMDISK By Steve Mehr - An extended Basic utility loader for use with CALL MENU operation system written by John A. Johnson. (SSSD)40

5009 AIDS/1 Surgeon General's Report on Acquired Immune Deficiency Syndrome by U.S. Department of Health & Human Services. Use TI-Writer to print (SSSD)239.

7047 MILITARY MUSIC (X/B) Auto load 5 songs from the Army, Navy, Marines, & Air Force- Graphic, Color- (SSSD)146

2178 OMEGA TE By Travis Watford. The newest in Terminal Emulator that includes on-line RLE viewing, printing, and down loading to disks. programmable keys, one-time set up and other features. (X-B) load E/A. (SSSD)129

THE LA LIBRARY CATALOG HAS BEEN COMPLETELY CHANGED. THE NEW CATALOG WILL DESCRIBE THE DISK IN MORE DETAIL AS SHOWN IN THE LIST ABOVE. THIS NEW CATALOG CAN BE OBTAINED FROM THE LIBRARY EITHER ON PAPER OR DISKS FOR \$1.00. WHEN OBTAINED BY DISK UPDATED VERSION CAN BE OBTAINED FOR \$0.50 ON YOUR OLD DISK. PRINTING UPDATED CATALOG USE TI-WRITER ALL YOU NEED TO DO WHEN IN THE FORMATTER MODE IS TYPE IN THE LAST PAGE NUMBER - E AND ONLY THE THE PAGES YOU DO NOT HAVE WILL BE PRINTED. NO NEED TO PRINT THE WHOLE CATALOG LIST EVERY TIME. WHEN ORDERING DISK FROM THE LIBRARY ASK FOR 2000A/B. MAILING CHARGES WILL BE \$1.00. I HOPE ALL OF YOU OBTAIN THIS NEW LIBRARY CATALOG AND KEEP IT UP TO DATE BY EITHER GETTING YOUR OLD DISK UPDATED OR UPDATE YOUR PAPER COPY YOURSELF BY USEING THE NEW ADDS TO LIBRARY SECTION EACH MONTH IN OUR NEWLETTER.

LIBRARIAN FRED MOORE 7730 EMERSON AVE LOS ANGELES CA 213-670-4293

REMEMBER NEXT MEETING - Wednesday Aug. 26, Torrance Public Library, 7 PM
ADVANCE NOTICE - September meeting on the 30th NOT the 23rd

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Membership in the LA 99ers, including subscription to Topics is \$20.00 per year

MARKETPLACE

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(the marketplace is a fund raiser for the club, that is, the "profit" goes to maintain the quality of this Newsletter. In general the price listed splits the difference between cost and retail. Please help your Club.)

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