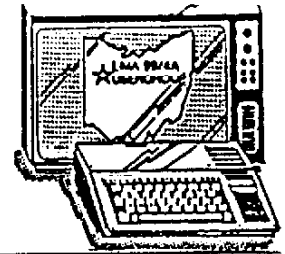


BITS, BYTES & PIXELS

LIMA 99/4A USERS GROUP



MARCH 1997--Volume 13, #3

The 1997 Multi User Group Conference

Friday May 23 4PM through Saturday May 24 7PM

This all TI99/4A and Geneve computer show is sponsored by the Lima Ohio User Group and will be held in Reed Hall of the Lima Campus of Ohio State University. Here are some maps showing how to get to the Conference. The event is totally free. There is no admission charge and no charge to those wishing exhibit area tables.

Jim Peterson memorial Achievement Awards

The Peterson awards for service to the 99/4A and Geneve community in four categories will be presented at the MUG conference. These categories are:

Community Service
Geneve
Hardware
Software

Nominations and voting is being handled by Jim Krych. Anybody can submit nominations now and vote for nominees later either by email or by snail mail. Send your nominations and votes to Jim at 3969 Clague Rd., North Olmsted OH 44070.

SEMINAR SPEAKERS

- BOB CARMANY. "A Program That Writes Programs With Token Codes"
- RON MARKUS. "The Prostick II joystick and Texaments products"

GROUPS REQUESTING DISPLAY TABLES

- Ramcharged Computers - 6 tables. Asgard, Texaments, and Bodenmiller software.

HOTELS

There are no dormitories on campus. Call any of the following places and make your best deal. In general, hotel prices in Lima are inexpensive.

The following hotels are conveniently located about 2 miles from campus at the intersection of I75 and route 309:

- Motel 6. Phone 419-228-0114. This has been the most popular hotel at previous MUG conferences.
- Holiday Inn of Lima. Phone 419-222-0004. Very nice with an indoor pool, but kinda expensive.
- East Gate Motel. Phone 419-229-8085.
- Economy Inn. Phone 419-222-1080.
- Lima Budget Inn. Phone 419-225-2806.
- Super 8 Motel. Phone 419-227-2221.

This place is located on I75 two exits north of the 309 exit about 6 miles from campus and has the biggest indoor swimming pool in the area. A nice family place:

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--Lima Inn Conference Center. Phone 419-221-0114

The following places are about 3 miles from campus at the intersection of I75 and route 81.

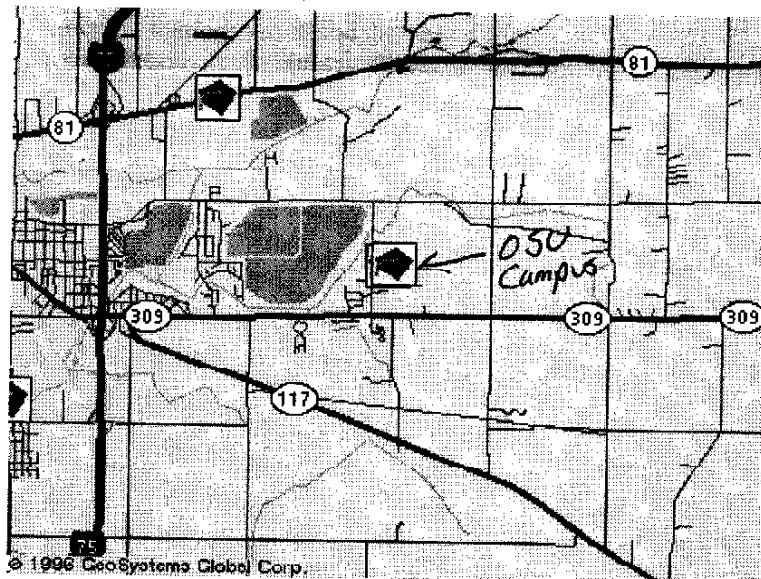
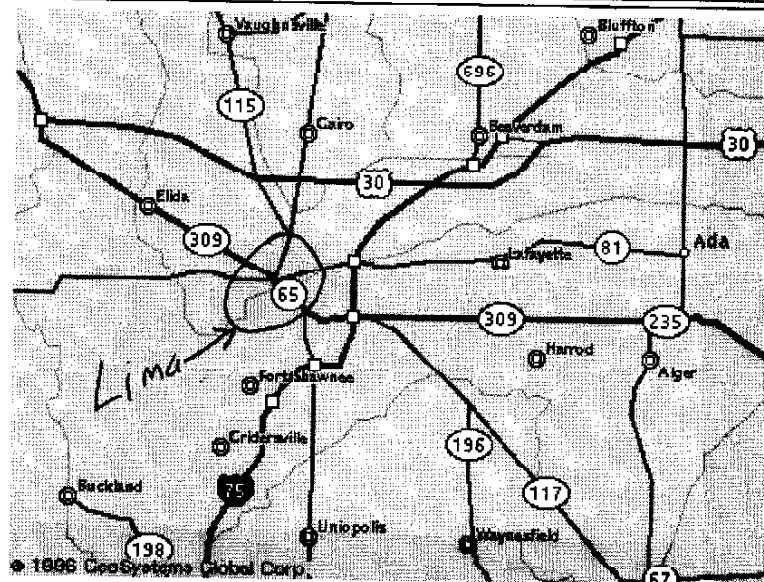
--Days Inn. Phone 419-227-6515

--Econo Lodge. Phone 419-222-0596

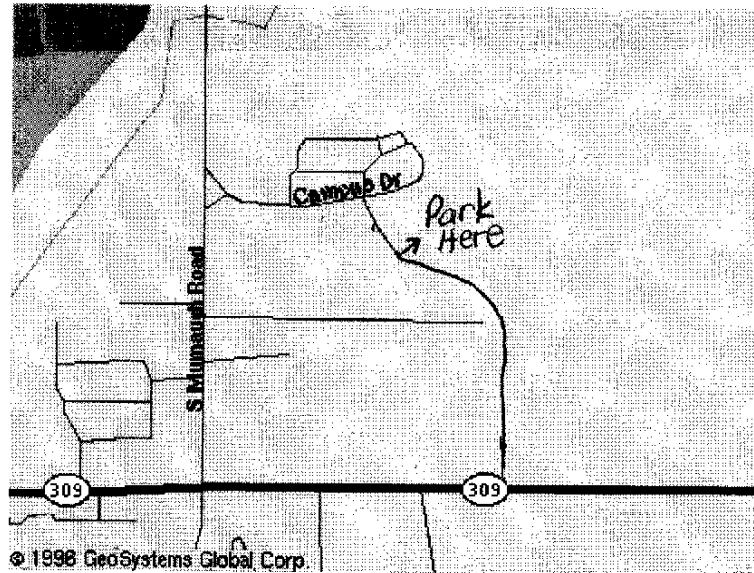
This page will be updated in the coming weeks as more details become available. For further information, to schedule a seminar, to request exhibit room tables, phone Charles Good at 419-667-3131 or send email to good.6@osu.edu.

Lima Area Map

This page last updated February 12, 1997.



Here is a map showing how to reach the OSU campus from the intersection of I75 and route 309. The campus is located at the double blue icon near the center of the map. Most hotels are located at the junction of I75, 117 and 309.



Enter the campus from 309 1/2 mile east of Mummaugh Road. Turn north into the campus where the right of the two "309" markers is shown here on the map. Park in the first available parking lot on the right. Reed hall is immediately adjacent to this parking lot. *****DONE*****

Term 80 Followup
by Gil Parrish

Early in 1996 my review of Jeffrey Brown's "Term 80" software was presented here. For those who do not recall, Term 80 is a terminal program which allows use of 80-column ANST color graphics on a plain-vanilla 99/4a disk system. There were a couple of loose ends from that article I might clear up. First, I had mentioned that text files downloaded with Term 80 were landing on my disk in D/F128 format, rather than the D/V80 format TI-Writer uses; and, that I had no idea why this was occurring, or how to convert the files for use. Bruce Rodenkirch explained to me that the problem is the way the TRM world stores the information on the disk: each line is 128 characters long (resulting in a D/F128 file when downloaded to a TI), while the TI world normally uses D/V80 files where the lines are 80 characters long. If a TI is used to upload a file, the info as to how the data is stored is contained in a "header" which is recognized if a TI downloads the file, which will cause it to! format it as a D/V80 file.

There are conversion programs floating around that will change D/F 128 files to D/V 80. Particularly recommended was Jim Smedlow's XB program CONVERT, which appeared in the August '93 issue of MICROpendium, and which allows conversion in either direction, and which will add or not add carriage returns as you desire.

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Second, my review indicated that the docs mentioned a hardware modification to the 99/4a that was supposed to improve video quality. (High video quality is important when viewing such a condensed character set, which is why I suggested use of a composite monochrome monitor.) That section of the docs states in full:

"There is also a hardware modification which can be done to enhance the sharpness of the display. I have not tested it myself yet, but the author apparently claims a good 40% improvement of picture clarity! Anything you do is at YOUR OWN RISK!!! From the OK-99 Users' Group Newsletter of May '89:

'There are quite a few hardware modifications that can be done on the TI99/4a. I have not tried them but will pass on the information to you so the brave at heart can give it a try. This and all modification to the TI you do at your own risk. The proper kind of soldering iron and equipment is necessary.

'For some reason the load resistor that TI called for in the VDP LOAD RESISTOR was replaced with one of higher value which causes ghosting. The resistor in your computer is 560ohms and the recommended value should be 330ohms 1/4 watt. This change will improve the picture by 40% and you'll wonder where the WHITE SHADOWS WENT. All that is required for you to do is unsolder the old resistor and solder the new one in its place.'

"Anyhow... he included a little graphic... to help you find the resistor, it has stripes coloured Green/Blue/Brown/Gold, and in most consoles it is located (looking "up" with the keyboard connector towards you) just one resistor below two transistors in the top-left corner of your console. If you can't find it, try following pin #6 of the TMS9918A through two inductors (they're big red things that kinda look like resistors) until you get to a resistor (striped as noted above). Oh, another little nit is that the other end of the resistor is grounded... (other, meaning the one not connected to the inductors)."

As you can see, the claimed effectiveness of this modification is hearsay piled on hearsay. I didn't try it, but mentioned it in the review; Jeffrey Brown never tried it, but mentioned it in the docs; and, even the unidentified OK-99 author apparently did not try it, but instead passed on what he was told (including the "40% improvement" boast) by yet another unidentified source. I figured this rumor had gone far enough it was time someone DID try it.

I bought the appropriate resistor from a local electronics store, and pulled out a black-and-silver 99/4a console I could afford to lose. The directions above were adequate to get me to the right resistor on the motherboard, although I might add that the "top-left corner" is the part of the motherboard next to the unit's 5-pin video connector, and that transistors (in case you don't know what they look like) are small, black 3-legged objects the top of which are shaped rather like a capital "D". Find the two transistors, skip the first resistor

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below that, and the next resistor you come to should be your target-- confirm the right color stripes. The resistor is small and quite ordinary looking. I cut the old resistor out, then put the soldering iron in the tiny pools of solder previously holding that resistor and pushed one leg of the new resistor into each pool as they liquified.

It'd be hard to do a "before and after" test under these circumstances; you basically have to remember what your old picture looked like before you did the modification. But I turned the unit back on expecting significant results-- and was disappointed. I really could not tell any difference; shadows and other picture defects remained. While I did not damage my unit with my modification (at least, no bad side effects have appeared so far), neither was my effort significantly rewarded. Those of you who like doing hardware modifications might wish to give this a try yourselves and see how it works for you, but absent glowing reviews from others, I would not recommend this for the average user.

Finally, I noted in my review that the Jeffrey Brown was indicating future modifications to Term 80 would be forthcoming. The docs mention an intended version 4.0:

"V4.0 is MORE than a terminal program, it will be an entire OS + have TONS of applications. I am planning a TRUE GUI interface, FULL support for expanded memory cards, mice, etc... It will have picture viewers/converts, a text editor, file utils, and PROGRAMMER SUPPORT. Yes, I will release tools for designing your own Term 80 modules to make use of it's functions + libraries, and devices. Term 80 v4.0 *should* have support for expanded video cards/devices (TMS9938) and the ability to run off of the Geneve."

This section of the docs was apparently written in 1994 or very early 1995 for an earlier version of Term 80, because it mentions a possible late Spring '95 release of v4.0. However, the docs were last modified October 27, 1995 at the time v3.1.4 was released, so obviously a late Spring '95 release for v4.0 was no longer on the agenda. My review recommended that people not wait for a possible future pie-in-the-sky version of Term 80, and instead obtain v3.1.4 upon Jeff's promise that IF future versions did come out, buying v3.1.4 would entitle the user to (in Jeffrey's words) "cheaper updates of the program (like a couple \$\$ plus shipping)." At the time I wrote the review in March of 1996, I sent Jeff an e-mail query about new versions or modifications of Term 80 beyond the v3.1.4 I was reviewing, and was told "none yet". In December of 1996 I sent Jeff another e-mail query about Term 80 upgrades or modifications (or indeed, any other new TI software he might have developed), and received no reply. A followup in January, 1997 also went unanswered. I have since been told by someone else that Jeffrey Brown lost his source code due to a hardware failure, and has discontinued work on Term 80. If the latter is true, I do not know how it impacts the availability of the commercial version of Term 80 (though there is also a PD version floating around, with some features disabled), but it would certainly appear at this time that v3.1.4 will be the final form of this interesting TI software.

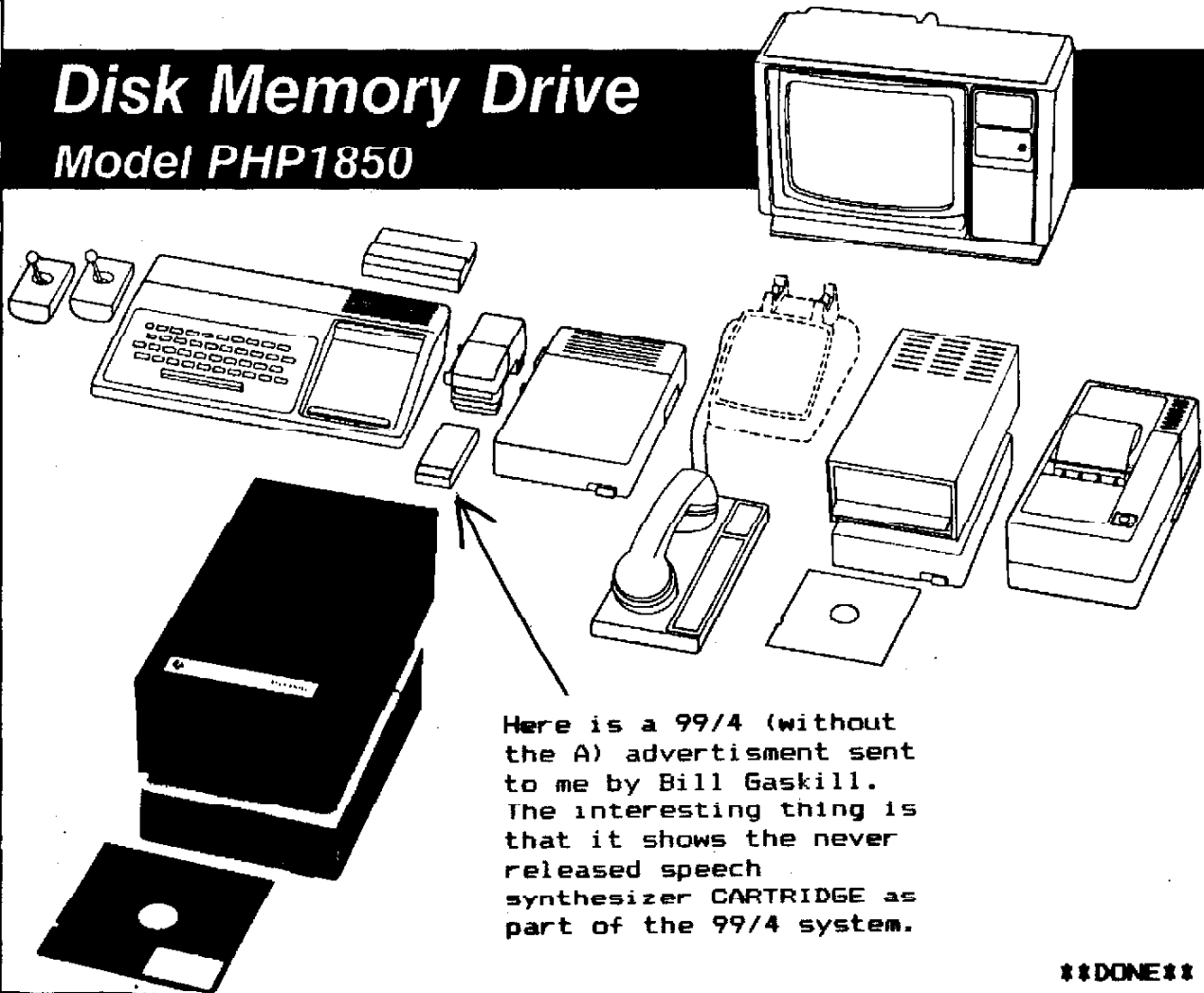
***DONE**

CL482A

Texas Instruments
TI-99/ Home Computer Accessory



Disk Memory Drive Model PHP1850



Here is a 99/4 (without the A) advertisement sent to me by Bill Gaskill. The interesting thing is that it shows the never released speech synthesizer CARTRIDGE as part of the 99/4 system.

DONE

Hello Charles,

in the following I send you a list of some developments for the TI-99/4A. If you find it useful please put it in the next LIMA newsletter. Please send the next newsletter to the adress below of the list.

Hope to see you again any time in the USA... or in Europe?

Oliver

=====

* HP-MGR, a userfriendly print manager for Hewlett Packard printers. It is possible to print till to 8 TI-ARTIST pictures on one side. Menue driven program with disk directory, show TI-ARTIST picture, print double wide and much more... written in C99.

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- * RISK, a strategy game for 2 to 6 players, completely written in Assembly language, uses full Bitmap-Graphics, needs only a TI, 32k, Disk and two joysticks
- * Speech for Infocom Adventures; a batch program, let your infocom text adventure speak to you, e.g. Floyd says nasty things... needs an extra Ram >6000 a speech synthesizer and the new speech card from Winfried Winkler; this card has as a true speech DSR, not the pseudo one of the TE-II Modul
- * 16-BIT-BOARD
opens the way to the full 16 Bit World
Included is a double sided PCB with 64k memory banked RAM with 16 Bit access and a super fast 16 Bit Input/Output Port expandable to 256 Bits. This port can be used by any language you like e.g. Basic you only need a peek or a call load; there are drivers on the board to connect a longer cable (more then one meter)
The two memory banks are set by a poke to a special adress. In XB it is possible to load two XB-Programs or you can use the 64Kram for a large buffer.

The board is installed in the TI with a special socket on the top of the CPU so you don't need to remove anything. If this board is installed you have easily acces to the full TI-BUS for other developments.

I use the I/O-port for a 16-Bit-LOGIC-ANALYSER a software project of our user group (TI-User-Groupe-Mannheim). In the last years we developed software called SPION (means spy) to use the full speed of the 16 Bit port. We have sample rates till to 4 mikro seconds (10^{-6} seconds) in full 16 Bit wide. There is room for 5000 measurements which you scroll on screen to see the high or low signal, set a trigger point, search binary combinations, start the measurement with individual speed, save or reload a measurement and and... The program is menu driven and uses full bitmap graphics to give you a sophisticated tool to anlyse binary measurements.

E. g. I have used this program to analyse the I2C-BUS for the teletext card.

This board was shown with software to the public on the international TI-FAIRE in Wolfsburg Germany in September 96.

Next development for this board is a 16-Bit Ramdisk.

- * The TELETEXT-CARD is a new hardware project for the TI99/4A and for the Geneve. The card is an extern device which is connected to the RS232 interface. On the other side you need a CVBS signal from a TV or something else. I use a satellite receiver. The software is written mostly in C99 and in assembly language. This software controls the decoder chip (SAAS246A/PE) via the RS232. The software needs 32k memory, a Diskdrive and a program file loader like the Editor/Assembler Modul or the Horizon menu.

The card is controlled by a user friendly menu program with the following options:

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- searching four pages at the same time
- dump pages with graphics to printer
- save them to any other device you like in DISPLAY VAR 80 format
- show the status of memory
- show moving index, date, time, channel
- find subpages
- if you have an 80 column card you can store 176 pages in memory
- automode function:
 - the program searches the pages alone
- move pages during the searching process
- see two page equally on screen
- if the Ti speech synthesizer is adapted the computer gives you advices
- use other language characters: german, french, spanish etc.

absolutely necessaire is the following hardware:

TI-99/4A
 32k Memory
 Disk
 RS232
 and of course the TeletextCard

further supported are:

80 column cards: Becker, Mechatronic, TIm, EGI, GENEVE
 TI speech synthesizer
 Printer
 and very useful: a printer buffer

Any interests? Please write to the following address:

Oliver Arnold
 Pestalozzistr. 15
 80469 Muenchen
 Germany
 or via email:
 oliver.arnold@gedos.de

***DONE**

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