

TRS -80 Software and Hardware from MISOSYS, Inc.

General Information

MISOSYS specializes in quality tools and professional software to enhance your microcomputer system. We have been serving the TRS-80 community since 1978. Our products are used worldwide by the discriminating professional, the casual computer user, as well as by the devoted hacker. In keeping with this tradition, we have professional products for the TRS-80 Models I, II, III, 4, 4P, 4D, 12, 16, 6000 as well as MS-DOS and PC-DOS based machines.

The information in this flyer represents all the printed matter we can send you concerning a software package. If this still does not answer all of your questions, please write or call; however, there is no other printed material we can send you.

If you are ordering from the United States or Canada, you may place telephone orders direct to our order desk toll free by calling 800-MISOSYS (that's 800-647-6797 for you digital folks). Please, we cannot handle customer support or questions of a technical nature on our order line. Any telephone query not relating to an order must be directed to 703-450-4181.

RETURN policy for Software

Here's a policy which should minimize anyone's fears of trying out one of our products. Any MISOSYS software product except those designated as CLEARANCE, purchased directly from MISOSYS may be returned within 30 days from the invoice date for a full refund of the product purchase cost. Returns must be in a "like-new" saleable condition and be accompanied by a copy of the original invoice. So if you're not sure whether a MISOSYS product will serve your needs, try it out. If it doesn't fit, return it. Note that this policy does not pertain to hardware items.

Policy on Disk Refreshes

The charge to re-master the disk(s) for any one of our products is \$ 10 + S&H. The S&H charges are \$2 for US, \$3 Canada and Mexico, \$6 elsewhere. This charge pertains to the same release version. Upgrades are priced separately.

TRADEIN Policy

We will accept a trade-in of any other non-MISOSYS commercial product as 50% of the purchase of an equivalent MISOSYS product. Got an ALDS and wish you had our relocatable macro assembler? Trade it in and get PRO-MRAS for \$29.98. Got PFS-FILE or PROFILE and wish you had LB? Trade it in and save \$49. How about EnhComp for half price? Trade in your BASCOM or Alcor MultiBASIC! Got somebody else's ratty disassembler? Trade it in and get PRO-DUCE for half price. Got a Radio Shack Series I (or II) disk assembler. Trade it in for EDAS or PRO-CREATE at \$22.48. Want an LDOS 5.3.1 Trade in your DOSPLUS, NEWDOS80, or MultiDOS! To qualify for a trade-in, all you need to send along with the payment is an original "Table of Contents" page from the *User Manual* of the product you are trading. Note that you still pay full S&H charges.

The MISOSYS Quarterly subscriptions

The MISOSYS QUARTERLY is a professional magazine filled with the latest information on MISOSYS products, programs, utilities, patches, significant messages from our CompuServe forum, and articles on programming. Each issue of TMQ will keep you up to date with information, news, and announcements concerning our entire product line and related machine environments.

We'll start your subscription with the current issue, and include a bonus of four past issues free. Subscription cost varies by rate zone as follows:

- A = \$25; United States via 3rd class bulk mail
- B = \$30; Canada, Mexico, via 1st Class
- C = \$32; Colombia, Venezuela, Central America via AO Air
- D = \$35; South America, Europe, & North Africa via AO Air
- E = \$40; Asia, Australia, Africa, Middle East via AO Air

Back issues of TMQ are available

We are providing back issues of *The MISOSYS Quarterly* still in print. We currently have Volumes III, IV, and V still available. The price is \$4 per issue plus \$2.75 S&H in the U.S. and CANADA. For foreign zone D, the S&H rate is \$5.50; zone E is \$6.50. Minimum order is \$10.

PRICE LIST effective March 1, 1992

TRS-80 Software

<u>Product Nomenclature</u>	<u>Mod III</u>	<u>Mod 4</u>	<u>Price S&H</u>
AFM: Auto File Manager data base	P-50-310	n/a	\$49.95 D
BackRest for hard drives	P-12-244	P-12-244	\$34.95
BASIC/S Compiler System	P-20-010	n/a	\$29.95 B
BSORT / BSORT4	L-32-200	L-32-210	\$14.95
CP/M (MM) Hard Disk Drivers		H-MM-???	\$29.95 B
CON80Z / PRO-CON80Z.	M-30-033	M-31-033	\$19.95
diskDISK / LS-diskDISK	L-35-211	L-35-212	\$29.95
DISK NOTES from TMQ (per issue)			\$10.00
DoubleDuty		M-02-231	\$49.95
DSM51 / DSM4	L-35-204	L-35-205	\$49.95
DSMBLR / PRO-DUCE	M-30-053	M-31-053	\$29.95
EDAS / PRO-CREATE	M-20-082	M-21-082	\$44.95 D
EnhComp / PRO-EnhComp	M-20-072	M-21-072	\$59.95 D
Filters: Combined I & II	L-32-053	n/a	\$19.95 B
GO: Maintenance	n/a	M-33-100	\$39.95 B
GO: System Enhancement	n/a	M-33-200	\$39.95 B
GO: Utility	n/a	M-33-300	\$39.95 B
Hardware interface Kit	n/a	M-12-110	\$24.95
HartFORTH/PRO-HartFORTH	M-20-071	M-21-071	\$39.95 B
LDOS 5.1.4 User Manual	L-40-020	n/a	\$15.00 D
LDOS/LSDOS Reference Manual	M-40-060	M-40-060	\$30.00 B
LDOS/LSDOS BASIC Reference Manual	M-40-061	M-40-061	\$20.00 A
LDOS 5.3.1 Diskette - M1	M-10-110	n/a	\$15.00
LDOS 5.3.1 Mod1 Upgrade kit	M-10-133	n/a	\$39.95 B
LDOS 5.3.1 Diskette - M3	M-10-130		\$15.00
LDOS 5.3.1 Mod3 Upgrade Kit	M-10-333	same	\$39.95 B
LED / LS-LED	L-30-020	L-30-021	\$19.95
LB Data Manager-M4 (Ver 2.2)	n/a	M-50-510	\$99.00 D
LS-DOS 6.3.1 Upgrade Kit - M4	n/a	M-11-043	\$39.95 B
LS-DOS 6.3.1 Diskette - M4	n/a	M-11-243	\$15.00
LS-DOS 6.3.1 Upgrade kit - M2/12/16		M-11-002	\$39.95 B
LS-Host/Term	n/a	L-35-281	\$39.95
LS-UTILITY	n/a	L-32-150	\$24.95
MC / PRO-MC	M-20-064	M-21-064	\$79.95 D
Mister ED	n/a	M-51-028	\$39.95 B
MRAS / PRO-MRAS	M-20-083	M-21-083	\$59.95 D
PowerDot (Epson or Tandy)	P-32-21?	n/a	\$19.95
PowerDraw	P-32-220	n/a	\$19.95
PowerDriver Plus (Epson).	P-50-200	P-50-200	\$17.95
PowerMail Plus	P-50-003	P-50-004	\$39.95 D
PowerMail Plus TextMerge	P-50-100	P-50-100	\$15.00
PowerScript	P-50-142	P-50-142	\$24.95 B
PRO-WAM	n/a	M-51-025	\$74.95 D
PRO-WAM Toolkit	n/a	M-51-225	\$29.95 B
Programmer's Guide DOS 6.	n/a	M-60-060	\$20.00 B
QuizMaster	L-51-500	n/a	\$19.95
RATFOR-M4		M-21-073	\$59.95 D
RSHARD - R/S HD driver	M-12-013	same	\$29.95
ST80-III	P-35-300	n/a	\$39.95 B
SuperUtilityPlus	P-32-132	P-32-104	\$44.95 D
SuperUtilityPlus CMD file diskette	P-32-832	P-32-804	\$20.00
Supreme HD Driver (PowerSoft-RS)	P-12-113	P-12-113	\$34.95
TBA / LS-TBA	L-21-010	L-21-011	\$19.95 D
THE SOURCE 3-Volume Set	n/a	L-60-020	\$40.00 D
Toolbox/Toolbelt	P-32-203	P-32-245	\$24.95 B
UNREL-T80	same	M-30-054	\$29.95
UTILITY-I	L-32-070	n/a	\$19.95
XLR8er Interface Kit (M3 mode)		M-12-X10	\$20.00 B

MSDOS Software

LB Data Manager 2.2	M-86-510	\$99.00 D
DED-86 [Disk/Memory sector editor]	M-86-020	\$29.95 D
RATFOR-86	M-86-073	\$59.95 D
HartFORTH-86	M-86-071	\$59.95 D
SAID-86 [Text Editor]	M-86-040	\$29.95
FM-86 (File Manager)	L-86-050	\$29.95

TRS-80 Game Programs

Bouncezoids (M3)	M-55-GCB	\$14.95
Crazy Painter (M3)	M-55-GCP	\$14.95
Frogger (M3)	M-55-GCF	\$14.95
Kim Watt's Hits (M3)	P-55-GKW	\$9.95
Lair of the Dragon (M3/M4)	M-55-021	\$19.95
Lance Miklus' Hits (M3)	P-55-GLM	\$19.95
Leo Cristopherson's (M3)	P-55-GLC	\$14.95
Scarfman (M3)	M-55-GCS	\$14.95
Space Castle (M3)	M-55-GCC	\$14.95
The Gobbling Box (M3/M4)	M-55-020	\$19.95

MSDOS Game Programs

Lair of the Dragon	M-86-021	\$19.95
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Hardware

Floppy Disk Controller M3/M4	H-MM-FDC	\$45.00	F
Double Density Controller (DDC) M1	H-MM-DDC	\$45.00	F
RS232 Serial Card M3/M4	H-MM-SPC	\$45.00	F
RS232 Serial Card Kit M3/M4	H-MM-SPK	\$50.00	F
TeleTrends TT512P modem (M4P)	H-4P-512	\$74.95	E
Floppy drives (5.25" 360K 1/2 ht)	H-FD-360	\$75.00	D
Floppy drives (3.5" 720K 1/2 ht)	H-FD-720	\$85.00	B
Floppy Drive Case (2-1/2 ht drives)	H-FD-2SV	\$60.00	F
MSCSI HD kit e/w clock, 20Meg M3/M4	H-HD-020	\$450.00	?
MSCSI HD kit e/w clock, 40Meg M3/M4	H-HD-040	\$575.00	?
Aerocomp HD - 5 Meg M3/M4	H-MM-005	\$250.00	?
Aerocomp HD - 20 Meg M3/M4	H-MM-020	\$400.00	?
Aerocomp HD - 40 Meg M3/M4	H-MM-040	\$500.00	?
Hard drive joystick port option	H-HD-JSO	\$20.00	
Hard drive: Seagate ST225 (20M)	R-HD-020	\$200.00	F
Hard drive: Seagate ST251-1 (40M)	R-HD-040	\$320.00	F
Hard drive: Seagate ST-157N (SCSI)	R-HD-S40	\$300.00	F
Cable: dual floppy extender	H-FD-2EX	\$18.00	
Cable: 4Ft floppy (1 34EDC each end)	H-FD-C04	\$12.50	
Cable: 4Ft M3/M4 printer	H-RC-PM4	\$20.00	
Cable: 4Ft Radio Shack hard drive	H-HD-CT4	\$20.00	
Cable: 4Ft MISOSYS hard drive	H-HD-C04	\$22.50	
Cable: 26-1069 internal floppy	H-FD-2NG	\$20.00	
Cable: 26-1069A/26-1080 internal floppy	H-FD-2GA	\$20.00	
Cable: 26-1080/A internal floppy	H-FD-24P	\$20.00	
Cable: drive power Y	H-HD-CPY	\$5.00	
Cable: XT hard drive set	H-HD-CXT	\$5.00	
Cable: Custom IDC ribbon (M3/M4/M2)	?-??-???	varies	
Standby Power System: 200VA	R-PS-200	\$199.00	?
Standby Power System: 450VA	R-PS-450	\$399.00	?
HD Controller: Adaptec 4010A	H-HD-CA4	\$75.00	D
HD Controller: Xebec S1421A	H-HD-CX2	\$75.00	D
T80 to SCSI host adaptor	H-HD-MHA	\$75.00	D
ZOFAX 96/24 Fax/Modem (PC XT/AT)	R-Z1-FAX	\$125.00	G
Infochip Systems Expanzi (PC)	R-IC-EXP	\$150.00	G
DJ10 Tape Backup (PC)	R-TD-D10	\$199.00	G
DJ20 Tape Backup (PC)	R-TD-D20	\$265.00	G
AB10 Tape Adaptor (PC)	R-TD-A10	\$75.00	
KE10 External tape adaptor/case (PC)	R-TD-K10	\$110.00	D

The Fine Print

Freight codes: A = \$3.50; B = \$4.00; C = \$4.50; D = \$5.00; E = \$5.50; F = \$6.00; G = \$7.00; H = \$12.00; ? = varies; All unmarked are \$3.00 each; Canada/Mexico add \$1 per order; Foreign use US rates times 3 for air shipment. Virginia residents add 4.5% sales tax. We accept MasterCard and VISA; Checks must be drawn on a US bank. COD's are cash, money order, or certified check; add \$4 for COD.

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Window Application Popup

PRO-WAM

This desktop manager gives keystroke access to 4 memory resident pop-up applications and disk access of others. A Function Key lets you invoke DOS library commands. PRO-WAM turns your TRS-80 into a powerful machine because it comes with many useful and powerful time savers and desk organizers. Here's some of what you get:

- ✓ An ADDRESS file data base prints cards and mailing labels. Throw away that black book and your Rolodex file.
- ✓ HEAD pipes formatted address data into your letters.
- ✓ BRINGUP tickler file schedules up to 12 items per day by time. New print module. Remember those appointments.
- ✓ CALendar gives you a month at a glance; covers 4000 years. Flags days with BRINGUP items.
- ✓ A 3x5 CARD filer for a free-form scratch pad of 40 columns by 12 rows. Or use the new CARDX with forms capabilities. It's great for keeping a small data base.
- ✓ PHRASE is a KSM from disk for lots of automation.
- ✓ A telephone list and autoDIALER for Hayes modems.
- ✓ CALCulator gives you 4-functions at your fingertips. RPN CALC gives 7-functions in bin, oct, dec, and hex.

PSORT puts your PRO-WAM data files in sort order. EXPORT and IMPORT functions allow you to move data across windows between applications and programs. There's even an online HELP facility!

PRO-WAM works with all programs which use standard DOS keyboard requests and honor the DOS high memory pointer; requires one 32K RAM bank, about 2K of high memory, and a small piece of low RAM. If you have a model 4, then you must have PRO-WAMI

PRO-WAM Application Pack

Mister ED

Mister ED is loaded with editor applications. All are full screen which make your editing jobs easy. Best of all, these are all PRO-WAM applications so they can pop up even when you are using other programs and applications.

✓ DED edits disk sectors; FED edits file records; and MED edits memory pages (even alternate banks). All use a similar display screen and strikingly similar commands to enable you to edit anything. Get comfortable with one and you will know how to use all three of these editors.

✓ VED lets you edit the video screen with CARD-type editing. You get cut & paste; with this, you can easily use it as the clipboard facility found on more expensive systems.

✓ TED is just like the editor you get with LS-DOS 6.3; but ours works from PRO-WAM while you are using other programs! It's friendly, fast, and great for writing notes when you are right in the middle of a program you can't interrupt.

Z80 Assembler

EDAS

This powerful combined disk-based line editor and Z80 macro assembler assembles from one or more nested source disk files or memory buffer; features nested conditionals with ten pseudo-ops, nested 7-level MACROs with parameters both positional and by keyword, cross reference listings; and a separate full screen text editor.

The expression evaluator supports left-to-right evaluation of add/sub/mul/div/mod/shift, logical AND/OR/XOR/NOT, binary ops EQ/GE/GT/LE/LT/SHL/SHR; unary HIGH/LOW. Labels may be up to 15 characters long; start with A-Z, "@", or "\$"; positions 2-15 may also use "?" and "_".

A sorted symbol table listing is available during the assembly. A complete CROSS REFERENCE listing is performed by the XREF utility.

Line edit text in memory and use a command syntax identical to BASIC; with block move/copy; with string change/search. Invoke DOS commands within the editor.

If you are writing system software, support software, applications - big or small, EDAS will provide the power to make your job easier, faster, and more worthwhile.

Z80 RELocatable Assembler

MRAS

An advanced Z80 assembly package for the programmer who wants a powerful and flexible development system. It includes a macro assembler which generates either relocatable object code modules or CMD files directly, a linker, a librarian, a full-screen text editor, a utility for convening to/from line-numbered files, and a cross reference tool for directly generated CMD files.

MRAS generates M80 compatible .REL files. Macro support includes REPT, IRP, and IRPC as well as standard macro parameters by both keyword and position. It supports nested includes and a full range of nested conditionals. MRAS incorporates a fast binary-searched symbol table and the ability to enter symbol values from the command line. Labels can be any length with 15-character significance. It has flexible output redirection of listing and symbol table.

MLINK supports virtual memory bit-stream buffering, REL and IRL library searching, direct generation of complex program overlays, and does not generate disk space for DEFS regions in DSEGS and COMMONs. The linker can generate either a normal executable command file (CMD) or a core image file (CIM). MLINK supports the following special link items: 0-3, 5-7, 9-11, 13-15.

MLIB maintains both relocatable (REL) and Indexed relocatable (IRL) module libraries. You can add, delete, extract, or replace a module; and get module maps.

SAID is an advanced full screen text editor. It can be used to generate your assembler source code, C-language source code, or edit any type of ASCII file. Model 4 128K operation provides multiple editing buffers.

8080 to Z80 Translator

CON80Z

A source translator to help you convert your Intel 8080 files to Zilog Z80 files. Converts CR-LF sequences to a single CR; By using the CR="c" parameter in the command line, the character "c" will be interpreted as a logical line end.

Translates "M" to "(HL)"; extended instructions (LDX); B, D, H, and PSW are changed to BC, DE, HL, and AF; changes <DB/DS/DW/SET> to <DEFB/DEFS/DEFW/DEFL>.

Z80 Disassembler

DSMBLR

This disassembler provides extensive capabilities such as direct disassembly from CMD disk files, automatic partitioning of output disk files, data screening for non-code regions, and full label generation. It even generates the ORGs and END statement - the complete ball of wax. You will find that the use of this disassembler - even by a beginning assembly language programmer - will be paying handsome rewards with the ease of its use and clarity of the documentation. It's a professional tool for your use.

The labeling disassembler produces an assembler source from in-memory code or directly from a CMD-type disk file. Labels are generated for 16-bit references; a reference is any relative instruction target address or a 16-bit target for load, call, jump, add, or subtract instructions.

The disassembler allows you to build a screening data file telling what segments of the program are to be interpreted as data regions. You enter the addresses of the "segments" after analyzing the target program's disassembly.

CRT output is in screen-sized pages. PRINTER output is paged with column headings, page numbers and titles for print-outs that look identical to an assembler listing. Output to DISK produces a file suitable for MRAS/EDAS (configurable for others), and is automatically segmented into manageable file sizes. You will even be prompted to change the output file diskette when the disk becomes full.

REL Disassembler

UNREL

Here's one of those rare utilities designed for the programmer. UNREL will decode a relocatable object module which has been assembled by either Microsoft's M80 or MISOSYS' MRAS assemblers. The output is an assembler source file compatible with MRAS and M80. UNREL assumes anything in a code segment is code, and anything in a data segment is data. It supports special link items: 0-3, 5-7, 9-11, 13-15.

We bundle in SPLITLIB which can be used to split a library into separate modules. We also include DECODREL, for displaying the bit stream of a REL file. This can be used to more fully understand the actual bit stream.

UNREL should be the perfect professional assembler's tool for your bag of tricks.

TRS-80 Software and Hardware from MISOSYS

Communications Terminal

LS-Host/Term

This communications' package gives you the tools needed to get communications chores done quickly and effectively.

ADDS25 is set up to look like a Radio Shack DT-1 emulating an ADDS-25 terminal. Full cursor positioning, reverse video, and blinking fields are supported.

TERM6 allows one Model 4/4P to be used as a remote terminal to another running HOST portion of LS-Host/Term.

HOST lets your 4/4P operate remotely with password access for log-in from another 4/4P using ADDS25. All video effects are properly transferred to the remote system.

We include a version of XMODEM for file transfer between systems using the MODEM7 protocol, as well as a utility that converts to/from binary and HEX-ASCII binary representation, to/from INTEL Hex format and checksum files.

Full C Compiler

MC

If you are looking for a full C compiler, look no further. If you are looking for a well stocked UNIX System V standard library, look no further. MC, reviewed in the January 1987 issue of *80 MICROCOMPUTING*, is a complete C compiler which adheres to the standards established by Kernighan and Ritchie. The library of functions is extensive and System V compatible. The compiler generates Z80 relocatable macro assembler code (M80 or our MRAS). The libraries are files of relocatable object modules. MC is a full-featured compiler for the discriminating programmer!

MC supports command line I/O redirection for compiled programs, wild-card file specifications, parsing for UNIX "*" extensions in file specifications, overlay support (requires MRAS), a full pre-processor, lots of options, and is designed for the programmer wishing the ultimate in C compilers. The package is supplied with the compiler, pre-processor, an optimizer, assembler macro files, C libraries, a Job Control Language file, the header files, and a 400+ page user manual. MC requires the use of either M-80 or MRAS, 2 disk drives, and upper/lower case.

Structured BASIC

The BASIC Answer

The BASIC Answer is a text pre-processing utility that allows programmers to generate program code in a structured manner. Source code is created with your text editor; TBA is then used to process this source code into ordinary interpretive BASIC code that uses a minimum of memory. TBA utilizes labels in lieu of line numbers; supports variable names to 14 significant characters; allows the use of pseudo Global and Local variables (local variables retain their value only in a unique subroutine); and reduces the concept of Conditional Translation. This last feature allows co-existence of "machine-dependent" or other variable code within the same program source with the irrelevant sections ignored when processing the source to executable code.

BASIC Compiler

EnhComp

This is an enhanced BASIC compiler released in 1986 and reviewed in the March 1987 issue of *80 Microcomputing* and October 1987 issue of *COMPUTER SHOPPER*. This compiler has lots of great features. It handles the bulk of Model III Microsoft BASIC and supports additional commands and functions. Standard is floating point with both single and double precision functions; random file access ("X" mode for records to 32767), turtle graphics, pixel graphics, keyed array sort, multi-lined functions, user commands, IF-THEN-ELSE, REPEAT-UNTIL, printer control, sequential file positioning, line labels and more.

A supervisor program automates the edit-compile-test phases inherent when using compilers; this makes using EnhComp almost as easy to use as your BASIC interpreter. You also get CED, a line editor with string search/change, partial load/save, renumber, copy, and move.

Enhcomp has a built-in Z80 assembler. You can easily create hybrid programs of BASIC statements and in-line assembly code which completely eliminate contorted string packing and DATA statement high-memory module techniques for your BASIC program to access a machine code module. Z80-MODE accesses BASIC's variables!

You'll have to edit existing BASIC programs, but the power and completeness of EnhComp make that an easy task.

RATFOR Compiler

RATFOR-M4

RATFOR reduces your programming time and effort dramatically over that required when FORTRAN is used, because RATFOR code is fully structured, facilitating modification and debugging, and because program flow is apparent from the overall appearance of the program; comments are simpler and more versatile than in FORTRAN, simplifying self-documentation. This allows changes without the subsequent debugging tolerated when modifying FORTRAN. RATFOR compiles source code to an object of FORTRAN; use your existing FORTRAN compiler to convert this to executable.

RATFOR is free-field; blanks are significant as delimiters; numerical statement labels are mostly unnecessary; all 80 columns are available for statements; provides user-defined macros; and RATFOR provides powerful loop constructs.

RATFOR is an excellent language for general purpose use, but it is vastly superior to FORTRAN when working with a large number of modules without documentation, as is necessary when producing very large programs.

Extensions supported include the "arith" macro to perform binary arithmetic operations, read and print macros for short form READ and PRINT, and support of any valid FORTRAN expression for "switch" and "case" operands.

This package includes the language translator, a batch file to automate compilation, a language Reference Manual, an Installation Manual, application programs in source code on disk, and our LED text editor for source code preparation.

BASIC Sort Utility

BSORT

Here's a high speed sort for almost any number of one or two-dimensional BASIC arrays: string, integer, single and double precision. When invoked from your BASIC program, BSORT will perform the indicated sort, and execution will continue with the next statement in your program.

Multiple key arrays may be specified; the sorting on each key can be done in either ascending or descending order. Tag arrays that do not affect the sort, but merely follow along may also be specified. BSORT can also create an integer index array, without affecting the actual order of the elements in the "sorted" array. For string arrays, "midstring" parameters allow sorting based on a portion or "midstring" of the key array elements. BSORT goes far beyond CMD*O* in capabilities and performance.

Disk Sort Utility

Disk Sort Merge (DSM)

A high speed, disk virtual sorting utility that eliminates the burden of sorting from your applications software development project. DSM will create and maintain index files for you. Since the sort is disk virtual, your only limitation is the amount of available disk space, not available memory!

Sorts almost any type of field in a random access file: integer, single and double precision, and strings. Files can have 65,535 records with an LRL up to 1024. Specify up to 24 select fields (12 for DSM51). Relations (EQ, LT, etc) may be applied to your criteria; operators AND/OR may be used.

Sort ascending or descending; skip records that match a deleted record value. Save a template of the specifications to disk to automate the sort. This allows you to set up a sort operation that is transparent to even a novice user.

DSM is intended for use with user-developed applications software. Please note that DSM creates an index file, as opposed to actually re-ordering the records in the data file.

Quizzes and Answers

QuizMaster

QM is an educational question and answer program that can also be used as a game. It displays a question and four possible answers and scores the operator's response based upon speed and accuracy. QM comes with five subject files of up to 100 questions each derived from grades 6-9 textbooks: U.S. Information; Geography; Math; General trivia; as well as Fantasy and Science Fiction trivia.

QM randomizes both the order of the questions and the order of the answers to prevent memorization. The question sequence is never the same. Extended play provides a sudden death mode feature for the skillful user. QM includes all the programs necessary to establish and maintain your own series of multiple choice questions on any subject. Five support programs are provided to create, extend, edit, print, and maintain the question & answer files. All features are easy to use and easy to operate.

TRS-80 Software and Hardware from MISOSYS

Text Editor

LED

A full screen text editor for almost any type of ASCII file, including ASCII program source code for BASIC programs, TBA source, as well as JCL and KSM files. The command menu may be displayed while editing text. This display includes all command keys, the filename, the cursor column, the character hex value, and the available memory.

Cursor positioning uses the arrow keys. <CLEAR> key combinations move the cursor to the top, bottom, left or right. Has the following modes: *overtyp*, *insert*, *insert line*, and *delete*. Block mode allows the manipulation of large text areas. Search and Search/Replace are also provided.

Hex mode allows characters to be input as two hexadecimal digits; makes possible the direct editing of graphics.

Action Game

The Gobbling Box

This fast-paced action arcade-type game runs on the TRS-80 Model I, III, and 4/4P/4D. The game generates a variety of special sound effects and music which complement the action on the screen. The arrow keys or Alpha Products joy-stick control the movements of the GOBBLER in this game.

You want your GOBBLER to eat as many dots as possible, while trying to avoid the ZONKERS who won't stop chasing your GOBBLER until one of them eats it or until the GOBBLER eats all dots on the GameBox. The GOBBLER's reward is a new Box; there's 3 in all. The GOBBLER can tame the ZONKERS for a short while by eating one of the ENERGIZERS on the board. Then it's the GOBBLER's turn to chase, catch and eat the ZONKERS.

The game has two skill levels; the pace is fast; the sound is great; the action is continuous. You can't beat this bargain of a game. Even Stacey plays it!

Adventure-type Game

Lair of the Dragon

If you thought the TRS-80 was dead, think again. Our Lair of the Dragon MegAdventure is unlike virtually any other interactive fiction adventure that you have ever played, for it will more than just paint its pictures upon the canvas of your imagination - it will slap the sweat right onto your forehead!

If you truly believe that discovery is one of the finest points in life, if you would like to test your ability to think logically to the fullest extent of your ability, if you would like to take on the largest adventure ever written in the genre of interactive fiction, and if you have the guts to face that which would make any other mortal elf cringe in fear, then Lair of the Dragon is your cup of poison; for reward is a hard-earned commodity here, not given easily to the timid and the faint-hearted. If you are an old hand at adventuring, then be pre-pared for a worthy opponent.

MegAdventure rips the door to adventure right off its hinges!

TRSDOS 6 Source books

THE SOURCE, 3-Volume Set

This will be the last time that these books will be made available for a *giveaway price*. *THE SOURCE* contains a vast wealth of information for the assembly language programmer. *THE SOURCE* is not only informative, but also an excellent learning tool.

These books contain the complete, commented assembler source code for TRSDOS 6.2, excluding hard disk support, the Microsoft BASIC and the HELP utility. Each book is softbound, 8-1/2 by 11. The complete set totals over eleven hundred pages of cleanly commented, elegant source code. Volume 1, The System, covers SYS0 to SYS5 and SYS9 to SYS13. Volume 2, The Libraries, covers all of the library commands making up SYS6, SYS7 and SYS8. Volume 3, The Utilities, covers all utilities, drivers, and filters.

Hard Disk Driver

RSHARD

Finally for your Radio Shack hard disk drive is this hard disk driver package from MISOSYS - at a reasonable price. You get support for both LDOS 5.3 and LS-DOS 6.3

● RSHARDx driver partitions by both head and/or cylinder; supports two 8-headed drives up to 1024 cylinders.

● RSFORMx formatter adds both low level and high level formatting to your drive's partitions.

● HDCHECK checks the performance of your drive.

● ARCHIVEx lets you backup some or all of the files on your hard drive to multiple floppies; BIG files and small files.

● RESTOREx lets you selectively restore some or all archived files to your hard drive.

All ten modules come fully documented and are ready to install into your LDOS 5.3 or LS-DOS 6.3 system (or both).

Hard Disk sub-partitions

diskDISK

Do you have a hard disk? If so, you need diskDISK. The diskDISK utility allows the creation of *logical disk partitions* as files on a physical disk drive. This is indispensable for hard disk users. Once a diskDISK file is *installed* into a logical drive slot, the diskDISK can be used just like any other physical drive; diskDISK provides for easy swapping of any currently active diskDISK file.

With diskDISK, you can easily group related files for ease of maintenance. diskDISK files can also be set up as *images* of physical drives to allow mirror image backups.

diskDISK drives allocate in granule sizes smaller than your hard disk system. Five inch diskDISK images allocate just like floppy drives. Also, there are special diskDISK types that allocate in one or two sector granules for maximum storage efficiency.

DoubleDuty doubles your Model 4

DoubleDuty

DoubleDuty, published previously by Radio Shack (cat 26-2231), is now available from MISOSYS. DoubleDuty divides your 128K or greater TRS-80 Model 4 computer's memory into three complete and independent partitions. Two partitions each operate as if they were their own 64K Model 4! This lets you run two programs concurrently switching between either at the flick of a function key. It doesn't support multitasking, so only the foreground application receives CPU time. The third partition can be used to execute DOS library commands.

Our new 2.6.0 release also works with expanded memory known to the DOS [such as our XLR8er board]. A BANK parameter lets DoubleDuty use any pair of adjacent memory banks. With expanded memory and DoubleDuty, run ScripsitPro along with other programs. If you thought you needed another computer, think again. With DoubleDuty, you can now have two for the price of one! DOS Manual

LDOS & LSDOS Manuals

LDOS 5.1.4 User Manual

LDOS 5.1.4 is documented in an extensive operating manual (over 400 pages) containing both user instructions and a large technical information section. Numerous examples are given for all operating functions.

LDOS/LSDOS DOS Reference Manual

Brand new off the press is this 350-page manual in a convenient 8.5" x 5.5" format referencing LDOS 5.3.x and 6.3.x. Now only one manual is needed for Models I, II, III, 4/4P/4D, 12, 16, 6000, and MAX-80 whether you are using either LDOS 5 or LSDOS 6.

LDOS/LSDOS BASIC Reference Manual

Brand new off the press is this BASIC reference manual which covers LDOS BASIC, LSDOS BASIC, and our EnhComp Compiler BASIC. A perfect companion to our DOS Reference Manual.

Mod 4 features for Mod III

Hardware Interface Kit

This will allow you access to your Model 4 *hardware features* while using LDOS 5.3. Here's what you get: ● K14 keyboard driver uses <CTRL> key, <CAPS> key, and function keys. ● SET2RAM switches to Model III RAM mode. @BANK provides bank switching capability; @EXMEM handler allows for easy programming of memory bank I/O. ● MemDISK provides a one or two bank RAM disk. ● BANKER manages bank utilization. All four modules come fully documented and are ready to install into your LDOS 5.3 system using a Model 4 computer. A 128K machine is only required for MemDISK/DCT and the memory management facility.

TRS-80 Software and Hardware from MISOSYS

Model III Utilities

Utility Disk #1

14 utilities useful to novice and experienced LDOS users.

- ✓ COMP is a file and/or byte-for-byte comparison utility.
- ✓ DCT allows you to view or modify the Drive Code Table.
- ✓ DIRCHECK checks the directory on a diskette and corrects most recoverable directory errors.
- ✓ MAP displays or prints the allocation (granules or cylinders and sectors) of a file on a diskette.
- ✓ RAMTEST is a self-relocating RAM memory test.
- ✓ READ40 allows access to a 40T disk in an 80T drive.
- ✓ TYPEIN combines the functions of JCL and KSM. Allows programs such as Profile 3+HD to be totally automated.
- ✓ UNKILL recovers files accidentally KILLED or PURGED.

Model III Filters

FILTERS

This combines 23 filters and utilities from FILTER Disks 1 and 2 with assembly source code at a clearance price.

- ✓ XLATE translation for I/O devices
- ✓ STBAS print formatting for BASIC programs
- ✓ STRIP7 removes high-order bit off all characters
- ✓ STRIPCNT replaces output >127 or <32 with a # symbol
- ✓ MONITOR displays control chars in string form (%xx)
- ✓ TITLE prints a title after form feed
- ✓ UPPER converts lower-case character to upper case
- ✓ LOWER converts upper case character to lower case
- ✓ SLASH0 translates zero to zero-backspace-slash
- ✓ TRAP discards any user-defined character
- ✓ LINEFEED adds or removes a linefeed after return
- ✓ PAGEPAWS pauses after formfeed for <ENTER> key
- ✓ CALC performs hex/dec/bin conversion; hex add or sub
- ✓ REMOVE removes occurrences of a byte from a disk file
- ✓ COMM1 tests for modem carrier
- ✓ DICTATE toggles cassette on/off from the keyboard
- ✓ DOSPEED regulates output device speed from keyboard
- ✓ KSMPLUS features key re-definition on the fly
- ✓ LCOUNT adds a line number before each line of output
- ✓ MARGIN sends a 2-char control before margin spaces
- ✓ MAXLATE translates one character to a group of chars
- ✓ SLOSTEP for drives that require additional settling time
- ✓ VIDSAV saves the current video screen in high memory

Model 4 Utilities

LS-Utility Disk

Filters and Utilities for DOS 6.x:

- ✓ BRCODES gives control of boldface and underlining
- ✓ TRAP discards any user-defined character.
- ✓ XLATE is a translation filter system for I/O devices. Does many; includes EBCDIC and DVORAK tables.
- ✓ KSMPLUS improves on the DOS; allows key re-definition on the fly; defines strings for the function keys.
- ✓ READ40 allows access to a 40T disk in an 80T drive.
- ✓ TYPEIN combines the functions of JCL and KSM. Allows programs such as Profile 4 to be totally automated.

FORTH Compiler

HartFORTH

HartFORTH is a *full FORTH* that conforms to the 79-STANDARD. The Model III version is an indirect threaded version; the DOS 6 version is a direct threaded implementation providing greater execution speed of 10%-40% depending on the details of the actual program. The kernel contains some additional useful words and utilities which turn HartFORTH into a full-fledged development system.

HartFORTH is designed to *run under an operating system* which is totally transparent to the programmer or user. The virtual Memory that it accesses for storage and retrieval purposes is a normal DOS file that is requested by the FORTH system when it is first entered. Doing this has several advantages in that it provides for FORTH files to be used in other language application programs and vice-versa. Enhancements have been built into the kernel in the form of functions to call the operating system file handling routines so that other files may be created or accessed.

HartFORTH supports double length integers, string handling, cursor manipulation, graphics, random numbers, and floating point.

Maintenance

GO:MTC

The *GO:MTC* program collection provides maintenance support services for your computer operation. The programs have been rewritten for Model 4 LS-DOS 6.3. You get DIRCHECK to perform an integrity check of your disk's directory and repair certain kinds of errors; FIXGAT re-constructs a corrupted Granule Allocation Table; IOMON traps disk input errors; MAPPER checks the granuization of files on your disk; RAMTEST performs an exhaustive test of RAM in your computer; and UNREMOVE to restore a file inadvertently deleted. All documentation has been revised and is printed in a convenient 5.5" by 8.5" format.

System Enhancement

GO:SYS

The *GO:SYS* program collection is designed to provide additional features to LS-DOS 6.3 operation. The programs have been rewritten for Model 4 LS-DOS 6.3. You get DOCONFIG for manipulating CONFIG/SYS files; DOEDIT to provide command editing; MEMDIR to get a memory directory; PaDS for the provision of Partitioned Data Sets; PARMDIR to obtain parameterized directory information for listings and JCL processing; SWAP switches drive assignments; WC for wild card command invocation; and ZSHELL for command line I/O redirection, piping, and multiple commands on a line. All documentation has been revised and is printed in a convenient 5.5" by 8.5" format.

More Model 4 Utilities

GO:CMD

The *GO:CMD* program collection provides additional utility for your computer operation. The programs have been rewritten for Model 4 LS-DOS 6.3. You get FASTBACK and FASTREAD for hard disk large file archive/restore; PROCESS manipulates command files; COMP compares two files or disks; FED2 zaps disk or file sectors on a full-screen basis; IFC updated with new features for interactively copying, moving, renaming, deleting, and invoking files; ZCAT catalogs 6.3 disks. All documentation has been revised and is printed in a convenient 5.5" by 8.5" format.

Cornsoft's arcade-type games

MISOSYS has licensed the action games previously published by The Cornsoft Group: Frogger™, Scarfman, Bounceoids, Crazy Painter, and Space Castle are exceptional action games with great video and Alpha joystick support (even the new MISOSYS joystick). All games are for Model III (or 4 in III mode).

It's ... BOUNCEOIDS

Where do they come from? What do they mean? You'll leave those questions to the scientists. Your duty is clear: DESTROY! Utilizing your newly issued class 4 annihilator, you must reduce the massive BOUNCEOID BOULDERS to cosmic dust! BEWARE! They bounce off of walls like giant pool balls, and the smallest touch means instant death! And as an added complication, terrible shaking bugs come slithering out of null space to crunch you into bug lunch! If you can prove yourself worthy, you will be challenged by the mysterious alien invaders in a nerve grinding test of incredible coordination and targeting skills.

Crazy Painter

A mischievous puppy, snakes and poisonous turpentine buckets force changes in your painting. In higher skill levels, "paint eaters" start chewing up your work. Suddenly, everyone's a critic. Can you overcome them? And on top of it all, in the Exclusive Challenge Mode, you have to catch an army of runaway puppies. Crazy Painter is joystick compatible.

SPACE CASTLE

Will you save the Andromeda Galaxy by destroying the Space Castle or will the evil warlord Yugdab continue to rule, uncontested? Locked in battle with Yugdab, your main defense is your ability to skillfully handle your ship and it's projectiles. If you are not careful, Yugdab's intelligent mines will hunt you down and blow you into space dust. Space Castle has fast action and exciting sound.

SCARFMAN

SCARFMAN, written by the author of MISSILE ATTACK, features quality GRAPHICS, SOUND, REAL TIME MONSTERS, and hours of ENJOYMENT. Nine progressive skill levels make the game more difficult as you get better. Do you have what it takes to reach skill level 9?

The Official FROGGER™, by SEGA

The popular arcade game for TRS-80 Models I & III.

TRS-80 Software and Hardware from MISOSYS

Mod 4P internal 1200 bps modem

TT512P Modem

MISOSYS has the TeleTrends 300/1200 baud Hayes compatible modem which slips right into the Model 4P's internal modem slot. This has a full "AT" command set capability. For now, you Model 4P folks can upgrade to a real Hayes-compatible modem operating at 1200 baud. It's just what you needed for your 4P.

Hard Disk Drives and Parts

MISOSYS MSCSI Hard Drives

Genuine MISOSYS MSCSI hard drive kit packages plug into Model 4/4P/4D and Model III computers. The 11" x 10" x 4.75" (LWH) beige drive case has space for a half or full height drive, 115V/230V 30 watt power supply and fan, hard disk controller (HDC), host adaptor (H/A), hardware real time clock (RTC), LED status lights, and 50-pin SCSI female connector. Optional Joystick port with joystick. Includes software for one DOS (Model III or 4), and 4-foot host cable.

20 Meg drive kit (ST225), complete
40 Meg drive kit (ST251-1), complete

Aerocomp Hard Drives

Genuine FCC-certified (EZU5PL3000) Aerocomp drives are now available from MISOSYS. These are new and complete units ready to run. The external hard drives are FCC Class B certified. They include continuous duty switching power supplies, filtered forced air ventilation, effective EMI filtration, and solid steel construction. Five front panel lights indicate power, ready, read, write, and select. Drivers available for Montezuma Micro CP/M, LDOS, or LS-DOS. Comes complete with 4-foot host cable.

Aerocomp 5 Meg drive Hard drive
Aerocomp 20 Meg drive Hard drive
Aerocomp 40 Meg drive Hard drive

Component Piece Parts:

Seagate ST225 5.25" 20M drive, 65ms
Seagate ST251-1 5.25" 40M drive, 28ms
MISOSYS SCSI H/A with software
Xebec 1421 Hard Disk Controller
Adaptec 4010 Hard Disk Controller
power Y cable
XT drive cable set (20P HDR-EDC.; 34P HDR-EDC)

Model I Double Density Controller

Double Density Controller (DDC)

80% more disk capacity is what you get when you add Aerocomp's DDC to your TRS-80 Model I. This controller has withstood the test of time. All the others are gone, yet the DDC endures. Why? Because it has proven itself as the only way to achieve reliable floppy disk operation on the Model I. Requires the Radio Shack Expansion Interface and software driver. Use our LDOS for top-notch up-to-date DOS performance.

Model III or 4 RS-232 Serial Card

RS232 Serial Card or Kit

MISOSYS acquired the remaining stock of genuine Aerocomp serial cards for your Model III or 4. Replace your broken serial card with this brand new work-alike replacement; or get a kit to install a serial port in the computer without an existing one.

Model III/4 Floppy Disk Controller

Floppy Disk Controller (FDC)

MISOSYS acquired the remaining stock of genuine Aerocomp floppy disk controller boards, 100% compatible with the original. Replace your broken FDC card with a brand new one. Complete kits with plated steel mounting towers and all necessary cables are available to convert a cassette machine into a disk powerhouse!

Floppy Drives and Parts

5.25" 360K 1/2-height; 3.5" 720K in 5.25" frame; 2SV5 drive case & P/S; Single drive cable; Dual floppy extender cable **

Our Model 2SV5 dual vertical external floppy disk drive case will hold two 5.25" half-height disk drives. * needed for one or two drives; ** needed for two drives..

Miscellaneous parts...

H-72-PAL U-72 PAL for 26-1069 128K upgrade
Model II/12/16/6000 printer cable
Model 4 FDC to floppy cable (specify model)
We custom manufacture ribbon cables
R-KA-P17 KelAm male 34-pin connector
R-KA-R17 KelAm female 34-pin connector

XLR8er'd Model 4 in III mode

LDOS 5.3 XLR8er Interface Kit

This is based on our Hardware interface Kit but is for the XLR8er board operating under LDOS 5.3. The package includes: XLR2RAM, XMEMDISK, BANKER, VIDX, and SETX.

XLR2RAM performs the same operation as SET2RAM but it adds the bank handler for the extra 64K of memory and the extended 256K of memory on the XLR8er board. This adds banking capability for the ten additional memory banks. The RAM disk driver can create a RAM disk of from two to twenty seven banks; however, only ten are supported through XLR2RAM.

The Video Management Extender expands scroll protect from zero to fifteen lines rather than just three; supports reverse video characters as in the Model 4 mode, and supports the @DSP of the video character generator ROM's character codes from 0-31 and 192-255.

Model I/III Data Base Manager

Auto File Manager (AFM)

AFM is a language that you can program your database in! The package consists of three integrated modules that can be called from within each other. AFM - Auto File Manager - is the actual data-base program, AFR - Auto File Reporter - is obviously the module that prints out your reports, and AFU - Auto File Utility - recovers space and keeps the files' integrity intact.

AFM is a free-form entry system, which means that you can enter your data in any way you want! You are not limited to a particular screen format. In fact, each record can have its own individual display format! Really! A unique feature is the ability to define the same field repeatedly within a record. AFM's search routines will find every occurrence of a field within a record, no matter how many times it is repeated.

An AFM record can be up to 4096 bytes long (including field name information), but each AFM record takes up only as much space as it needs. If the record must be expanded, then more space is taken up on the disk. AFU will later allow you to recover unused space within an AFM database file. The size of an AFM database file can expand to accommodate a full fifteen megabytes.

AFM allows you to set printer parameters through a FORMS command very similar to the FORMS command of many popular disk operating systems. This allows you to control your report formats. Totally independent of FORMS, is a COLUMN parameter which is used for defining column widths on display. Thus you have complete control over the formatting of your data for printing and display.

Sorting within AFM is automatic. Once the sort field has been defined, every record entered with that sort field will automatically be placed in the correct position relative to the other records in the file. However, you can list the contents of ANY field in sorted order at any time. In addition, searching can be performed on the major key fields through the use of powerful relational operators including AND, OR, GREATER THAN, LESS THAN, EQUAL, NOT EQUAL, etc.

AFM has a second module included called AFR (Auto File Reporter). It is one of the MOST powerful report generators ever made available for the TRS-80 computer. Fully relational reports can be generated by applying any set of parameters to your data base. AFM also contains a BCD MATH Package which will allow you to have a running total on numeric fields in reports if desired, using + - * / operators. Accuracy is assured by using BCD math instead of floating-point and output is automatically formatted.

AFM contains numerous HELP screens, which can be invoked at the touch of a key. The help screens are user-controllable and user definable; you may set up your own help screens for a particular application if you wish! It is very easy to set something up for people who don't use the system all the time.

• Output of AFR is fully sorted by all fields and is fully relational. We can't imagine ANY report that cannot be performed by AFR. You can field your data each with different field lengths.

• FORM-LETTER output of AFM will allow you to write documents and have the data filled in automatically by AFR.

• RELATIONAL LOOKUP report allows multiple passes through the database while generating reports. You can utilize information from ALL NINE drawers in the same report.

• MAIL labels etc. are a cinch with AFR's <T>ext option which allows selected field output without fielding the information before hand.

• Forms filter parameters include Word Wrap, Page Numbering, Headers, and Vertical Justification.

Floppy Disk Repair Utilities

SUPER UTILITY PLUS

The greatest Model I and III utility ever written for the TRS-80. Every TRS-80 magazine has said so!

- Disk repair, password removal plus 65 other functions with manual.

- Five-Star Excellent Reviews in 80-MICRO, 80-US, INFOWORLD, POPULAR ELECTRONICS, FAMILY COMPUTING, Creative Computing & more!

- Reads, repairs and works with all the popular TRS-80 operating systems Models I, III, 4!

- Allows you to set up two drives for two different DOS's and copy between them easily!

If you use a TRS-80 with disk drives, then this is a must-have program that you will wonder how you did without for so long! Super Utility has won numerous awards and has received many 5-Star reviews. Super Utility does so many things, you will never use its full potential, but it isn't that hard to use since it is completely menu-driven with the most common defaults built right in. It is configurable for all the popular TRS-80 operating systems and will even allow you to set one drive for one system and another drive for a different operating system and copy files easily between the two. Even between Model I and III or 4, regardless of density, track number, number of sides, or system used. We have thousands of letters in our files over the years about how Super Utility has saved the user from various problems.

Super Utility removes or decodes passwords (strips them right off a disk in one pass), reformats a disk without erasing the data, fixes problems, backs up most protected disks, etc. This was the very best utility ever written for the TRS-80 and now is the time to get your own copy. Super Utility has over 65 functions and features. Too many to describe! A fantastic buy. Does not work on hard disks. Our ToolBox or ToolBelt has similar features for hard drive use, as well as floppy. SU+ does not support Newdos/80 double-sided disks. '86 price: \$79.95

Super Utility Plus 4/4P/4D

The Model 4 version of Super Utility has all the features of the Model I/III version, but more! It uses the larger amount of memory for quicker operations, plus utilizes the three function keys. One key is even definable by the user to go right to their favorite or most used function in Super Utility 4. Also, boots right up in a Model 4P without having to first load the MODEL4/III ROM file. Many other niceties for the 4 have been implemented in this version of Super Utility.

Super Utility on unprotected disks

Want the unprotected CMD file version in addition to the regular protected version? The low fee noted on our price list along with your existing serial number (if registered) will get you the unprotected CMD file version that you can invoke from DOS.

Hard Disk Check, Repair, & Modify

LDOS ToolBox

If you own a hard disk and use LDOS, this is the perfect insurance policy for your data. The LDOS TOOLBOX is like a Super Utility+ for hard disks. Features Disk Check and Disk Repair, Sector Modification, plus many, many other useful utilities that makes using a hard drive even easier. Each program contains a builtin help command, so many times you don't even need to look things up in the manual - just press <Enter> for help! A very wise buy for hard disk users.

Model 4 ToolBelt

This is similar to the LDOS TOOLBOX, except it is for the Model 4 TRSDOS 6 operating system (all versions).

Super Fast Hard Disk Backup and Restore

Back/Rest

BACK/REST has proven to be a great time-saver for thousands of TRS-80 hard drive users. When reviewed by 80-MICRO, they gave it FIVE STARS - perfect! It saves hours of time and is very easy to use. BACK/REST can back up 10 megabytes in about 10 minutes and 20 meg in about 30-40 minutes. It also tells you how many disks to have ready. Works under LDOS or TRSDOS 6 (both versions on same disk). Great utility for hard disk users!

Hard Disk Drivers for Tandy disk systems

Supreme HD Driver - RS

These hard disk drivers out-perform the Tandy drivers in many ways. Our Powersoft drivers allow you to combine LDOS and TRSDOS 6 on the same drive and boot from either system (with floppy disk). They run faster and take much less memory from the system. Only for use with Tandy Hard Drives.

SuperSCRIPSIT Printer Driver

PowerDriver Plus

- Allows EPSON or compatible printers to be fully utilized with SuperScripsit and SCRIPSIT PRO.

This is a replacement driver for the ones you got with SuperScripsit. It fully supports the various Epson and Epson compatible printers to the limits of their capabilities. Model I, III or 4 is supported in the same package. Easy to install. Once installed, works without any extra thinking. Thousands of happy customers! 5 Star mailing list-data system!

Mailing List/Fixed Database

PowerMail Plus

This program was because all the other mailing list/data base systems couldn't keep track of all the types of data most folks wanted to keep track of. You needed speed, you needed hard drive support, and you needed a crash-proof data structure. PowerMail+ was top-rated (5 stars) in several publications and has never been topped. Works on floppies or hard disk under all popular TRS-80 operating systems. Allows importing of data from several other once popular mailing systems to avoid re-typing. Written in machine language by the author of Super Utility, this program is FAST and sorts up to 10 levels very quickly. If you keep track of names and addresses along with associated data for any situation, this is the one to use. Many churches, organizations and businesses use PowerMail+ for all the different kinds of lists they need to pull from. Each record has 24 user-definable "flags" to allow total customization for your exact needs.

Form Letter Module

Text-Merge

Create customized "form letters" and Labels with PowerMail+!

This optional module for PowerMail allows you to create customized "form letters" or custom labels, lists, etc. with PowerMail Plus and any word processor that saves text in ASCII format. Very easy to use and really gets the effect you want. Allows completely definable report generating from your PowerMail+ data.

A Major Enhancement for SCRIPSIT 4, III and I

PowerSCRIPT

One of PowerSoft's very best sellers, this modification for Radio Shack's SCRIPSIT program turns it into a POWERHOUSE! Our program merges with your copy of SCRIPSIT to create a new program that outperforms most other TRS-80 word processors without relearning a new program! PowerScript adds new features in two important areas. The first area is in the printer control. PowerScript allows you to add printer control codes directly in the body of your text! Now it is easy to add underlining, bold face, the different sizes of print, etc. Initially set up for the EPSON type dot-matrix printers, it is configurable to just about any printer during set-up. If you have more than one printer type, then just set up a copy of PowerScript for each printer you have. The second area of improvement is in disk and file control. PowerScript adds several neat features to SCRIPSIT, including the ability to see an alphabetized directory without exiting the program seeing how much free space you have, and others. This has been one of our most popular programs and we have received many, many complimentary letters on its performance. It works on the Model I, III or 4 versions of SCRIPSIT. It will even make a Model I version of SCRIPSIT work on a Model III or 4 (in the III mode). Lastly, PowerScript removes the limited copy "feature" of SCRIPSIT so that you may make as many copies as you need or copy it to your hard disk without hassle.

animated TRS-80 screen graphics!

PowerDraw

INFOWORLD, 80-MICRO and 80-US magazines really loved this program when they reviewed it. It does many things and is fun to use as well. PowerDRAW allows you to create graphics (mixed with text if desired) and save them to disk. It allows you to create up to 33 "frames" of animation and "play" them like a movie. It also allows you to save the graphics in several modes, including BASIC listings, CMD file format, etc. These can then be merged into your own programs, either in BASIC or machine language! Many of PowerSoft's opening screens were created with PowerDraw. In fact, it even creates animated opening screens (like we use in Super Utility, PowerTool, etc.) to really pep up the program. It also allows you to print the screens on Epson-type and several other type of printers. Lastly, PowerDraw has the ability to load in many types of TRS-80 graphics and convert them to BASIC listings like a BASIC program generator!

Block Graphics Drawing

PowerDOT 2.0

This program is similar to PowerDraw, but quite different. It allows you to create "hi-res" type screen graphics combined with text, and allows you to create drawings much larger than your screen. The screen is a "window" to a much larger drawing area and you use the arrow keys to move about the drawing. In a way, it is similar to Macpaint for the Macintosh computer. It also allows you to create custom fonts for aos, etc. Many of our early ads were created with PowerDot. It creates the hi-res effect due to each TRS-80 block pixel being printed as a single dot. Please specify if EPSON, Okidata, Prowriter, or Radio Shack printer.

TRS-80 Mod I & III GAMES

Leo's Greatest Hits Animated Game Disk with sound

This is one of the greatest values in games ever produced. Leo Christopherson wrote the very first animated game for the TRS-80 and the country went wild for it. Android Nim will make everyone laugh to watch these life-like creatures as they shake their heads up and down or side to side and blink at you stupidly as they wait for you to make a move. Then Leo invented how to make the TRS-80 produce sound and added it to NIM. He then followed Android Nim with the other games, even getting Radio Shack to sell Dancing Demons, which is a real scream. It alone is well worth the price of this disk; but you get ALL of Leo's programs on one disk for one great low price. If you haven't yet bought this disk, do it now! It is a classic! Each one of these games originally sold for \$9.95 - \$19.95 EACH. The disk includes the famous games: ANDROID NIM, BEEWARY, DUELING DROIDS, DANCING DEMONS (once sold by Radio Shack for \$14.95), SNAKE EGGS, and ANIMATED LIFE. All games feature full sound effects and some of them are even in 3-part harmony! You and your family will just love this disk! Dancing Demon even features saving your song and dance routines to disk and four of them are included! The possibilities are endless and it is always entertaining. A great way to "show off" what your computer can do and always fun.

TRS-80 Mod I & III GAMES

KIM WATT GAME DISK

• Contains: Space Colony, Symon, Capture, Horse Race Slots

Kim watt, author of Super Utility and other famous programs wrote some games that Adventure International published back in the early 70's. They are interesting in that most people have never seen these, as by the time SUPER UTILITY was established in the market, these games, as well as Adventure, were gone. Originally these were sold on three separate diskettes (or tapes), but we have combined them all on one disk for you collectors.

TRS-80 Mod I & III GAMES

Lance Micklus' Greatest Games

This 3 disk set is a great collection as it features space games (Space Trek), adventure games (Dog Star Adventure), gambling games (The Mean Craps Machine, which also includes a Craps tutorial booklet on disk), board games (Mean Checkers Machine), as well as some darn useful programs that you might use for real purposes. Also has some educational games for the kids. You will enjoy owning this set of programs by one of the early pioneer programmers for the TRS-80, Lance Micklus.

Smart Terminal Program

ST80-III™

Designed for the hobbyist and for the commercial user as well, ST80-III is the standard of excellence by which all other terminal programs compared themselves. ST80-III is one of the most reliable terminal program you will find anywhere in terms of performance and accuracy. It will work with any ASCII system, whether it be FORUM-80 or IBM™ 370. Works great with CompuServe®, and DELPHI®. It requires only a single disk drive and 32k of memory.

Prompted wait and Venprompt are included here for total control over the input to the host. From the keyboard you can select full or half duplex operation with all of the RS232 options, including nuls and auto linefeeds. You can even have ST80-III automatically transmit linefeeds after each <RETURN> character. To save you hours of grief, ST80-III even performs an RS232 test to make sure the hardware is working properly before going online. FEEDBACK lets you send back incoming data to the host. The memory buffer allows you to APPEND incoming data to previously stored information. It also keeps a running checksum which is displayed each time the buffer is closed. Along with the checksum is a display letting you know how much memory is left in the buffer. Besides the normal SCROLL method of video display, there is also PAGE and FORMAT methods of display which can be controlled by direct keyboard entry or by the host. Direct cursor addressing, video and printer on-off control codes, WHAT-R-U, serial polling, DOS commands from within ST80-III, device independent I/O, and extended ST80-III utility programs are all included. Data files can be scrambled for security prior to transmission. The advanced auto-logout supports built-in pause characters and control characters. A built in HELP function simplifies use.

Host Program

ST80-X10

There are many programs on the market which call themselves host programs. Most aren't very practical and none offer the features of ST80-X10. If your need is to be able to dial up your computer by telephone so it can be operated safely from a remote location, ST80-X10 is the solution to your problem.

This host is easy to use because it was designed to make most any regular application program work via a telephone line. It automatically converts all TRS-80 control codes to ST80-III control codes. So what's on the screen is also on the remote terminal. All PRINT @'s are converted to direct cursor addressing codes. No PEEK and POKE commands are used. When the phone is hung up, ST80-X10 automatically restarts your application program. Program development is easy to do off line because ST80-X10 shows you on the screen exactly what the remote terminal will see. ST80-X10 is designed to work with all ST80 terminal programs with direct cursor addressing. If the remote terminal is an older version of ST80 or is another type of terminal, a dumb terminal mode is provided.

Your applications programs MUST use the standard TRS-80 ROM calls, and can not use graphics or video POKE's. Just about all BASIC, FORTRAN, COBOL and many machine language programs can be used with ST80-X10. The user should have a good grasp of programming techniques to use the system to its fullest advantage, especially when the application program will be for access by the public. For private use, little or no modification to your application programs will be necessary. ST80-X10 works with all Hayes compatible auto answer modems including those with switchable port addresses.

Personal Bulletin Board

ST80-PBB

Computers are designed to work. Keep your computer busy all of the time by letting it fill those idle moments as a personal bulletin board system. Great for old Model I's or III's that have been replaced! Put those guys to work!

ST80-PBB is a small, simple, but amazingly powerful bulletin board for the individual who would like to leave his/her computer on line to gather and leave electronic mail with friends. It maintains its message data base in memory for fast response, thus avoiding the problem of scanning the disks. It runs with Disk BASIC and can be compiled with Microsoft's BASCOM. It supports four levels of access - Guest, Member, Owner, and Operator - Using a password system for privileges. A user log and four message types are also included. An ST80-PBB advanced feature is the smart reverse scan for viewing messages. All of this is tied in with a very efficient memory organization which makes the maximum use of available memory. A 32k configuration will hold from 25-30 messages, depending on their length. 48k will hold more, of course. The message data base is automatically maintained without operator intervention. The only maintenance required is a backup save to disk. If saved to disk, a text editor can then be used to modify the data base.

To use the program, you must have an auto-answer modem and the ST80-X10 host program. ST80-PBB is written in BASIC. Some other minor modifications must be made before putting the program online - such as changing the passwords. The program includes comments for easy reading. To expand the size of the message data base, these comments can be deleted, the spaces in the lines can be removed, and the non-applicable parts for the program can be taken out.

LS-DOS 6.3.1: The latest for your Model 4

- ☆ The DATE command, "Date?" prompt on boot, and the @DATE SVC now support a date range of 32 years; from **January 1, 1980 through December 31, 2011.**
- ☆ **Enable or disable the printer time-out** and error generation with SYSTEM (PRTIME=ON|OFF)
- ☆ Customize the display of the time field in the DIR command to display **12-hr or 24-hr clock time** with SYSTEM (AMPM=ON|OFF).
- ☆ Both ASCII and hexadecimal display output from the LIST command is **paged a screen at a time.** Or run it non-stop under your control.
- ☆ MEMORY displays (or prints) the status of switchable memory banks known to the DOS, as well as a **map of modules** resident in I/O driver system memory and high memory.
- ☆ Specify SYSTEM (DRIVE=d1,SWAP=d2) to **switch drive d1 for d2.** Either may be the system drive, and a Job Control Language file may be active on either of the swapped drives.
- ☆ The TED text editor now has commands to **print the entire text buffer,** or the contents of the first block encountered. Obtain directories from TED, too!
- ☆ Have extended memory **known to the DOS?** The SPOOL command now permits the BANK parameter entry to range from 0-30 instead of 0-7.
- ☆ **Alter the logical record length** of a file with "RESET filespec (LRL=n)"
- ☆ Specify "RESET filespec (DATE=OFF)" to restore a file's directory entry to the old-style dating of pre-6.3 release. Specify "RESET filespec (DATE=ON)" to establish a file's directory date as that of the **current system date and time.**
- ☆ Felt uncomfortable with the *alleged* protection scheme of 6.3? **LS-DOS 6.3.1 has no anti-piracy protection!** MISOSYS trusts its customers to honor our copyrights.
- ☆ Best of all, a **6.3.1 diskette is available as a replacement for your 6.3.0 diskette for \$15** (plus \$2 S&H in US). There's no need to return your current master.
- ☆ The 6.3.1 diskette comes with a 30-day warranty; written customer support is available for 30 days from the purchase date. Versions for the Model 4 and Model II/12 are available. **If you do not already have an LS-DOS 6.3.0, order the 6.3.1 Upgrade Kit with 90 days of customer support for \$39.95** (+\$3 S&H).



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Sterling, VA 22170-0239
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[orders to 800-MISOSYS (647-6797) from U.S. or CANADA]

LDOS 5.3.1: the support continues

- ☆ The DATE command, "Date?" prompt on boot, and the @DATE SVC now support a date range of 32 years; from **January 1, 1980 through December 31, 2011;** time-stamping, too.
- ☆ **Double-density BOOT support for Model I** with embedded SOLE and FORMAT (SYSTEM). Supports mirror-image backup, too. Reworked FDUBL driver eliminates PDUBL and RDUBL and takes less memory; enhanced resident driver eliminates TWOSIDE.
- ☆ Model III version auto-detects Model 4 for installation of KI4 keyboard driver; supports CAPS, CTRL, and function keys.
- ☆ SYSTEM command supports removable and reusable BLINK, ALIVE, and UPDATE memory modules.
- ☆ The TED text editor now has commands to **print the entire text buffer,** or the contents of the first block encountered. Obtain directories from TED, too!
- ☆ The SPOOL command offers Pause, Resume, and Clear parameters. (OFF) attempts to reclaim memory used.
- ☆ **Alter the logical record length** of a file with "RESET filespec (LRL=n)"
- ☆ Specify "RESET filespec (DATE=OFF)" to restore a file's directory entry to the old-style dating of pre-5.3 release. Specify "RESET filespec (DATE=ON)" to establish a file's directory date as that of the **current system date and time.**
- ☆ Both Model I and Model III support similar commands: all features of Model III 5.3.0 are in Model I 5.3.1. That includes such facilities as DOS and BASIC help files, SETCOM and FORMS library commands, TED text editor, BASIC enhancements, etc. All DOS commands have been groomed for Model 4 LS-DOS 6.3.1 syntax where possible.
- ☆ Best of all, a **5.3.1 diskette is available as a replacement for your 5.3.0 diskette for \$15** (plus \$3 S&H in US and Canada, \$4 elsewhere). There's no need to return your current master.
- ☆ The 5.3.1 diskette(s) come(s) with a 30-day warranty; written customer support is available for 30 days from the purchase date. Versions for the Model I and Model III are available. **If you do not already have an LDOS 5.3.0, order the 5.3.1 Upgrade Kit with 30 days of customer support for \$39.95** (+\$4 S&H). Some features require lower case or DDEN adaptor.

With a 20 or 40 MB MISOSYS Hard Drive connected to your TRS-80 Model III or 4, your computer will sail through data access.

Order any hard drive kit or unit from MISOSYS and we'll pre-install either LS-DOS 6.3.1 or LDOS 5.3.1 at no extra charge.

MISOSYS has been shipping complete drive kit packages since September 1989 which plug into Model 4/4P/4D and Model III computers; let us build one up for you! Our host adaptor, which interfaces the 50-pin expansion port of the TRS-80 (host) to the 50-pin SCSI port of the HDC, sports a hardware real time clock using a DS1287 clock module. With its internal battery lifetime in excess of 10 years, never enter date and time again. It even adjusts for daylight saving time! An available option is a joystick port and Kraft MAZEMASTER joystick with a port interface identical to the old Alpha Products joystick; thus, any software which operated from that joystick will operate from this one.



Software supporting the S1421 and 4010A controllers includes: a low level formatter; an installation utility and driver; a high level formatter; a sub-disk partitioning utility; utilities to archive/restore the hard disk files onto/from floppy diskettes; a utility to park the drive's read/write head; a utility to set or read the hardware clock; a keyboard filter which allows the optional joystick to generate five keycodes; and a utility to change the joystick filter's generated "keystroke" values after installation. Optional LDOS 5.3 software is available.

Twenty megabyte drive packages are currently built with a Seagate ST225 hard drive; Forty megabyte packages use a Seagate ST251-1 28 millisecond drive. Drive packages are offered as 'pre-assembled kits'. Your 'kit' will be assembled to order and fully tested; all you will need to do is plug it in and install the software. Drive kits include a 50-pin host interface cable and the hardware clock. Add a joystick for but \$20 additional (see price schedule).

Aerocomp Hard Drives now available from MISOSYS

MISOSYS is also the sole source of remaining brand new Aerocomp hard drives. A limited number of NEW 5 megabyte units are available. All Aerocomp drives include status LEDs, software driver and formatter, power and host cables, and installation Job Control Language. We are also building their 20M and 40M drives.

- Prices currently in effect:
- Complete MISOSYS Drive Kits:
- 20 Megabyte kit: \$450
- 40 Megabyte kit: \$575
- Joystick option \$20
- LDOS software interface \$30
- Aerocomp Hard Drives:
- 5 Meg unit \$250
- 20 Meg unit \$400
- 40 Meg drive \$500
- MISOSYS H/A with software \$75
- Xebec 1421 HDC \$75
- Adaptec 4010 HDC \$75
- Drive power Y cable \$5
- XT drive cable set \$5
- Note: freight charges are additional.
- Prices subject to change without notice

Pre-installed program collections at unheard of prices!

For a limited time, MISOSYS presents fantastic program sets pre-installed on your newly purchased hard drive. For just a modest additional charge for each collection, we will install all software on your hard drive and provide you with all documentation. But hurry, these offers are available for only a limited time and are offered only at the time of a new hard drive purchase.

Programmer's Powerpack - \$50

MC: C compiler; MRAS: macro assembler; HartFORTH: FORTH compiler; DSMBLR: Z80 disassembler; CON80Z: converts 8080 to Z80; UNREL: converts REL to ASM; *The SOURCE*: 3-volume book set

Model 4 Business Bonanza - \$50

LB Data Manager; PRO-WAM: Pop-up desk-top; Mister Ed: More wammies; LS-LED: text editor

Model 4 Ultimate Utilities - \$50

GO: Maintenance; GO: System Enhancements; GO: Command Utilities; Powersoft's Toolbelt; LS-Utility Disk

Model III Games Galore - \$40

Leo Christopherson's Greatest Hits; Kim Watt Game Disk; Lance Micklus' Greatest Hits; The Gobbling Box; Bounceoids; Crazy Painter; Frogger; Scarfman; Space Castle; MISOSYS HD Joystick option

Model III Business Bonanza - \$50

PowerMail: Mailing list; TextMerge: form letters; AFM: data file manager; FILTER Pack; LED: text editor

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Note: Our 800 ORDER LINE can accept calls from all 50 United States and CANADA.

Let our LB Data Manager solve your data storage problems

LB Version 2.2: A Flat File Data Manager with more powerful and easy to use features in this latest enhancement of Little Brother! Now with data conversion utility for DIF, pfs, Profile, dBASE, ...

We've added many features asked for over the past few years by LB users; yet LB is still about the easiest, most flexible data manager you can use for managing your data. Absolutely no programming is needed to create a database with numerous fields, construct input screens for adding and editing data, and create your own customized report. Quickly you define your data fields in response to LB's prompts, and then draw your data input screen using simple keystrokes - or have LB automatically create your input screen. In no time at all, you're entering data. Customize your printed reports with user-definable print screen definitions. LB is just what you need in a data manager! Now even more in version 2.2!



Data capacity per database:

LB supports up to 65,534 records per data base; 1,024 characters (64 fields) per record; and up to 254 characters per field.

Field types supported:

LB allows ten field types for flexibility: *alphabetic* {A-Z, a-z}, *calculated* {operations on "numeric" fields using +, -, *, /}, *date last modified* {YYYY/MM/DD automatically maintained}, *dollar* {±ddddddd.dd}, *floating point* {±ddddddd.ddddddd}, *literal* {any ASCII character}, *numeric* {0-9, -, .}, *right-justified numeric* {flush right numeric}, *upper case alphabetic* {A-Z, automatic conversion of a-z}, and *upper case literal* {literal with automatic conversion of a-z}. All field types utilize input editing verification so invalid data cannot be added to a record. Field name strings can be up to 19 characters long.

Data entry and editing:

LB allows you to design up to ten different input/update screens to provide extreme flexibility for selectively viewing your database fields. Using a database password provides the capability of selectively protecting fields from being displayed or printed without entry of the correct database password, or they can be protected from being altered. This is quite useful in a work-group environment. Fields may selectively be established to require a data entry before a record being added or edited is saved. You can enable a special index file to keep track of records being added. This can be subsequently used, for example, for a special mailing to newly added *customers*. Flexible editing includes global search and replace with wild-card character match and source string substitution. Search and replace can be performed on all records, or on records referenced in an unsorted or sorted index file.

Record selection and sorting:

You can maintain up to ten different index files to keep your data organized per your multiple specifications. Records may be selected for reference in an index file by search criteria using six different field comparisons: EQ, NE, GT, GE, LT, and LE. You can select on up to eight different fields with AND and OR connectives. Index files can be left unsorted, or you can sort in ascending or descending order. By attaching a sorted index file, any record may be found within seconds - even in a very large database. LB even includes a special command for automatically finding duplicate records!

Report generation:

Report generation incorporates a great flexibility. Your report presentation is totally customized through print definition formats which you define on the screen as easily as you define the input/update screens. You can truncate field data, strip trailing spaces, or tab to a column. You control exactly where you want each field to appear. LB provides for a report header complete with database statistics: database name, date, time, and page numbers. A report footer provides subtotaling, totaling, and averaging for dollar, floating point, and calculated fields; print number of records printed per page and per report. Attach any of the ten

index files and you control exactly what records get printed; even a subset of indexed records can be selected for printing to give you a means of recovering from that printer jam halfway through your 30-page printout. You can even force a new page when the key field of an index file changes value. Up to ten different printout definition formats can be maintained for each database. Reports may be sent easily to a printer, the console display screen, or to a disk file - useful for subsequent printing or downstream data export to other programs. Report formatting allows for multiple across mailing labels, multiple copies of the same record, or even printing one record per page for sales books. You can easily generate mail/merge files of address or other data for your word processor. Or you can use LB's built-in form letter capability.

Automatic operation:

For automating your processing needs, LB can be run in an *automatic* mode, without operator intervention. Frequently used procedures can be saved by LB's built-in macro recorder for future use. Entire job streams may be produced, so that LB operations may be intermixed with literally any DOS function that can be *batch* processed.

Maintenance utilities:

To make it easy for you to grow your database as your data needs grow, we provide two utility programs for managing your database. One allows you to construct a new database with an altered data structure and populate it with data from your existing database. Another allows you to duplicate your database structure, copy or move records from one to another, or automatically purge un-needed records. A *third utility* converts to LB from pfsFILE4, Profile4, DIF, dBASE II&III, and fixed record; also converts to DIF, dBASE, and delimited.

Help is on the way:

The main menu even provides a shell to DOS so you can temporarily exit LB to perform other DOS commands. LB provides extensive on-line help available from almost every sub-command. A 200-page User Manual documents every facet of LB's operation.

Trade-up policy:

Send in the Table of Contents page from any existing database program and get LB Version 2 for half price.

Specify MS-DOS or TRS-80 version. LB is priced at \$99 + \$5 S&H (US; \$6 Canada; \$7 Europe; \$9 Asia, Pacific Rim, and Australia). To trade up from any other database, send Table of Contents page and \$49.50 +S&H. Remit to:

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703-450-4181 or orders to 800-MISOSYS