SUPERLETTER

Serving SuperBrain and CompuStar Users Around The World

Aug./Sept.
Vol. 3 No. 4

Modem communications continues to grow as an important use of microcomputers. It forms the third part of the triad we feel is the foundation of a contemporary micro's main use: i.e., word-processing, financial spreadsheets, and telecommunications.

Hayes has set the standard with its 1200 Baud model, the SmartModem. Now, even its features are being surpassed -- the new Cermetek InfoMate, for example. Prices are dropping as well.

Speaking of prices, we're having our very first sale for Superletter subscribers. Take 10% off any hardware or software product (except WordStar) until October 30th. You can use this discount on 10 and 20MB harddisks, modems, cables, diskettes, computers, printers and CP/M software. Just mention the Superletter Fall Special. But you must be a subscriber. Naturally, all regular tax and shipping costs still apply.

Maxtek is participating with a special sale on their high-resolution graphics product. $995 gets you the entire package -- hardware and software -- for either the SuperBrain or CompuStar system. An excellent deal through the end of November.

Finally, the rumor mill about Intertec has started up again regarding a new line of products to be released soon. At this point any comments or hunches would be pure speculation. An IBM-PC DOS compatible machine wouldn't be a bad idea. But that's just wishful thinking.

Or is it?

Albert Abrams
EDITOR

Technical Corner

File Transmission Using the SuperBrain

By Steve R. Riskin

For a long time now SuperBrain users have been searching for ways to enter the fascinating world of free software. The CPMUG groups have nearly a hundred volumes of free software available but not for SuperBrain 5 1/4" disks. From time to time someone offers to sell the entire library in SuperBrain format but such a purchase is an expensive way to gain access to what is, and should remain, free software.

Also, everyone has some computer buddy with whom, for a variety of reasons, one would like to transfer files. Commercial file transfer programs are notoriously better at advertising their benefits than providing them, and, of course, the classic example of free software is the Ward Christiansen series of Modem programs available from your local RCPM (Remote CP/M) system.

Bootstrapping Your Way to the New World.

Unlike other commercial CP/M's, SuperBrain's CP/M comes with an enhanced PIP utility. Prepare a disk with STAT, PIP, LOAD, ASM, and the editing part of your word processor. Test PIP by entering "PIP Q=INP:". Your screen should delay for a fraction of a second and then ask you (ECHO Y/N). Wonderful! Answer Y and then write some letters to the screen. End with a control Z. Did your disk drive turn on? Did it write your words to a disk file? Splendid. The "Q" can be replaced by an "ufn" (unambiguous file name) and this will be extremely useful in the processes that follow.

Reboot and try "PIP OUT:=CON:" (watch the apostrophes they are required!). Does nothing happen? Excellent; now hit CR. The (ECHO Y/N) should now appear. If all this has worked, you now have access to the wonderful world of free software. If not, get a proper copy of PIP or buy one from Superletter. You may patch one by using the explicit instructions in the July, 1983 issue of MicroSystems (the article on PIP-MODEM, or by using the instructions appended to this article.)

Getting Started

To get started: Turn on your modem. I use the Hayes SmartModem connected to my SuperBrain's main port. Enter the com mand "PIP OUT:=CON:". The screen remains blank and nothing happens. Enter a "CR" and PIP will ask (ECHO Y/N). Answer "Y". Later, when you become an experienced user you will want to avoid the ECHO (having everything you enter at the keyboard appear twice on your screen) but now that is preferable to having nothing appear at all. You are now connected to your modem through the main port. All commands entered at the keyboard will either address your modem (depending on whether they are recognized by your modem's command structure) or, if they are transparent to the modem, will be sent out through the modem to your destination.

Enter commands your modem requires to dial a number, The Hayes requires "AT D T 1-xyz-abc-defg CR". It is useful at this point to have a list of RCPM Systems or CBBS's (CP/M Bulletin Boards). The July issue of Microsystems has an updated list. A useful number is the SuperBrain remote bulletin board at 1-617-862-0781 (in Massachusetts) or the dBASE II bulletin board at 1-408-378-8733 (in Campbell, California, near San Jose). For starters, of course, a local number is best. It will take a

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Technical Corner

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few hours to get these routines down pat and with long distance rates being what they are you will not want to practice on a long distance board.

If you are successful in reaching the remote source your modem will indicate that it has made a connection. If you are using the Hayes you will be able to hear the connection being made through the modem speaker. There will be a few rings, a high pitched whistle, and the satisfying sound of a connection being made. Other modems simply print on the screen "Ring, Ring, Ring, Connect!".

The remote board will now take over and prompt you for various bits of information. Some of it, at the very beginning is trivial but technical. Just brave your way through: How many nulls? answer 0; Is lower case OK? (those poor Apple users!-they could have had SuperBrains for the same price), answer Y. Then give them whatever particulars about yourself that the "Sysop" (System Operator) desires. If they assign you a password or a user number start your notebook recording that information. Shortly you will have a great deal of information making it highly practical to keep a looseleaf notebook for data transmissions.

After the remote gives you a great deal of information about itself-and how to avoid this information in the future-it will give you a command line. This looks something like "Command: A, B, C, D, E, F, Q, W, E, R, T, Y, 2, 4, etc." ending with the option of, HE, or HELP for help. Choose the expedient alternative and type HELP. Experiment with the board; read messages; search out levels of messages; enter messages; do whatever you like. This, by the way, is all you can do with most commercial modem software: play around with the bulletin board material and information. They assume your desire for remote computing will be exhausted by contact with the Source and the like.

The interesting command, however, is the one that precipitates you to the remote system's CP/M level. Type Help again and find the command that puts you in the remote system's CP/M. Here, just as when you are at your own computer, you can use the DIR command to list to screen the files available on the remote system. Now you can see what you have been after: lots and lots of new software just there for the plucking. DIR both the A: and the B: disks. Try C: and D: to see how extensive the library of programs available is. Some systems have User Levels (more on that later) but if they do they will instruct you at the beginning how to view the directories on the various levels. (More information to record in the notebook). These commands will take something like the form DIR A: $ADL (note the space between the : and the $).

Capturing Information from Remote Systems

Some magic: you can, at any time once you have established modem contact and connected with a remote system, reboot your system without breaking the connection with the remote system! This is extremely useful for the following kinds of tricks. Remember the "PIP Q=INP:" command above? Remember the effect of control Z afterwards? Before you give the remote board the DIR command, when you are at the remote CP/M prompt 'A", reboot your system and enter "PIP Q=INP:". At the query (ECHO Y/N) choose what you will, hit CR and your system will respond with the remote CP/M prompt. That is, you are now back in contact with the remote system.

You can tell it is the remote prompt because it will shimmer (literally-it sort of bounces) and is sometimes followed by a 0: thus it looks like A0. Now type DIR; go on to B: and when you get the B0, type DIR, wait, and then write to your own disk all the preceding information by typing control Z! You will write to your own disk whatever transpired between the time you issued the command "PIP Q=INP:" and the control Z. There, on your disk, under the appellation "Q", will be the remote board's directories for you to dump to hard copy at your leisure and not at long distance rates. After this maneuver you are back on your local system but your remote connection has not been broken.

Going In and Out of the Remote System

At various times you will want to go back to the remote directory from local CP/M. Any time you wish to do this (after you have rebooted your system to issue local CP/M commands, or have precipitated to your local CP/M by typing control Z) you can do so by typing"PIP Q3=INP:" Be careful here for sometimes you will be doing this command to end with the control Z to preserve instructions, directories, files etc., received from the remote system, and sometimes merely to get yourself back to the remote system after rebooting your own system. I use a number addition to distinguish my intentions for if you are merely getting back, as it were, you will not end that portion of your session with the remote board with a command of control Z. Thus your local directory, depending on how many times you enter the remote and exit by rebooting locally, will fill up with .$$$ files.

I use the one file appellation: Q3 because it matters little if the empty file is written to again and again. But since it is sometimes necessary to enter and exit a number of times this bit of housekeeping keeps your local disks relatively clean. At the end of the session, to complete your disk housekeeping chores, you can erase all .$$$ files. If you use the conventions herein described there will be only the one: Q3.$$$. What you don't want to do is overwrite a 'saved to disk file of information', which ended with a control Z, with an empty file just used to get back to the remote system. Perhaps, the first time around, you should create every file with a different directory title: Q, W, E, R, T, Y etc. and then only ERA the ones with the .$$$ extension at the end of the session.

Capturing a Copy of MBOOT3.ASM

At this point, however, you are going back to retrieve MBOOT3.ASM. Therefore, use a command such as "PIP MBOOT3.ASM=INP:" (Remember: any "ufn"!) This

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Technical Corner *continued from page 2*

will prepare a space on your local disk for the program. It will also get you back to the remote CP/M prompt. Once you have the remote A0 CP/M prompt, go to the drive that has MBOOT3.ASM- probably the B: drive-since most remotes keep their interesting files on B:. Type "TYPE MBOOT3.ASM" CR and watch it flash by on your screen. Remember that you have prepared a disk file called MBOOT3.ASM and everything that is read into your RAM will be written to the disk file after you type control Z. Don't forget the control Z or all will be lost. When the whole file has flashed by type control Z. Now you have captured MBOOT3.ASM.

You can use the above procedure to get a few more files once you are connected and in order to practice. Go back to the remote with some dummy file name: "PIP W =INP:" and DIR the remote. When you see something interesting TYPE it and then end with a control Z. It is now written to your disk. Short .BAS files will come across this way and some short .DOC files also. Some boards will chastise you for using TYPE for any files except the MBOOT3 file but if it works, it works. Prepare a separate PIP 'ufn.ext'=INP:" for each file you transfer over. This means going in and out of local CP/M but you know how to do that! The main task, however, lies ahead.

Capturing and Reconfiguring MBOOT3.ASM for your Modem

The simplest way to do this is to capture the MBOOT3.ASM from the SuperBrain RCPM at the above number. This is fully configured for the SuperBrain and requires only a little installation work. What needs to be done is to install it for your particular modem. If your modem is connected to the main port you will need to know that the Main Port Data address on the SuperBrain is 58H and the Main Port Status Port is 59H. For the Auxiliary Port these addresses are: Date 40H; Status 41H. Use your word processor to list the MBOOT3.ASM program. Notice that about 24 lines into the program there are the lines:

```
IF NOT PMMI AND NOT DCH AND
NOT VT180

MODCTLP  EQU  3DH  ;Put your modem control
                     port here
MODSNDB  EQU  04H  ;Your bit to test for send
MODSNDR  EQU  04H  ;Your value when ready
MODRCVB  EQU  01H  ;Your bit to test for receive
MODRCVR  EQU  01H  ;Your value when ready
MODDATP  EQU  3CH  ;Your modem data port
  ENDIF    etc.
```

For the SuperBrain, the date and status ports are as listed above (58H and 59H; or 40H and 41H.) The transmit empty buffer mask, and the receive buffer full mask (for that is what they are asking for) are 01 and 02 respectively. (They don't ask but some modems require this info: The polarity of the Transmit and Receive masks are 1: and there are no initialization bytes.) So, overtype 59, 01, 01, 02, 02, 58 after the EQU and before the H and then save this version as per your word processor's command to save a file.

Next Steps

Use ASM.COM to create a HEX file of MBOOT3.ASM. Type ASM MBOOT3 and wait. When the program is finished there will be a MBOOT3.HEX file on disk and a .PRN file. Use LOAD. COM to create a COM file from the HEX file. Type LOAD MBOOT3 and wait. When the LOAD program is finished there will be a COM file on disk! Lovely. Now the door is open.

Through the Looking Glass

This file is most useful for obtaining remote COM files (called .OBJ files so you are prevented from running them on the remote system-and screwing everything up). The one file you are looking for, however, is MODEM7xx.AQM. If you have the Hayes SmartModem you are looking for SMODEM 7xx.AQM. Notice the Q in the middle slot of the remote file's extension. This means that the files is 'squeezed' to save remote directory space. Notice the strange extensions on almost all the remote files. You are going to need some new software to handle these strange extensions.

One of the first programs you will need to bring over is USQxxx.OBJ or any such version. Any .OBJ file brought over can be renamed to make it runable on your system: Ren UFN.COM=UFN.OBJ. That is sufficient to make it a .COM file which your system will recognize. The USQ.COM file is necessary to unsqueeze files that have been compressed on the remote system. Type USQ UFN.xQx and the program will respond: POOFOO.xQx -- POOFOO.ASM The resulting program is ready for further processing.

Other files you will want to bring over can be best determined either by the existence of .DQC files (compressed DOCument files) or by the DISKMENU program on the remote. The DISKMENU program describes all files on the remote system and makes very good bedtime reading. These are the goodies in the candy store yours for the plucking. The .DOC files are your manuals. Take a few of these first to see if you want the corresponding programs. Things you should look at, beside the MODEM or SMODEM and USQ sine qua nons are SWEEP, NEWCAT, LU-xxx, ZCPR, ZESOURCE and the like.

Transferring Files

Now you are armed with MBOOT3.COM configured for your system. Big Guns indeed but not the biggest. To bring over files go into the remote directory. Choose what you like. While in the remote type XMODEM S UFN.EXT. The remote will call up its Xmodem program and tell you how large the file is and how long it will take to transmit it. Then it waits. If you watch your modem, and your modem has indicator LEDs to show you, you will see that the remote board tries, every ten seconds, to send the program. Reboot your system and type MBOOT3 UFN.EXT and get a prompt line that says ESC to start. When you hit the ESC key the program says FILE OPEN, READY TO RECEIVE. But nothing happens. Wait a bit; remember the sending program only tries once every ten seconds. After a few moments everything should be flowing splendidly. Go have some coffee but return within the time the XMODEM program said the transmission would take. Watch the transmission end and the whole file written to your disk!

After the local disk write you are in local CP/M. Write another INP: file to get back and XMODEM something else. You can proceed in this fashion as long as you like but you will want to bring over MODEM7xx or SMODEM7xx and their corresponding .DQC files to learn how to use them.

Appendix One: Reconfiguring PIP

Use DDT to patch PIP to support the INP: and OUT: functions. These are procedures reserved at beginning addresses from 110H to 1FFH in the PIP program. For input, PIP will jump to location 110H from 103H and for output to 120H from 106H. A byte received is put in location 109H and output it at 128H. This routine is set for SuperBrain's Main Port. The status and data port addresses are therefore 59H and 58H respectively. Change this if your modem is set to the Auxiliary port.

```
103H   JMP   110H     ;Jump to input
106H   JMP   120H     ;Jump to output
110H   IN    58H      ;Get Status
112H   ANI   2        ;Mask bit
114H   JZ    110H     ;Loop
117H   IN    59H      ;Get data
119H   ANI   7FH      ;Clear the high bit
11BH   STA   109H     ;Save the data
11EH   RET            ;Return to PIP
120H   IN    58H      ;Get status
122H   ANI   1        ;Mask it
124H   JZ    120H     ;Loop
127H   MOV   A,C      ;Place the char in
                       a register
128H   OUT   59H      ;Move it out
12AH   RET            ;Return to PIP
```

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Letters to the Editor

DEAR SUPERLETTER:

First: thanks for sending the BASIC-test programs written by Dr. Kelly from Boston.

Only it's a pity that the 'SuperBrain DISPLAY EXERCISER' - program is not compatible with SuperBrain II. Most of the OUT PPIA, XXXX statements give strange effects and do not work, so I had to change the above mentioned statements into escape-control sequences.

Second: when the SuperBrain II came on the market, I had an arrangement with my dealer, to give back my "old" SuperBrain-I and change it for a new SuperBrain II. Enclosed in the box I found a 14 page preliminary SB-II-manual from Intertec saying: "This bulletin will serve as interim documentation of these new products until the SuperBrain-II User's Manual is available". Now, my dealer still says that there is no SuperBrain-II manual. And I don't believe him!! Can you please tell me if there is a new SuperBrain manual?
Thanks in advance. Another thing is this:

In the SB manual there is no description of the ASM.COM (CP/M assembler) error-messages U and S. My system-diskette came with an ASM.COM (the CP/M assembler) on it that prompts:

(CP/M ASSEMBLER-VER 2.0)

But in the (odd) manual on page 18 in the chapter 8 (sample session) the CP/M assembler prompts:

CP/M ASSEMBLER - VER 1.0.

So Intertec "forgot" to update the manual, when the new (2.0) ASM came out. Therefore I say: "This manual needs to be updated by Intertec".
Can a reader give me all new error-codes (plus their meanings) including the errors "E" "U", that I discovered by myself?
Thanks again!!

Yours sincerely
Robert Jan van Herksen
27 van Karnebeeklaan
4102 BZ - CULEMBORG
THE NETHERLANDS
EUROPE

DEAR SUPERLETTER:

I would like to bring your attention to JRT Systems PASCAL package. At $39.95 it is one of the truly great bargains of the personal computing industry. It is not the fastest nor the best Pascal on the market, but it has such a low price that it is a great way to learn about Pascal. It comes in the SuperBrain format and has a nice (although not perfect) manual. You might want to alert your readers to this bargain. (JRT Systems, P.O. Box 22365, San Francisco, CA 94122)

Thank you,
Richard Ross
3631 E. Flower, Apt. G
Tuscon, AZ 85716

DEAR SUPERLETTER:

We market the SuperBrain and its derivatives, and find your Superletter extremely useful and enlightening.

We would be grateful if you would permit us to copy extracts from the Superletter on occasion to include in our own newsletter which we circulate free of charge to our customers.

Please let us know.

Yours faithfully
Peter E. Beckles
Interactive Systems Ltd.
6 Stanmore Avenue
Port of Spain
Trinidad & Tobago, West Indies

Editor's Note: *Yes, you may. Thanks for asking.*

DEAR SUPERLETTER:

When I received the April/May Vol.3 No.2 issue, I was very surprised to see my letter published. I thought that you would like an update.
The current configuration of my machine is:

SuperBrain I S.S./D.D. modified
to 2×800K + 1×200K drives.
Johnathan Platt's SOS operating system and PROM.
Cambridge Micros S100bus adapter
Rostronics S100 clock/calendar
Phonelog
Epson MX-80F/T printer.
Maplin modem-300 Baud CCITT
Anchor Auto'-300Baud Bell 103
Xtec 75/1200 Baud modem
Phone answer hardware

and it is used to operate the FIRST CBBS (Ward Christensen's) this side of the Atlantic. It is one of only 5 boards in Britain, and there is only 1 other operational board in Europe.

We are CBBS NORTH-EAST, Tel: 0207-43555 14.30-09.00 CCITT tones, but will be adding Bell 103 in the near future,
Plus tel: 0207-32447 19.00-00.00 CCITT
00.00-08.00 Bell 103

I would like you to give publicity to this, because from what we can gather, there are a growing number on your side of the 'pond' who wish to communicate with Europe.
A CCITT modem kit for £39.95 (a really excellent job - we use it) is obtainable from:
Maplin Electronic Supplies Ltd.,
P.O. Box 3, Rayleigh. Essex. SS6 8LR
Tel:0702-552911 Part No:LW99H

Trevor Smith
12 Tollgate Road,
Hamsterley Mill,
Rowlands Gill
Tyne & Wear.
NE39 1HF
ENGLAND

DEAR SUPERLETTER:

I'd like to know how in MBASIC, ver. 5.1, I can have an input at the keyboard tested without having to press CR.

I know only partly how to do it with one letter tapped but the problem is I return to CP/M at MBASIC.

Perhaps one of Superletter's readers can help me.

Thanks.
Normand Beaudoin
3479-A St. Dominique
Montreal, P.Q. H2X-2X5

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SEEK AND SEARCH
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Technical Corner *continued from page 3*

Work only with copies of your system disk for if you have a non-standard PIP (for SuperBrain) there is no telling what may happen. There are more explicit instructions, and another approach, in the July, 1983, issue of Microsystems in an article on "PIPMODEM".

Editor's Note:

PUBLIC DOMAIN SOFTWARE FOR CP/M

There are thousands of programs and utilities available free to anyone able to download them from most RCP/M's. Generally, no single system has them all, but many of the more useful or popular programs are available on the Intertec.

The following is a partial list of the 100-plus public domain programs found on Software Centres' RCP/M (213) 296-5927. Listed is the program name as it may appear, its approximate size, and a brief description of its use:

DU-V77.COM 6k Disk Utility program: allows direct modification of disk files.

DU-V75.DOC 8k Documentation for above.

ERAQ.COM 2k Erases files, but asks first one at a time.

FILEFND8.ASM 16k Searches all user areas and drives for the specified file. Wild cards are accepted.

FBAD-V54.ASM 24k This program checks for bad sectors and, if found, locks them out, saving the rest of the diskette. Version 5.4.

SCRAMBLE.COM 2k This can encrypt a file using a password of 8 unique characters. The file must be run through a second time to restore it. Note: encrypted '.COM' files may cause crashes.

SCRAMBLE.ASM 8k 8080 assembler source code for above.

OSETAUTO.COM 2k Sets the autostart section of system tracks on single density disks for the Osborne-1.

SHOW.COM 2k Lists files on the screen with pauses every 24 lines. Spacebar to view next page.

UNERA.COM 2k Restores files that were accidentally erased. If there have been files added, it will try to determine if the erased file is lost.

WASH14.COM 4k Self documented multifunction utility. Combination of 'PIP' and various CP/M commands. Menu driven.

RAMDRIVE.ASM 8k Allows you to use selected portions of RAM memory as an additional high speed disk drive.

RAMDRIVE.DOC 4k Documentation for setting up the above. D-27A .ASM 16k A directory utility that keeps track of changes in the directory. Usually found on RCP/M's as 'WHATSNEW'.

CRCK.COM 2k Gives a checksum value to verify accurate reception of files from RCP/M's.

DIF.COM 16k Part of system that allows updates by separating only the changes in a file to reduce transfer time.

PRNTSQ.COM Prints squeezed files without unsqueezing the disk file.

SQ.COM 16k File compression utility. Can save 30-40% on transmission time or storage space. Most files on RCP/M's are squeezed using this program.

SQ/USQ15.DOC 2k Brief document about the squeeze files.

SQUEEZER.DOC 24k Documentation on the finer points of squeezing and unsqueezing of various files.

TYPESQ.COM 8k This file allows you to view a squeezed ASCII file without expanding it. Format: A)TYPESQ Fn.Ft(cr).

UNSPOOL.COM 2k Allows you to use your computer while listing a file on the printer. It will send data to the printer when the keyboard is inactive. Caution: it may crash with certain programs which overwrite 'UNSPOOL'. Format: A) UNSPOOL Fn.Ft (cr).

USQ.COM 14k Reverses the file compression process. Use on any file with a 'Q' in the second letter of the filetype.

OTERM404.COM 32k Modem program designed for the Osborne. Version 4.04.

OTERM4.DOC 50k Documentation for the above.

OSETAUTO.COM 8k This file is for adding extended function keys. This allows automatic signon and dialing routines. This prog used with OTERM.

OTSET4.DOC 4k Document for the above.

? **COMM7.ASM 125k** Current version of the 'MODEM' program at its greatest state written in 8080 source code that can be modified for virtually any CP/M computer.

? **COMM7.DOC 48k** Document for the above.

SMODEM3.ASM 96k Modem program for SmartModem users. Takes advantage of many of the features of the SmartModem. Present version is 3.8.

SMODEM3.DOC 38k Documentation for the above.

* **RESOURCE.COM 6k** 8080 disassembler. Produces INTEL mnemonics.

RESOURCE.DOC 30k Document for the above.

* **ZESOURCE.COM 8k** Z80 disassembler. Produces ZILOG mnemonics.

ZESOURCE.DOC 4k Document for the above.

AMORT.BAS 4k MBASIC program that figures amortization rates.

OZCPRGEN.COM 4k Generates the ZCPR environment on the current system diskette for the Osborne-1.

* **Z80ASM.COM 10k** Assembler for the Z80. Works just ASM.

Z80ASM.DOC 6k Document for the above.

ADVENTUR.COM 24k The Original Adventure game with the colossal cave and all its myths and adversaries.

ADVENTUR.WRK 24k Work data file for the above program. You have to have both ADVENTUR files on the same disk to play the game.

On most RCP/M systems, all of the .COM files are renamed to have an .OBJ filetype so they cannot be executed on the host system. Everything else will more than likely be squeezed to conserve space, and will be evident by the "Q" in the middle of the filetype extension.

★ ★ ★

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-Programs-

PATCH YOUR PERSONAL HELP-LEVEL INTO WORDSTAR

When I used WORDSTAR for the first time, I was very pleased to find all those HELPing menu's on the screen, because then it wasn't necessary to look-up the most-used command-codes in the manual. But after I had worked with this word-processing-program many times, I got used to all codes, and it became slightly irritating, to see those (editing-space-consuming!!!) explanatory prompts, that I already knew by heart very well.

One can, of course, set the HELP level to another (lower) value, but this change has to be made EACH time (by using the^JH command) when you start-up WORDSTAR, because standard HELP-level is 3. Here's a HOW-TO description to patch your personal HELP-level into WORDSTAR.

HOW TO CHANGE THE DEFAULT HELP LEVEL.

You have to patch-in your personal "standard"-HELP level, and what you need is:

a) A diskette with WORDSTAR (any version) and INSTALL.COM and

b) Just 5 minutes of your time.....

Boot up CP/M with the above mentioned diskette in drive-A and wait for the "A> " prompt.
Now type: INSTALL and press the <RETURN>-button.

Answer the next question: "Do you want a first-time installation of WORDSTAR?" by typing N(o).

Now, the INSTALL-program asks how you like to install WORDSTAR. There are four possibilities (A,B,C,D). Press C

Answer WS.COM to the question: "Filename of WORDSTAR to be installed?", and give a <RETURN>.
(Give this filename ONLY if your-WORDSTAR has the filename WS.COM, but if your WORDSTAR has another FILENAME, then enter this other name.
Answer WS.COM to the question: "Filename for saving installed WORDSTAR" and give a <RETURN>.
(The saved "name" of your WORDSTAR will then be: WS.COM).

Now, answer the next eight questions, by only hitting RETURN. (So hit RETURN eight times). In any case: stop giving <RETURN> if you see the question:

"ARE THE MODIFICATIONS NOW COMPLETE?"

Answer N to this question, and you will see the following text:

YOU MAY MODIFY ANY LOCATION DESCRIBED.....etc
and the prompt:
LOCATION TO BE CHANGED (0=END) :

Now, type 0360, and give <RETURN>
You will see:
OLD VALUE: 03H
(03)=the HELPlevel)

*** c a u t i o n ***

****

If you DON'T see 03 or 02 or 01 or 00 HERE, THEN CHECK IF YOU ENTERED THE CORRECT LOCATION 0360.

****

Enter YOUR favorite "standard"-HELP-LEVEL (= 03, 02, 01 or 00), by typing 03, 02, 01 or 00 (you have to enter TWO decimals, the first decimal is always ZERO).

Then give a RETURN and answer Y(es) to "OK? (Y/N)". Drive-A activates, and your patched wordstar will be saved on disk. After this, WORDSTAR will come up now within 10 seconds.

TESTING THE NEW HELP LEVEL

Edit a text now, and WATCH YOUR SCREEN. If you entered an other HELP-level then THREE, now you'll see that the whole screen can be used to edit a text, and HELPING explanations will only be displayed if you really want them to see, by typing: ^Q or^K or^J or^P or^O.

```
;-------------------------------------------------------------------
; Program-name :   ROM1 (See alse ROM2)
; Made for     :   INTERTEC SuperBrain-II
; DESIGN       :   Robbert J. van Herksen
                   (PA3BKL)
;                    27 van Karnebeeklaan
;                    4102 BZ CULEMBORG
;                  THE NETHERLANDS
;                    Phone: 03450 - 14379
; Dated        :   May 9th 1983
; Function     :   Switch-on PRIMARY or
                   SECONDARY character set.
;                  (can be modified, to switch
;                  ON/OFF other video-attributes.)
; Algorithm    :   Send string
;
; Primary          "ESC + 7E(hex) + 47H +CR + LF"
; Secondary        "ESC + 7E(hex) + 67H +CR + LF"
;                    to CON: sole by BDOS-call'
;                    and return to CCP
                   (WARM BOOT).

***********************************************
;
;       NOTE:
;
; In order to switch ON/OFF another
; video-attribute, 47 (hex) (secondary
; = 67(hex))in the string has to be
; replaced by another ATTRIBUTE code (see
your SUPERBRAIN-II manual):

        42H = blinking ON
        62H = blinking OFF
        48H = half-intensity ON
        68H = half-intensity OFF
        47H = primary character-rom
        67H = secondary character-rom

        etc.

For instance: you want a routine for
switching-on the BLINKING attribute,
        then:
a) Copy this file (ROM1.ASM) to
BLINKON.ASM
   (PIP BLINKON.ASM=ROM1.ASM)
    IF you like to keep THIS routine
b) Change       ATTRB EQU 47H
                to
                ATTRB EQU 42H (useWORDSTAR
                or any EDITOR)
                Secondary=
                ATTRB EQU 67H
                to
                ATTRB EQU 42H
c) Assemble it with the CPM-assembler,
        (ASM BLINKON)
d)  Change  the  BLINKON.HEX  file  into
BLINKON.COM by loading it.  (LOAD BLINKON)
e) Try it out, by typing : BLINKON, and you'll see the
characters on the screen in blinking mode.

***********************************************

BDOS expects the character in register E
and the BDOS function in register C
```

Continued on page 7

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Letters to the Editor

continued from page 4

DEAR SUPERLETTER:

I have been driven crazy trying to get my SuperBrain to work with a Hayes Smart-Modem 1200. Everything seemed to be set up right, but there appeared to be no communication between the computer and modem.

A call to Intertec yielded a test for communication from the main port.

Use paper clips into the main ouput socket and jumper pins 2 to 3 and pin 20 to 5. With the Master disk brought up type: PIP OUT: = CON: SPACE, CR. The screen shows ECHO(Y/N). Answer Y. Then everything typed on the keyboard is shown twice on the screen. If this works, the main port is O.K. Next they suggested opening the case and inspecting the dip-switch on the processor board under the disk drive. 3 and 4 should be on; 1, 2 and 5 off. Mine were all on. Corrected this, plugged in the modem and all works fine.

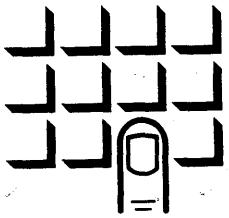
M.N. Estridge, M.D.
399 East Highland Ave.
Suite 520
San Bernardino, California
92404

Programs

continued from page 6

```
; ASCII-characters:
;
        CR      EQU     0DH
        LF      EQU     0AH
        ESC     EQU     1BH     ; tilde =
        TILDE   EQU     7EH     ; attribute = characterset 2
        ATTRB   EQU     47H     ; (see also note)

; Secondary set:
;
        CR      EQU     0DH
        LF      EQU     0AH
        ESC     EQU     1BH
        TILDE   EQU     7EH
        ATTRB   EQU     67H

; CP/M BDOS "write to CONsole":
;
        WCONS:  EQU     2

;CP/M addresses:
;
        WBOOT   EQU     3       ; warm boot
        BDOS    EQU     5       ; system-call entry
        TPA     EQU     100H

        ORG     TPA

        LXI     H,STRING
        CALL    COSTR

STRING: DB      ESC, TILDE,ATTRB, CR,LF,0; output string...
; Subroutine for sending 1 character to CON:
CHROUT  PUSH    B       ; save registers
        PUSH    D
        PUSH    H
        MVI     C,WCONS ; BDOS functioncode in C
        MOV     E,A     ; character in E
        CALL    BDOS    ; use CP/M BDOS
        POP     H       ; restore registers
        POP     D
        POP     B
        RET

; Main-routine
COSTR:  MOV     A,M
        ORA     A       ; 0 = end of the string, stop
        RZ              ; check for 0
        CALL    CHROUT  ; send a character
        INX     H       ; to CON: Increment
        JMP     COSTR   ; counter .Loop back
        JMP     WBOOT   ; Ready, generate a
                        ; WARM BOOT
END
```

R.J. van Herksen RO
V. Karnebeeklaan 27
Culemborg
The Netherlands



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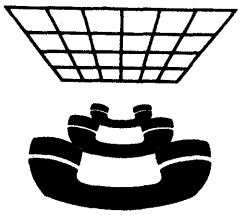

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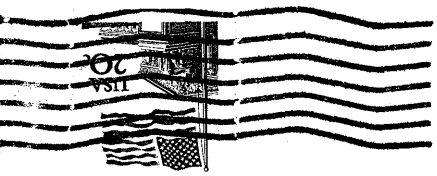

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