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NH NEW HORIZONS

NEWS LETTER

NORTHWEST OHIO COMPUTER CLUB FOR THE TEXAS INSTRUMENTS 99/4A

AND THE MYARC GENEVE 9640 PERSONAL AND HOME COMPUTER

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For more information consult one of the following officers: Yearly Dues $15.00 per Family or Individual.....

THIS MONTHS MEETING OCT.14,1989 SATURDAY AT UNITY CHURCH 12:30 PM.
Behind Wendy's off Secor Road on Executive Dr.

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FIRST CLASS

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%First Church Unity
3535 Executive Parkway
Toledo, OH 43606
Attn. Earl W. Hoffeis

"I'm user friendly."

Edmonton 99'ers Computer Users
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PRESIDENT'S CORNER

NEW HORIZON

Don Turner

Greetings to all the members of **NEW HORIZONS**. Last month I was given the reigns again, I don't know how it happened but it did ! The past summer sure was a hot one. I would like to start the Fall off with all of the members at this months meeting. Be sure to attend or you could miss something that would benifit you. We will be meeting at **UNITY CHURCH** on **Executive Pkwy** at 12:30 on **October 14th.**

This month we will have a new club disk available. The new club disks will be on sale at the club sales desk. See Earl for more details. Attendance is declining rather rapidly with each passing month. Myself and the officers would like to see that trend change for the better. Your attendance is what makes the club an enjoyable experience. Each member is like a shareholder in this organization. Your membership is like common stock, it gives you voting rights and pays dividends!

We introduced a few new ideas last month. There will be a 50/50 raffle this month. Also we will be asking for everyone to donate a few dollars to help bolster our sagging treasurary. This will only be temporary until we can get things turned around. With these new ideas adopted then a sweeping change will be made. I would like to see everyone should be there to offer some thoughts ideas and or objections.

We need to set up a nomination commitee to nominate club officers for 1990. I would like to have at least 3 people work on this commitee.

This month we will have at least one demo. Bill Teip is planning to demo our D.O.M. (disk of the month). Anyone having anything they want to show, bring it in and give us a demo please feel free to do so.

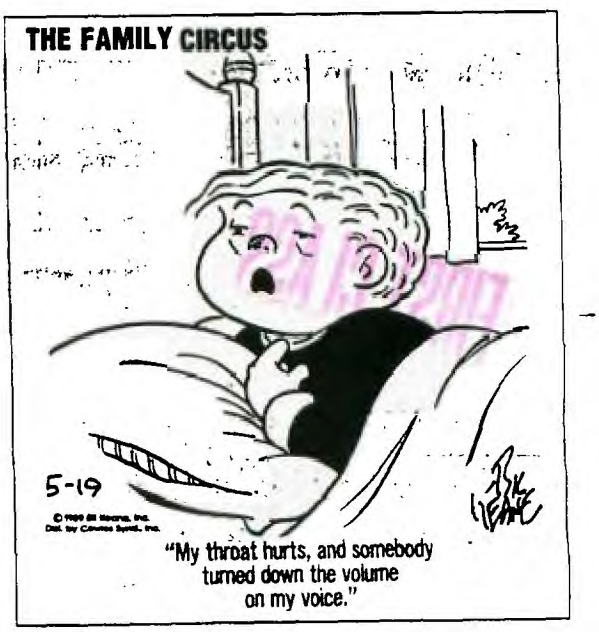
MICROPENDIUM is available each month at the club sales desk. These are in limited quantities so be sure to get yours while they last. **MICROPENDIUM** has some of latest news and software concerning the **TI-99/4A** and the **GENEVE 9640.** Also it has reviews on software/hardware and much much more.

Anyone who has borrowed from the lending library and the exchange newsletters should return them this month so that we can update our library and get it ready for November. Please return the exchange newsletters to **BURR MALLORY** and the software to **CHRIS DEWY.**

NEW HORIZON

MEETING DATES
FOR 1989

OCT 14 at 12:30 pm
NOV 11 at 12:30 pm
DEC 09 at 12:30 pm



Hello everyone and hope it's been a good month for each and every person. This month we will have for our club disk some new games, and hopefully some new utilities for you to enjoy. Howerver I am not sure if you will get the utilities this month or next month. For the lack of articles I have downloaded a couple of rather long pieces of information that I feel is of some importance. One deals with TI-Base the other with the use of delays in Extended Basic. I hope these will help in under standing both this new data base for the TI and help some of you to under stand something in programing in basic.

As you can see we have a new President, Don Turner. Mark felt at this time he has so many different personal obligations, that he couldn't give the club his full attention so decided to step down. I wish Mark all the best and hope to see him at the meeting. Don was chosen by all in attendence last month, and agreed to finish of the rest of this year. Which leads me to ask is anyone thinking of running for office this fall? If so we would like to hear about it at the meeting. Maybe we should all give this some thought,"How can I be of service to the future of or Club?"

This October marks two years I have been the Editor of this news letter. Though I have learned many things about my computer that I wouldn't of possibly have found out had I not been given this opportunity here. I personaly feel that this office should be added to the yearly election, so that more persons have the opportunity to add their touch of themselves to the clubs, newsletter. What do you think? Please let us know your feelings on this at the meeting.

On some of the software that will be offered at the meeting is a "Star Trek" program written in Extended Basic which is rather compelex in nature. It is not one of the three minute shoot em up games but more in line of a graphics adventure. Another is called "Imlost" which is an E/A opt. #3 program. What this means is you need either the E/A cart. or from extended basic you need an opt #3 loader such Funnel Web or Barry Boones emulator of E/A which was on the boot disk given as a club disk a couple of months ago. The program name to load this prgram is also Imlost. This is a maze game which can be up to 16 layers deep. Each time its played it is different so it won't get old fast. Another is "Pinball", this is an EA option #5 program. and is as the name says is a "Pinball" game. One loaded to start the game press the 8 key, to shoot the ball press 0 key, and the 1 and + keys are the flipers.

On Mx-Dos I did some digging around and ended up calling Charles Good in Lima Ohio as the add had no information on where it could be found. He said he will send me a ,copy as it is fareware softwre the authur is asking $8.00. So if it arrives in time it will be at the club meeting. Well, untill next time see you at the meeting.

Delay routines in REAL TIME

Paul E. Scheidemantle

Well folks, it's back to programing subroutines this month. We are going to setup a delay routine for basic and extended basic, which can be used in real time... as we know it. Making it easier to use rather than having to guess everytime if the loop will be as long or to long a wait, and then ofcourse having to fiddle with the numbers to get the delay just right.

First I'd better explain what I'm talking about when I mention a loop. A for next loop is setup as such: FOR A=1 TO 100 :: NEXT A . What is accomplished here is that the value of "A" will be incremented by 1 each time the program sees the NEXT A statement until it has reached the value in the second part of the statement. Such as 1,2,3,4,5 and right on up to 100 (or whatever figure you choose). This particular loop is refered to as a delay routine. Most delay routines as above are set up just as you see them with numbers ranging from 1 to 100 (or whatever you choose). Here the idea is to make the computer wait (delay) before doing anything else. Like a timer for a title screen, between notes in music, and or whatever you might want to stay on the screen for a certain length of time.

So the idea here will be to design a special loop that works in REAL TIME instead of those cryptic numbers that we have to continually guess at. The first thing we will need to do is find out how long it takes the computer to count through a loop, so that we can find out how far we have to count to get increments of seconds. Shown below is a small program that was run to find out this inforamtion. The call sound statements were used to give an audible sound at the beginning and end of the routine making it easy to time. I used a stop watch in hundreths of seconds to do this. If you are using your watch and have only even seconds to work with you might want to increase the length of the loop (make it 100000 instead of 10000) to get a more accurate figure.

FOR BASIC:

```
100 CALL SOUND(-10,880,0)
110 FOR A=1 TO 10000
120 NEXT A
130 CALL SOUND(-10,880,0)
```

This routine required 28.28 seconds to run. Now by dividing 10,000 by 28.28 we get a value of 353.6067893. Be sure to do this the easy way and use the computer. Type in "PRINT 10000/28.28" (without the quotes), and the number will just pop up like magic.

FOR EXTENDED BASIC:

```
100 CALL SOUND(-10,880,0)::
FOR A=1 TO 10000 :: NEXT A :
: CALL SOUND(-10,880,0)
```

We do the same thing for extended basic, except in a multiple statement line. The result is 33.76 seconds, giving us a value of 296.2085308. (For Myarc XBII users the seconds are 38.10 and a value of 262.4671916).

See now what do we do with these great figures now that we have them. Well I'm certain most of you are way ahead of me and have already gone on to the next article. But for those of you who were kind enough to stay with me and listen to my ramblings... here comes the answer.

If we multiple the value we got in the above example and by any number we get values for our

soon-to-be loop that come out in seconds (not cryptic numbers). Below are two example of subroutines to show you how they are used.

First we will look at the basic routine, and here is how it works. We will use two variables; SECONDS and A. In line 140 we give the variable SECONDS the value of 30 (30 seconds or any positive number you may wish to use here). In line 150 we GOSUB to line 500 (the delay subroutine). Line 160 here just separates the main program from the subrountines. Now to line 500. We set up a loop called "A" in which we count from one (1) to 353.61 (number required to complete one second in basic) times the value given to the variable SECONDS. Line 510 sends the program back to line 500 to increment "A" by one (1) until it equals the high number (second part of the peramaters (1 was the first part)). Finally line 520 returns control to the main program at the point right after where the GOSUB command was used.

```
140 SECONDS=30
150 GOSUB 500
160 END
500 FOR A=1 TO (353.61*SECONDS)
510 NEXT A
520 RETURN
```

Now to the extended basic routine, and here is how it works. We will use two variables; SECONDS and A. In line 110 we call our subprogram DELAY and pass the value of the number of SECONDS we want (in this case 30 (30 seconds or any positive number you may wish to use here). Line 120 just separates the main program from the subprogram(s). Now to line 500, our subprogram. We set up a loop called "A" in which we count from one (1) to 296.21 (number required to complete one second in extended basic) times the value given to the variable SECONDS. The NEXT A tells the program to go back and increment "A" by one (1) until it equals the high number (second part of the peramaters (1 was the first part)). Finally the SUBEND returns control to the main program at the point right after where the CALL command was used. Now you have a delay routine that works in REAL TIME! If you were using Myarc's XBII then replace the value 296.21 with 262.47, and you should be all set to run.

```
110 CALL DELAY(60)
120 END
500 SUB DELAY(SECONDS)!! FOR
A=1 TO (296.21*SECONDS)!! NE
XT A !! SUBEND
```

I hope that these routines help you with your programing and that this article will help you understand where all those cryptic number come from in programs. Another thing you should keep in mind is that the extended basic subprogram in line 500 can be saved in a merge format, for future use with other programs. There is hardly any reason to have to do this more than once. This can be done by saving the program thus SAVE DSK1.FILENAME, MERGE (the result is a DV/163 file on disk). Then in the future you can merge it into a program by first loading the program and then typing in MERGE "DSK1.FILENAME" and it will now be part of the program. It should be noted that when a file is merged to a program that it will overwrite any existing lines with the same number, so be sure to give your routine a high enough line number that this does not happen.

I guess I've said this many times but here we go agian.... With a blank (or backup) disk and a little imagination you can do no wrong! So have fun and enjoy your computer!

JACKS JOTTINGS

By Jack Sughrue

Before I first started using TI-BASE I worried about the comments I heard about its difficulty of use. After all, as a 99er for many years, I was familiar with numerous data bases. And ALL of them were difficult for new users. Many were difficult for old users like myself, too. So why were some people saying TIB was "not for first-time users?" If THIS base was harder to learn than the others, would it be worth getting?

I have used CFS and PRBASE and DB300/500 and cartridge bases and lots of user-group bases. I have used bases designed just for videos or just for books or just for addresses or just for stamp collections or just for about any specific thing. But none were for EVERYTHING. None of them (for me) were easy to use, and none of them ended up doing what I REALLY wanted a data base to do.

Those days are behind me now. I have TI-BASE.

What does TIB do that the others do not do; even though the others are well-designed and certainly intelligently thought out within severe limitations?

TIB does everything EASILY, for one thing; and in exactly the ways you want it to, for two. And has so much other stuff that it's going to be fun to grow with and learn with, for three. And lots more, for four.

But, first, user friendliness. I was surprised and very pleased to discover that TIB is the most user friendly of the lot. You tell it what to do and it does it.

Let's take a few examples and create a base right away, so you can see what I mean.

You must first decide what you want the base for. Do you want to catalog your book library or all your videos? Do you want a checkbook manager or a mailing address listing or a catalog of your records and tapes?

Do you have a collection of anything: old bottles, stamps, coins, baseball cards, insects, used socks?

TIB'll take care of you!

For our purposes, let's decide to catalog some video tapes. You have a collection of 150 videos. Some were purchased. But most were recorded off the air or dubbed by a friend from her collection. Some tapes have movies on them; some have a couple of shows from a series; some have music; some comedy. Whatever. YOU have to make some decisions before loading this (or any) data base. Here are a few things you might want to put onto your base:

a) Title of program or series (such as OUT OF AFRICA or MASH)
b) Title (or number) of episode (if series)
c) Cast (which would include narrator of specials or actors or anchor people or team [if sports]
d) Date of taping (year is sufficient for most things)
e) Commercial, Dubbed, Off-air
f) Type (comedy, documentary, play, sit-com, baseball, movie, music, cartoon, etc.)
g) Length
h) Tape #
i) Audience (Children, adult, left- handed blondes, whatever)
j) Author (if this is one of the criteria important to you)
k) Comments (plot, topic, etc.)

Then you go through your selections to put them in the order you'd like with proper field identifications. Such as:

1) Number of tape [We'll call this field "#". We'll make it three numbers long. It can be up to 255 characters long, but I don't think your video tape library will extend to the

thousands. If it does, change this to four or five places.

2) Title of program or series. [We'll call this field "TITLE1" and make it 20 characters long.]

3) Next, episode titles. [If you taped a MASH episode, MASH would be TITLE1. The episode might be "Exploding Golf Course" or any title you want. These would be TITLE2, of course. 22 characters.]

4) To denote Commercial, Dubbed, Off-Air, Other you could title this field CDAO. And give it one character length.

5) Type (comedy, drama, sports, etc.) might be called TYPE and given 8 characters.

6) Cast might be called CAST and be given 40 so you can list the major actors, let's say, in GONE WITH THE WIND.

7) If author is important to you (such as a play by Arthur Miller) this could be another field called, appropriately, AUTHOR, and be given 15 slots.

8) Audience would be for whomever it suits. You could abbreviate to A for adults, C for children, E for everyone, O for other. Thus titling it ACEO and use up one character. (All this abbreviating business simply takes up less space and sorts faster, but you

could have EACH field of the 17 fields allowed contain 255 characters.)

9) Length of time. You might want to keep this in minutes, call the field LENGTH and have up to five characters for, say, a long mini-series.

10) Date can be DATE and use just the year (which is what I usually do) and be four characters. A date item is also built into the base if you wish to use that with a 10/23/88-style designation.

11) Comments (called COMMENTS) could be 255 characters long so as to allow details of plot, topics, opinion, whatever.

There! Eleven fields. (Remember we could have up to 17, which is why I chose videos for this tutorial. More fields are required than with books or addresses or music audio tapes. That way, if you follow this tutorial, most others you create will be much easier.)

Your personal way of cataloging your videos would probably be quite different. Which is the joy of TI-BASE.

Now we're ready to load up TIB.

But, first, make a backup copy of the original and have an initialized disk ready for your data.

TIB can be loaded with just your XB cartridge or with Minimem or E/A. You must have a disk drive (obviously) and 32K. If you are fortunate enough to have two or more drives and/or RAM capabilities then you can really go to town. The more heavy duty your system, the more heavy duty the use of such a profound piece of software.

Okay, you load it up from boot and have to wait about 70 seconds. This is a BIG program with lots of wonderful features.

Title Screen prompts for date. Type in 12/11/88 and all your files done in this session will contain this date. Nice feature. Once the date is ENTERed a SETUP file scrolls into place. These are your system parameters. This STATUS reports these following defaults:

```
DATDISK=DSK2.
PRGDISK=DSK1.
PRINTER=PIO.
LINE=80
PAGE=56
HEADING=ON
TALK=ON
SPACES=1
RECNUM=ON
LSPACE=256
DATE=10/23/88
```

with a dot sitting in the lower left-hand corner waiting for you to command.

If you want to change the defaults just type in the change at this point. I wanted my data disk to be Drive 4, so I just typed SET DATDISK=DSK4. and ENTERed. That's all. The command SET followed by the item you want changed and equal sign and the change. As simple as that. Do the same for any of the others. PRGDISK is the disk where TIB is kept. I keep it in Drive 3, which is my MYARC 512 RAM (and makes this VERY FAST [all Assembly] data base even more lightning fast). PRINTER as PIO is okay for me but can be changed to serial. LINE can be up to 134 condensed for columns on the TI or down to any narrow needs you may have. PAGE length I keep at 56. I take the HEADING OFF because I'm not interested in printing out the headings, as I know what they are. The TALK I keep ON because I like to see on the screen the commands I'm giving to the computer. I change the SPACES between columns to 3. I removed the RECNUM (record numbers) to the OFF position, as the videos will be numbered accordingly, anyway. I keep the LSPACES to encompass the range allocated for local variables.

Everything is ENTERed to my satisfaction. Now I type CLEAR to clear the screen. Isn't that simple? Then I type DISPLAY STATUS to make sure all is well with the new defaults I just created. These are now "permanent" until you want to change any for other reasons. All the changes come up in the listing. Perfect. (DISPLAY, by the way is a simple yet powerful command. Later, you'll see all the other ways to use this.)

You may have noticed how EASY, how CLEAR, how QUICK it is to have this base do all the things you want it to. Things get even easier. Before we get into the base, is there any way to change the white-on-blue to my favorite black-on-green? Heh-heh-heh. Keeping with the directness and simplicity of the dot-command approach of TIB, you simply type COLOR BLACK DARK-GREEN. When you ENTER, those colors are there until you type COLOR again.

Chompchompchomp.

"All this is very nice," I can hear you say, "but when do we get into our commission of base deeds?" Now... You want to create your video record. Type (of course) CREATE DSK4.VIDEOS. Automatically, you are set up. [NOTE: be sure to have an initialized disk in Drive 4 (or whichever) turned on before you type in this.] After I have typed CREATE DSK4.VIDEOS (data titles must be 8 characters or less), the screen comes up with some thick lines following a #1. I type "#" in the first bar and ENTER. Cursor jumps to next short bar with the "C" (character) default. I type "N" for number. For the third bar I type in "3" because that is the maximum length of the tape numbers (which could carry me up to 999). Another little bar appears. I type in 0 (zero) as I have no need for decimals in this base. I ENTER each item. Now I am on #2 with the same configuration appearing.

If you look up above at the 11 fields I created, you can see that my MY #2 will be "TITLE1". So I type this in, select C, and 20 for character length. No little bar appears as there are no decimal notations without a prior number designation.

Then I go to #3: "TITLE2 C 22" and so on. My base will look like this when done:

```
1 # N 3
2 TITLE1 C 20
3 TITLE2 C 22
4 CDA0 C 1
5 TYPE C 8
6 CAST C 40
```

```
 7 AUTHOR C 15
 8 ACEO C 1
 9 LENGTH N 5
10 DATE N 4
11 COMMENTS C 255
```

EUREKA! Our personal data base for our video library is done in a few seconds (providing you have blocked out previously what you want).

I may make changes at this point or EXECUTE (FCTN/8). All these functions are on the command strip which comes with TIB. Another nice feature. Dennis Faherty, the author of this gem, seems to have thought of everything.

Now Record #1 appears on the screen and we are ready to go. [At this point, looking back over this article, it seems as though the process is difficult. Actually, it is quick and easy and much more difficult WRITING about this process that DOING it. Once you've gone through this thing once, you own it and can set up a zillion bases with ease and alacrity.]

From here on, you simply fill in the blanks you created.

1) 001
2) MYSTERY
3) SCANDAL IN BOHEMIA
4) A
5) DRAMA
6) Jeremy Brett, etc.
7) Arthur C Doyle
8) E
9) 60
10) 1984
11) Sherlock Holmes series on PBS. Excellent.

Do I need any changes? Nope. ENTER. This is automatically recorded as Record #1 on my data disk.

Now #2 comes up.

1) 001 [NOTE: same tape]
2) AMERICAN PLAYHOUSE
3) GHOST WRITER
4) A
5) DRAMA
6) *** [I don't know the actors and will leave asterisks to EDIT later.]
7) Philip Roth
8) A
9) 120
10) 1984
11) An excellent autobiographical drama about a writer who lives through some of his material.

Then #3. And so on.

I do another dozen tapes or so at this sitting, all SAVEd automatically. Then I QUIT for the night by typing CLOSE ALL.

Today, I go back to TIB. At the command dot I type USE DSK4.VIDEO8. There it is!

I type EDIT just to look over the previous day's efforts. I PAGE forward and back (the 5 and 6 keys) and add things here and there with the normal function keys (such as FCTN/2 for INSERT). Then I'm ready to add more. I type APPEND and my next blank record (#17) comes up, and I proceed in the same way.

After I go through another dozen records, I take a break to play with TIB some more. (This is, after all, a program with lots of fun built in.)

Screen displays:

I type SORT ON TITLE1. Whoooosh! All sorted alphabetically. I least I think so. To check I just type DISPLAY ALL TITLE1 TITLE2 #. I get an instant 3 columns on my screen, alphabetically displayed - on TITLE1. Second column is TITLE2; third column is the number of the tape it is on.

While it's still sorted on TITLE1 I decide to DISPLAY ALL # DATE TITLE2 TITLE1 AUTHOR and get five neat columns in the order I just typed. Looks good. I want a hardcopy. I type PRINT ALL # DATE TITLE2 TITLE1 AUTHOR.

Because I had my printer on, the above structure is printed out as nice and neat as you please.

But I'd prefer just TITLE1 and COMMENTS. Another nice pre-sorted printout.

Then I decide I want it done numerically by tape. SORT ON # gives me this instantly. Then I type PRINT ALL # TITLE1 TITLE2. Another instant hardcopy configuration.

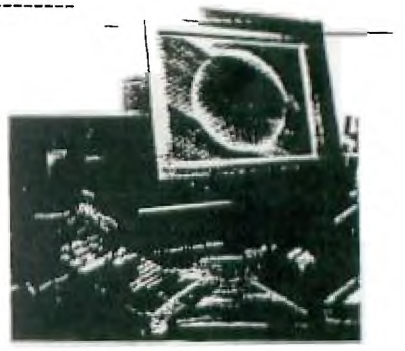
DISPLAY ALL etc. puts it on screen; PRINT ALL etc. puts it on paper. SORT ON n sorts it instantly on your choice alphabetically (for characters) or numerically (for numbers).

There are loads of other simple and direct commands. And loads of complicated commands if you are into heavy-duty data bases. This base lets you go as far as you want. Next time we'll discuss some of the other commands, but for most uses all that is needed is explained above or in the 40-page manual that comes with TI-BASE. The $24.95 (plus $1.50 shipping and handling) is a fantastic price for this remarkable piece of software (from TEXAMENTS, 53 Center St., Patchogue, NY 11772).

This is the best buy of the year for the TI.

Jack Sughrue, Box 459, E. Douglas, MA 01516

```
100 CALL CLEAR
110 B=16 :: F=5 :: !        B=Backgrou
nd Color          F=Foreground Color
      (Enter your choice)
120 C=16*(F-1)+(B-1)
130 CALL INIT :: CALL LOAD(9984,C,C,C,
C,C,C,C,C,0,7,15+B,4,32,32)
140 CALL LOAD(9999,48,2,0,8,0,2,1,39,0
,2,2,0,8,4,32,32,36,2,0,8,8,4)
150 CALL LOAD(10021,32,32,36,2,0,8,16,
4,32,32,36,2,0,8,24,4,32,32,36,4,91)
160 CALL LOAD(-31804,39,8)
170 CALL LOAD(-31952,255,231,255,231)
180 END
```



This 14-in. diagonal flat color panel display is larger and clearer than any demonstrated so far. The high-resolution screen, being developed by IBM researchers, uses thin-film transistor technology to achieve a screen density of over 1.5 million dots. The 1.5-in. thick panel produces 16 colors that appear crisp and clear even from acute angles. Images can change fast enough for animation applications. IBM engineers and scientists are improving the screen's gray scale rendition to give it a full gamut of colors, and are working to lower fabrication costs. The high brightness comes from a fluorescent back light whose light is spread by a diffuser plate and then passed through a polarizing filter. Next, the light passes through a "window" framed by a thin-film transistor and associated circuitry. Each window contains liquid crystal molecules that re-orient themselves according to the voltage supplied by the transistor. Light passes through the window and one of the color filters to produce a color dot. Four such dots combine to form a pixel.

FUNNELWEB FILES

File	Purpose	SSSD Disk	DSSD Disk	Note
·READ-ME	Docs File			
AS/AT	Assembler			1
&C99PFI.O	c99 Utility			2
CF/CG	Configuration Pgm		D	
CHARA1	TI Wr Characters	S	D	
&CHARA2	EA Characters			1
CP	c99 Loader			2
CTERAM	Cartridge RAM Loader			2
&DP	Disk Patch	S	D	
DS	Disk Utilities	S	D	
EA	EA Loaders	S	D	
&ED/EE	TI Wr Editor	S	D	
FMSAVE	Save Utility			1
FO/FP	TI Wr Formatter	S	D	
&FWDOC/EASM	Docs File			
FWDOC/LOAD	Docs File			
FWDOC/REPT	Docs File			
&FWDOC/TIWR	Docs File			
FWDOC/UTIL	Docs File			
FWSAVE	Save Utility			1
&LDFW	Aux Load Program			3
LH	Line Hunter			1
LL	Low Mem Loader		D	
&LOAD	XB Load Program	S	D	
MG/MH	DM 1000	S	D	
QD	Quick Directory	S	D	
&SAVIT	Sample Script File		D	
SL	Script Loader		D	
SYSCON	System Configuration	S	D	
&UL	User List	S	D	
UTIL1	Loads FWb from EA	S	D	
XB4THLD	Forth Loader			2

1. These files are normally used only for Assembly programming.
2. Used with named programs. See FWDOC/UTIL for details. Include only if needed.
3. LDFW can be used to load FWb from BASIC in EA, XB II or Mini-Memory. See FWDOC/UTIL for details.