

# The Software Toolworks

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H89/H8/Z89 SOFTWARE TOOLS FOR HDOS - FALL 1980

## New Products: Graphics Editor, LISP/80 and MYCHESS

This software was developed by computer science professionals for our own use. They are the tools we wanted to have, and we want you to be able to enjoy them too at a reasonable price.

FULL SCREEN EDITOR. PIE\* 1.5 text editor is easy and natural to learn and use. The H89 or H19 screen is a window into a file. Cursor motion keys allow changes to be typed anywhere on the screen. Function keys perform character and line insert and delete, string search, move and copy single and multiple lines, and scrolling of text in the window. Powerful macro capability provides search and replace, more. For H89 or H8+H19. PIE 1.5 Editor: \$29.95.

TEXT FORMATTER. By Dr. Jim Gillogly. Performs fill and justification (straight right margins) of text. Page numbering, headers and footers, indents, hanging indents, centering, underlining. Inclusion feature allows insertion of other files into document; new 3.2 release supports resetting disks. With the PIE 1.5 editor (above), provides word processing capability found in packages selling for several times as much. TEXT: \$34.95.

C COMPILER. C/80 compiler for a large subset of the C programming language. Supports character and 16-bit integer data, pointers, arrays and strings, macros, data initialization, a full complement of arithmetic and logical operators, and all C control statements including while, if-then-else, for, switch-case, and goto. Lacks structures, pointers to pointers, and long and floating point data types. Includes source for sample utility programs, and standard C library providing file I/O, dynamic storage allocation, and execution time profile. Documentation for compiler and library includes language summary, and complements the language reference manual, Kernighan and Ritchie's The C Programming Language (not included). C/80: \$39.95

FULL SCREEN GRAPHICS EDITOR. ED-A-SKETCH is a tool for the creation and editing of pictures and graphics displays using the H19 or H89/Z89 graphics character set. Cursor motion keys position the cursor at any point on the screen, allowing typing of regular or graphics characters in normal or inverse video. Powerful area operations may be performed on any rectangular area of the screen: operations such as erase, fill with any character, invert video, and pick up and move. Eight disk formats make displaying saved pictures easy from programs written in BASIC, MBASIC, assembler, C, or any other language. Special "relative mode" saves picture segments for display at any screen position. By Gail Halverson. Requires H89/Z89 or H19 terminal. ED-A-SKETCH: \$29.95

MACRO ASSEMBLERS FOR Z80 AND 8080. UVMAC is an absolute macro assembler. 8080 version accepts same source files as ASM, but includes macro capabilities. Z80 version accepts full Z80 instruction

set (Zilog mnemonics). Both support XTEXT, IF, listing control, etc., and produce .ABS files. Selectable octal or hex listing. UVMAC (specify 8080 or Z80): \$29.95.

MODEM & FILE TRANSFER PROGRAM. REACH turns the H89 into a remote timesharing station. H89 acts as a dialup terminal, transfers files between H89 and remote computer, and spools from remote computer to H89 printer. Operates at speeds up to 9600 baud, full or half duplex. New 1.1 release allows resetting disks; supports communication between two H89s. Requires serial I/O port; will not run on H8. REACH: \$19.95.

LISP INTERPRETER. Experiment with the artificial intelligence language to which Byte magazine devoted its August 1979 issue. Based on the INTERLISP dialect, LISP/80 offers over 75 built-in functions, including large machine features like trace, file I/O, and string operations. Comes with a simple editor, file librarian, and formatted expression print routine, all written in LISP, and a 32 page manual. Also included are two artificial intelligence demonstration programs: a guessing game which learns as it plays, and a simple version of the famous ELIZA psychiatrist program. By Walt Bilofsky. Requires 40K. LISP/80: \$39.95.

FILE COMPRESSION AND ENCRYPTION. Two program package saves disk space and provides security for sensitive data. PACK uses Huffman coding to compress files, saving 25-50% on text and program source. CRYPT takes a user-provided password and employs a sophisticated Tausworth-Lewis-Payne based cipher algorithm to protect files against unauthorized readers. Written by Dr. Jim Gillogly. PACK and CRYPT both for: \$24.95.

FLIGHT CONTROLLER GAME. By Dr. Jim Gillogly. AIRPORT tests your skill as an Air Traffic Controller. Your radar screen maps the moving planes as you direct them along air lanes and into and out of airports. Adjust length of game to increase challenge. Requires H89 or H19. AIRPORT: \$19.95.

CHAMPIONSHIP CHESS PLAYER. H89/Z89 owners now have the opportunity to own a true world class micro chess program. MYCHESS, best micro in the 1979 ACM North American Computer Chess Championship, and winner of the 1980 West Coast Computer Faire over such opponents as Sargon 2.5 and Atari, is now available under HDOS. Nine skill levels tailor MYCHESS to any opponent. It plays varying openings from a "book" of over 850 moves. Optional tournament time control. Can display suggested best line of play, record moves on printer. MYCHESS holds a USCF rating of 1568 (on a 4Mhz Z80) - highest ever for a micro program. By Dave Kittinger. Requires H89/Z89 or Z80 CPU, 40K. MYCHESS: \$34.95

All programs include documentation, will run on 32K H8, H89 or Z89 unless otherwise specified, and are supplied on HDOS data disk. Price includes single machine license. Programs are available by mail from The Software Toolworks, 14478 Glorietta Drive, Sherman Oaks, CA 91423. Please add \$2.00 per order for First Class postage and handling; California residents add 6% sales tax.

\* PIE is a registered trade mark of Programma International Inc.