

Dynamic Memories
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SOUTH BAY TRS-80 USERS GROUP

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SBUG meetings are held the 3rd Tuesday of each month in the north-east corner of Dysan's building at:

5401 Patrick Henry Drive
Time-7:15 to 10:30 P.M. Santa Clara, Ca.

June 17 August 21, September 18

Topic of the month: C --Instruction leader: Eric Brewer

General Forum: Topic--Database managers (non humanoid)
8:00 to finale

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If you wish to become a member of SBUG and start receiving our newsletter "Dynamic Memories" then send \$18.00 (check/moneyorder) to the following address:

South Bay TRS-80 Users Group
P.O.Box 60116
Sunnyvale, Ca. 94088

or come to one of our meetings. If you also wish to communicate with our bulletin board system (SBUG-80) then include an additional \$25.00 for an account on the system. You must be a member of SBUG to have an account on SBUG-80. Please include your address and phone number. Thanks...

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If the need arises, feel free to give any one of us a call.

THE EDITOR'S BYTES & BITES

This is written to alarm you. For some time now, I have been expressing my concern that we TRS-80 owners are becoming isolated. The fault of course is Tandy's, not ours, but we will suffer if we don't do something about it. Ian Webb's article in this month's newsletter expresses the same concern.

As a typical Tandy owner, I have many hours of learning tied up in Tandy, only part of which is transferrable. Also typically, I have many more dollars than I should have spent, tied up in software. I could make a pile of the hardware & software, set fire to it, & immolate myself. A few of you might join me.

Failing that, I can upgrade my Model III to Model IV and go to C/PM which is still alive & well. As to the club, in which I am vitally interested, I strongly suggest that we open up membership to all computers, all makes, all types.

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D I S K D R I V E H A R D W A R E

by Ian Webb

At the Computer Swap Meet, I bought a nice single drive horizontal case for \$10. The case is finished in "Apple off-white" with a good quality epoxy paint. It has ventilation holes in the rear and is precut for hardware associated with the power supply which mounts in the rear. For \$20, I also purchased a hefty transformer which I am sure would easily handle two drives, a circuit board with regulators and capacitors, a cable with the proper molex power connector, a line cord connector and filter which mounts on studs already on the case and some miscellaneous wire. Missing is the power switch (the case is stamped for a rectangular switch/circuit breaker), the fuse and line cord.

I made a plate to hold a mini-toggle switch and a fuse holder and put it in the cutout which was made for the switch/circuit breaker. I had to drill holes to mount the transformer and fabricate a bracket to hold the circuit board and drill holes for it, but for \$30 plus about another \$5, I have a nice looking case and power supply for a single drive. I could probably work it so that two half-height drives would go in the same case.

I did have a problem with the power supply when I first hooked it up. It turned out that the 5 volt regulator was shorted to the press-on heat sink and it was impossible to tell until the whole assembly was unsoldered from the pre-wired board.

I found later, unfortunately, that the required switch/circuit breaker was available for, I believe, \$1.00 at the surplus store where I bought the power cord. (A.C.E. on Kifer, about a block and a half east of Lawrence Expressway on the north side of the street.)

I don't know what the policy is on mail order, but the vendor from whom I bought the items is: Fischer Computer Systems, 445 Bay Street, Angwin, CA 94508, (707) 965-2414.

M O D E L 4 P 1 2 8 K

by Ian Webb

I had occasion to try to expand a Model 4P to 128K. It appears as though there is NO information on the 4P available. All my magazines seem to ignore this machine.

Radio Shack is tight-lipped about it and there doesn't seem to be a technical manual available.

To expand the machine to 128K you need about an hour of time and 8 4164 Dynamic Ram ICs. I bought mine from DoKay, 2100 De La Cruz Blvd, Santa Clara (just north of Coleman near the airport). They cost \$5.45 apiece for 200 nanosecond devices, which I would recommend you buy.

If you wish to expand your machine, here's the procedure.

1. Remove the case: Use a Phillips head screw driver to remove the handle by lifting up the handle and taking off the two screws which hold it to the machine. Remove 2 screws on each side of the case near the front bezel. Set the machine on its face on a soft surface and pull off the outer plastic case.

2. Remove the screws (Phillips head, black) which hold the bottom panel to the machine.

3. Carefully remove the three connectors which you find at the left edge of the circuit board, as viewed from the CRT face.

4. Remove the disk drive ribbon connector at the right rear of the circuit board.

5. Slide out the bottom panel with the CPU board still attached.

6. Put 8 4164 200 nanosecond RAM chips in the 8 sockets which you find at the front right of the circuit board. Make sure all the pins are inserted into the sockets and that they are fully seated.

7. To the left of that area, near the middle of the board, locate ICs U89 and U90. Between them you will find a small rectangular black jumper which is connected to E12 and E13. Lift off that jumper and push it back on to connect E11 and E12. You are moving the jumper away from the front edge of the circuit board.

8. Reverse this procedure to reassemble the machine.

9. Test it by using MEMDISK from TRSDOS 6. - SYSTEM (DRIVE=2, DRIVER="MEMDISK"). Or use Montezuma Micro CP/M 2.2 to test it. - MEMLINK.

M O S T L Y M O D E L 4 R A M B L I N G S
MODEL 4 SPEEDUP, 8" DRIVES, CONTROL KEYS, TANDY SURVIVAL
by Ian Webb

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I had hoped to be able to report to you on a Model 4 speed up which I saw advertised. Talking with the company which makes it, Alpha Technology, Huntsville, Alabama, I found that it is supposed to plug into one of the PLA sockets with the PLA inserted into the speed up board. Supposedly you can run at 5 MHz with no problems and no machine modifications and the sheet metal back will fit back on with no problems.

I was promised delivery of a unit over three weeks ago and have heard nothing. I will have to write a letter about it. I hope to be able to report on its performance by the next issue of Dynamic Memories.

I have, as many of you know, an 8 inch drive connected to my Model 4 through a Holmes controller. (I also have three double sided 40 track drives and a double sided 80 track drive = 1.7 MBytes.) I have been successful in using it on standard single-density CP/M and single density with Model 4 and Model III operating systems, but no luck with double density. I am working on LDOS 5.1.4 double density with the help of a member of the Cabrillo Computer Society (Camarillo, CA) who contacted me about my CP/M patches for 8" drive. He reads Dynamic Memories due to their exchange of newsletters with our club. Unfortunately, I managed to destroy my copy of the patches which he sent me and I am waiting for a second copy! When I get them, I will happily share them with anyone else trying to run 8" drives on a Model III or 4. His patches are in the public domain.

The newsletter, Cabrillo Computer Society, from a few months ago lists a used Model II with drive for \$500. Wow, good price! Interestingly enough, they also printed the PDRIVE for NEWDOS 80 V2 to read LDOS which I had printed from the Marin County TRS80 Users Group. Bernie Thompson (disk librarian and resident expert on PDRIVE) assured me that it wouldn't work and we verified that it only works for some special cases, but IT DOES NOT WORK as it is alleged. Guess more than one of us got fooled by it.

Control keys??? I have tried several keyboards. Some of them put the control key on the home row of the keyboard so you reach WAY over with your little finger on your left hand to reach it. The same keyboard usually put the ENTER key so you reach WAY over with the little finger of your right hand. Radio Shack puts the control key so you have to cramp your left hand and reach for it at the end of a shortened spacebar. It makes for a nice looking keyboard with pretty symmetry, but how the heck do you type with that keyboard? With difficulty!

I am able to type 60-70 wpm with a Selectric with few mistakes. I can hit over 100 wpm without trouble and probably more on a computer used as a word processor. Try

to use the control key. with any efficiency though...impossible! SuperScripsit uses the "at" key as a control key and it is pretty nice for a touch typist. For some reason when they redid regular Scripsit for the Model 4, they decided to use the clear which is too far away. CP/M (Wordstar too) uses the regular control key. I have been learning to use Wordstar on the Model 4, but I couldn't overcome the control key problem. The solution has been to electrically rewire the keyboard.

By opening up the keyboard and putting in a small mini-toggle under the lower lip, I am able to connect the "at" key to be in parallel with the control key. On those few occasions that you need the @ symbol, the switch can be thrown back. When you use SuperScripsit, the switch can be thrown back. Now a touch typist can learn to use Wordstar and CP/M efficiently without having to remove your hands from the keyboard to use the control key. The Model 4P can be modified in a similar manner with a small mini-slide switch mounted in the channel for the keyboard cable.

Why don't the manufacturers think about those things? Probably because an engineer who types with three fingers designed the keyboard or because that's the way other people do it. It is obvious that the manufacturers really don't care too much about the user who only wants to be comfortable while using the machine.

What does Radio Shack need to survive the computer business? Look at 80 Micro and you will see that the TRS 80 business is in terrible shape! The thickness of the latest 80 Micro is perhaps 1/3 of what it was a year ago. This is a sure sign of problems! Those who are amateur radio hobbyists recall the same thing happening with the amateur magazines after the ARRL and the FCC tried to kill amateur radio with new licensing requirements. A decrease in advertisement and subsequent decrease in thickness of a magazine is a hard-to-beat indicator of future troubles

In order to survive, I think that some definite changes are needed. These include:

1. Bundled software - The first time user doesn't like the shock of several hundred dollars extra for programs to begin to use an already expensive machine. The computer business is like the car business. Can you imagine buying a car without tires and only finding when you limped home with it on the rims that you need to shell out \$400 more to make your car useful?

Tandy should be able to afford to give the user a word processor, a data base system and a spread sheet. With the buying power of Tandy, one would suspect it would cost less than \$50 per machine to provide this. I would hope for SuperScripsit, Profile III + and Enhanced Visicalc. I would settle for (old) Scripsit, PFS and Visicalc. Better

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yet, some package like Wordstar, DBASE II or III, and Supercalc 3. (Maybe just LOTUS 1-2-3??)

2. A smaller profile - The single-piece "Model III case" machine is large, bulky and antiquated by today's styling. Painting the case a more modern color doesn't hide its original flaws. A machine in the Model 4P case or equivalent, or with a detachable monitor and keyboard might be more appealing to the buyer.

3. A more flexible machine - Let's face it, TRSDOS compatibility is not what everyone hopes for these days. If Tandy could come out with a machine with CP/M 80, PC DOS, and CP/M 86 compatibility AS WELL AS TRSDOS Model III/4 compatibility, THEN they would have a big seller!

If Tandy really wants to compete, they need a small machine with two drives (expandable to 4 or to 2 plus 10 MByte hard drive), preferably "luggable" (heavy portable??) at least 9 inch monitor with green or amber display (11 inches better), detachable keyboard with a true coiled cord which can be extended and removed (not the heavy 16 conductor shielded "hose" on the Model 4P), Z80 for CP/M 80 and TRSDOS (manage drives and other functions in 16 bit mode???) and 8088 (better an 8086 or 80186) for PC DOS and CP/M 86 compatibility, true Selectric (not IBM PC) keyboard which all typists are used to, and bundled software. PRICE? \$1500 or less good, \$2000 might make it also, but doubtful.

If Tandy were able to produce the machine as above, watch the Apple and IBM sales fall! If Tandy doesn't, I wonder if we will see Tandy machines available in 2 years.

Editor's note: Heed this all, or we will become tattered waifs scavenging from electronic garbage bins, alone, unwanted, bereft of kin and kind---"Here, kid, take this old relational database, I don't need it any more."

PROFILE, FIRST OF A SERIES ON DATA BASE PROGRAMS EDITOR

In several following issues I intend to review some data base programs which have come into my possession by various means including massive outlays of cash on my part. Any outlay of cash on my part is massive. These programs all cost under \$79. The first I will review is PROFILE sold by Radio Shack, written by "The Small Computer Company".

PROFILE has a long and honorable history. It first appeared as "In Memory", a tape based program. It is identical to the 3.2 version of PROFILE which I use except for being on tape.

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PROFILE is a rock solid program. I have never crashed it, and only geniuses can crash programs better than I. It is written in Basic and uses random files. It comes with a sort (ascending and descending order) facility, and a search facility. These may be used on any field.

We have picked the daisys, now let us pick the poison ivy. If you are doing the type of work where you are constantly checking and altering the records on the screen, PROFILE is for you. PROFILE's print out is clumsy and hard to format. No arithmetical nor mathematical functions may be performed on this version. If you are sorting more than 50 records, go out to the kitchen and have a beer and a cigar. A quart of beer and a long cigar. The searches are not exactly lightening-like either, but they are tolerable.

I know a number of people who have PROFILE and who are not very contented. It does me very well for one aspect of my work, so I'll explain how I use it. There are 94 apartments in the complex that I manage. When the tenant pays his rent, I update his record. At the end of the rent paying period I check the files with NE (not equal to) the current month, and I am given all the delinquents. I follow the same procedure for rent increases using the movein date.

Here we come to the crux of the matter. Data base programs, more than any other, are made to fulfil individual needs. If you spend \$750 perhaps the program will do everything you want. Perhaps, somehow I doubt it. Certainly in the cheaper programs you should shop carefully, outline your needs, and make sure the program will fullfil them. It is my hope that this series of articles will be of some help to someone in choosing database programs.

Name: Profile

From: Radio Shack

Cost: To me \$79, I believe you can find it for \$50.

Purpose: Data management

Comments: Never crashes. Good for on screen checking. Written in basic (random files) Slow. No mathmatcal functions.

A GOOD POWER SUPPLY

by Ian Webb

If you are looking for a good power supply for a computer plus disk drives or for just disk drives, I think you will have a long look before you find a supply like the one sold by B.G. Micro.

The supply is a new switching supply manufactured by California DC in Newbury Park. According to the advertisement they are from a manufacturer's over supply.

The board for the supply is just over 6 X 7 inches and supplies 5 VDC at 5 A, has two +12 VDC outputs, 2 and 2.8 A and a -12 VDC at .5 A. The outputs are brought to pins at the end of the board. You would have to wire in adapters to make them compatible with Tandy connectors. The AC connector seems to be the same as that used by Tandy on their supplies. The supply looks well made and costs \$37.50 plus \$1.50 shipping.

The output (about 85 watts) seems more than adequate to power a complete Model III or 4 INCLUDING the disk drives. If you are converting a machine to drives from cassette as I am, I think it is a good bet at a very reasonable price for a switcher. Buying one of these supplies is cheaper than buying another supply from Tandy by a factor of almost 2 and you still have a spare Tandy supply left. The operation is certainly cooler than if you build or buy a linear supply

The source is: B.G. Micro, P.O. Box 280298, Dallas, Texas 75228, (214) 271-5546. I ordered mine over the phone and put it on a charge card. Delivery was about two weeks from when I phoned in the order.

THE CREATOR--A REVIEW

BY EDITOR

There are a number of programs called Creator. This one is a program generator written by Bruce Tonkin in Tonkin's own PBASIC, which is compatible with almost everything. One warning, before I burst into glorious song to celebrate this really extraordinary program. Don't try to generate your program using NEWDOS. NEWDOS gets the lines out of order. Once you have your program written using TRSDOS, that program may be copied to NEWDOS if you wish.

As a programmer I am--let us talk about happier things. THE CREATOR makes a crackerjack basic programmer out of any klutz. I know that none of my gentle readers are klutzes. THE CREATOR will make a basic programmer out of you anyway. Many of the programs you have paid for could have been written by you and THE CREATOR. The code it writes is modular, and runs very fast. The first program I wrote with it has 94 records each with 14 fields. It runs with no delays. For my purposes I need only sum 12 of the fields, but THE CREATOR will do any type of math your computer will do, on any column, between any columns, on multiple columns, you want it you got it.

Segue to the next dramatic act. Compile your generated program with BASCOM or other good basic compiler, and you have a program as professional as it's possible to turn out. Even a competent programmer will be able to produce code faster and better, certainly incomparably faster.

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Programs generated by THE CREATOR lend themselves to compiling. All that is necessary is to remove the "on error go to" lines. Any kind of a database program, from mailing lists to architectural specifications to tables for the behaviour of argon gas in a vacuum may be composed.

How many times have you purchased a program because you had one specific thing you wanted to do? How many times were you unsatisfied? THE CREATOR will do it, the way you want it done. Please pardon my drooling. A lot of my work will be easier because of the tailor made programs I'll be able to turn out.

Microsoft basic limits you to 32767 records per file. Tonkin recommends a maximum of 45 fields per record. A very complicated sort program is included. Don't run the sort program if you've had more than two beers. CP/M versions are available.

THE CREATOR is available in the club library, it has been declared public domain by its creator so you need have no guilt feelings when you copy it. Copy the manual too, because only our certified geniuses and idiot savants could work without it.

Next month I'll cover the Reporter, which is the printout part of THE CREATOR and a little, many faceted jewel itself. In the meantime I'll go for those two beers.

<Message from

CHAMBRN at SBUG-80 06/26/84 18:23:05>

RE: MODEL I SPECIAL KEYS FOR C

Read command :

HI ALL

I'M TRYING TO LEARN THIS C AND INDEED IT IS TRYING. MY PROBLEM IS THE LACK OF KEYS ON THIS OLD MODEL I BEAST. DOES ANYONE KNOW IF THERE IS A KEY SEQUENCE THE COMPILER WILL ACCEPT FOR THE BACKWARD SLASH ? YES I KNOW ABOUT THE YQT COMBINATION FROM THE APRIL 84 80 MICRO BUT IT ISN'T RELIABLE ON MY MACHINE (MACHINE IS FASTER THAN I AM).

ALSO IS THERE SOME WAY TO GENERATE ESCAPE CODES FOR THE COMPILER ON THE MODEL I ?

THANKS FOR ANY HELP

CON CHAMBERLAIN (408) 736 2208

** CHAMBRN **

Read command :

<Message from RON at SBUG-80 06/27/84 13:17:00>

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RE: OUR 'C'

Read command :

USE THE ESCAPE= IN THE COMMAND LINE (WITH THAT +S ETC)
TO INVOKE COMPILER. DOC IN MIDDLE OF INTERSOFT MANUAL.
(FOR THE BACKSLASH).
ALSO, DID ANYONE TRY SCANF OF >1 VARIABLE (INT)??
(DID MY MSG ABOUT THAT BUG DISAPPEAR TOO?)
6TH LINE,
FOR GOOD MEASURE!

Read command :

<Message from RON at SBUG-80 06/27/84 13:19:47>
RE: WE NOW CAN READ *EVERY* DISK FORMAT (CP/M&IBM TOO)
Read command :

I GOT THE "HYPERCROSS" PGM FOR MOD 1 WHICH READS
70 DIFFERENT BRANDS! (PHANTOM, IT DOES RUN ON LNW!)
MAYBE THE CLUB WILL BUY THE MOD 3 VERSION.
LIN 4
LINE 6
OOOPS NOW 6
DON'T DISAPPEAR, MY PRECIOUS MSG!

Read command :

<Message from ANDERSON at SBUG-80 06/27/84 15:49:37>
RE: DISKON HALF HI DRIVES
Read command :

Ian - The drives were three or four makes and all within
\$10 of the same price, about \$139. Maybe one at \$129.
The name of the place is:
National Diskon Corp
44844 Grimmer Blvd.
Fremont, Ca 945328
(415) 490-7150

They recommended the TEAC drive as the best over TANDON
etc because it uses a head load. I don't know what their
non-show price is. They did an excellent job on .
two drives that I had aligned there.

Tom Anderson

Read command :

<Message from ANDERSON at SBUG-80 06/27/84 15:58:33>
RE: Mod III from Mod I
Read command :

I got a flyer in the mail the other day (I suppose
that most of you did too) that says for \$450 I can
buy a board to swapout the board in my mod I to
make it a MOD III. I got the impresssion that the
expansion interface was no longer needed. An RS232

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board and a keyboard were also available. If anyone is interested let me know. Also if anyone wants an extra Mod I keyboard package (not working) to use as the swap box I have one.

Tom Anderson

Read command :

<Message from ANDERSON at SBUG-80 06/29/84 14:12:42>
RE: MOD I TO MOD III

Read command :

<Message from JIBBYTRM at SBUG-80 06/29/84 17:54:12>
RE: Hello from Phoenix

Read command :

Hello from Phoenix

I am receiving from my office very well. It will take a little time but I will have a dedicated phone at home to communicate with. The weather is fine here. When people and the news says its 115 C that may sound warm but where I live it is only 105 in the shade.

BELIEVE ME IT'S NOT BAD AT ALL WHEN ITS DRY!!

Read command :

<Message from DURANT at SBUG-80 06/30/84 12:47:04>
Read command :

***** FOR SALE *****

1984 OLYMPIC GAMES TICKETS

1. 1984 OLYMPIC BASEBALL GAME, AUGUST 6, 1:00 P.M., \$25.00 OR BEST OFFER.
2. 1984 OLYMPIC BASKETBALL FINALS, AUGUST 10, 10:00 A.M., \$50.00 OR BEST OFFER.
3. 1984 TRACK AND FIELD, AUGUST 8, ALL DAY EVENT, \$55.00 OR BEST OFFER.
4. 1984 OLYMPIC WRESTLING, DATE WILL BE PROVIDED UPON REQUEST, 12:00 P.M., \$8.00 OR BEST OFFER.
5. 1984 OLYMPIC "CLOSING CEREMONY", AUGUST 12, 6:30 P.M., \$65.00 OR BEST OFFER.

Unfortunately must sell, unable to make games as originally planned. Please leave message or phone (415) 657-8890.

<Message from TIHULK at SBUG-80 06/30/84 16:18:24>
RE: IBM BBS #'S
Read command :

DOES ANYONE HAVE PHONE #'S FOR IBM BULLETIN
BOARDS?

THANKS,
TIHULK

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Read command :

<Message from SYSOP at SBUG-80 06/30/84 21:14:52>
RE: Use of SBUG-80...
Read command :

Hi All!

Many members (new and old) still find themselves stumbling around on SBUG-80. Yes it is true, SBUG-80 is not a menu driven BBS like many others. But, there is an easy cure! Turn on your printers and print out the help files...Make yourself a documentation file and keep it handy. If you don't have a printer then get out the pencil and paper and take notes! All the commands that one needs to know could be put on ONE 8 x 11 sheet of paper. If you give it a small effort, you could become an expert very quickly. There really isn't that much to know!

Rob...

Read command :

<Message from IANWEBB at SBUG-80 06/30/84 22:25:28>
RE: IBM BBS
Read command :

I think you will find that most CP/M BBS have an IBM section. When you enter CP/M look for the area that lists IBM or do DIR -*. * \$UOADL and watch for IBM in the user sections that come up.

Read command :

<Message from PAUSER at SBUG-80 06/31/84 17:59:59>
RE: Use of 4 double sided disk drives on a Model I
Read command :

Is it possible to use 4 double sided disk drives on a TRS-80 Model I with an LNW expansion interface? It appears to me that the 4th drive selection line is used instead to select the back sides of the drives? Does anyone know of a modification that is available to allow use of 4 drives?

Read command :

<Message from EDITOR at SBUG-80 06/31/84 23:05:57>
RE: HYPERCROSS
Read command :

What is Hypercross? What does it do? How does it work? What do you mean, Ron, "-it runs 70 different brands"? I get the impression it is something many of us would be interested in. I have been working with "Creator" lately

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and have it about half tamed. The concept is fascinating. Creator writes a program for me according to my specifications, then I turn it over to a basic compiler and--voila!! instant (though ignorant) programmer. More later. I have NO, 000.000 articles for the newsletter. Gentlemen, all of you within reach of my modem, I respect your intelligence, the scope of your technical knowledge is incomparable, but if your seminal output is in a class with your literary output, the race is doomed to disappear in a generation. I shall therefore write the entire newsletter. What the hell, it only hurts when I type.

Read command :

<Message from SYSOP at SBUG-80 06/31/84 23:24:48>

RE: Use of 4 double sides

Read command :

Yes PAUSER, it is possible. I think it requires a couple of chips. I remember hearing Bruce Carso at B&C Computervision say that he had the diagrams. You might start by giving Bruce a call at 554-0666. Make sure to tell Bruce that you are a member of SBUG!

Rob... P.S.: This would make a good newsletter article!

Read command :

<Message from RON at SBUG-80 07/02/84 18:11:31>

RE: MORE ON HYPERCROSS (BUGS!!)

Read command :

IT IS A /CMD FILE, (I ONLY HAVE MOD 1 VERSION-\$79)
ANY DOS MUST BE IN DRIVE 0 TO RUN HYPERCROSS.
IT ALLOWS YOU TO CHOOSE ANY OF 70 MODEL/BRANDS OF
IBM PC OR CP/M FORMATS (ALL BUT 1 ARE 5 1/4 INCH)
AS THE FORMAT TO BE USED IN THE OTHER DRIVES (1,2,3)
YOU CAN THEN COPY SINGLE FILES TO OR FROM THE
SELECTED FORMAT. ALSO DIR AND FORMAT THE "FOREIGN"
DRIVE(S). BUT THE 2 THINGS I NEEDED IT FOR,
IT DOES NOT DO (YET). FIRST, ALLOW MY 80 TRACK
DOUBLE SIDED TO (BY DOUBLE STEPPING) READ AN IBM PC
DS 40 TRK DISKETTE. SECOND, THE 8" (STD CP/M SSSD)
DOES NOT WORK ON THE MODEL 1. ONLY ON THE MOD 3
WITH THE HOLMES DISK CONTROLLER! SIGH....

South Bay TRS-80 Users Group
P.O. Box 60116
Sunnyvale, Ca 94088

FIRST CLASS MAIL