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, III, 4, 4P, 4D, 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 outside of Virginia, 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.**

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Here's a policy which should minimize anyone's fears of trying out one of our products. Any MISOSYS 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.

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PRICE LIST effective June 1, 1991

TRS-80 Software

Product Nomenclature	Mod III	Mod 4	Price S&H
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
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EDAS / PRO-CREATE	M-20-082	M-21-082	$44.95 D
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LB Data Manager-M4 (Ver 2.1)	n/a	M-50-510	$99.00 D
LS-DOS 6.3.1 Upgrade Kit - M4	n/a	M-11-043	$39.95
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
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LS-UTILITY	n/a	L-32-150	$24.95
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PowerDraw	P-32-220	n/a	$19.95
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UNREL-T80	same	M-30-054	$29.95
UTILITY-I	L-32-070	n/a	$19.95

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LB Data Manager 2.1	M-86-510	$99.00 D
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HartFORTH-86	M-86-071	$59.95 D
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Lance Miklus' Hits (M3)	P-55-GLM	$19.95
Leo Cristopherson's (M3)	P-55-GLC	$14.95
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The Gobbling Box (M3/M4)	M-55-020	$19.95

MSDOS Game Programs

Lair of the Dragon	M-86-021	$19.95

Hardware

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XLR8er e/w 256K RAM (M4)	R-MB-004	$182.00	F
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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
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Hard drive: Kalok KL320	**R-HD-020**	**$200.00**	**F**
Hard drive: Seagate ST251-1	**R-HD-040**	**$320.00**	**F**
Hard drive: Seagate ST157A (16B IDE)	**R-HD-A40**	**$320.00**	**F**
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Cable: Custom IDC ribbon (M3/M4/M2)	?-??-???	varies	
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Standby Power System: 450VA	**R-PS-450**	**$399.00**	**?**
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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	$225.00	F
Infochip Systems Expanz! (PC)	R-IC-EXP	$179.10	F
DJ10 Tape Backup (PC)	R-TD-D10	$275.00	D
AB10 Tape Adaptor (PC)	R-TD-A10	$75.00	
KE10 External tape adaptor/case (PC)	R-TD-K10	$110.00	D

The Fine Print

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TRS-80 Software and Hardware from MISOSYS

Window Application Popup

PRO-WAM 2.0 M-51-025

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.

✔ **CAL**endar 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*** capibilities. It's great for keeping a small data base.

✔ **PHRASE** is a KSM from disk for lots of automation.

✔ A telephone list and auto**DIALER** for Hayes modems.

✔ **CALC**ulator gives you 4-functions at your fingertips. **RPNCALC** 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-WAM!

PRO-WAM Application Pack

Mister ED M-51-028

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.

Data Base Manager

Little Brother-M4 L-50-510

LB is a **flat file data management system** where ease of use is its primary goal; you don't need to program anything or remember complicated command sequences to manage data. Even for the most complex data management needs, LB produces results quickly; EVERY function in LB is menu driven and comes with complete on-line HELP information.

To set up a data base, you just define the record layout. For each field, enter a descriptive name, type, and length. LB handles up to **65534 records**; each can contain up to **1024 characters**. LB supports up to **64 fields per record**; fields may be up to 254 characters long. There are seven types of data fields available: alpha, numeric, right justified, general, dollar, float, and calculated: add, sub, mul, and div; any of which may be a *Protected Field*, so that its data will not be displayed unless the proper *Password* is entered.

You next establish a *screen*, and you are ready to begin entering data! You may view or edit any record at any time. Find information quickly. You can even create an *index* to your data so any record can be accessed within seconds.

Simply define a print format screen, and LB will print records according to your specifications; 10 different formats can be created. You can print with headers/footers, date, time, page numbering, totals and sub-totals if desired, mailing labels format, and even form letters. You select what records get printed and can use an index for printing in *sorted* order as well; great for organizing your report.

For **automating your processing**, LB can be run in an *automatic* mode; frequently used procedures (such as selecting, sorting and printing) can be saved for future use.

LB requires a minimum of two floppy disk drives and 128K of RAM or hard disk, 64K, and one floppy disk drive).

LB Utility

LBMU-M4 L-50-515

LBMU lets you generate a new data file set from existing LB data. This can save you countless hours in restructuring an existing data base, and provides you an excellent means to archive *old* records from your data base.

You can use all records in the existing file, or a chosen few by using an LB index file). The new data base file will be allocated with only as many records as needed. This is useful for de-allocating the space consumed by a data base file if too many records were allocated for it.

You may use any field and associated data which is present in the existing data base. You may incorporate additional fields. Furthermore, LBMU will allow you to lengthen or shorten any existing field. LBMU will even perform some field type conversions for you. For example, you can convert from numeric or right justified fields into dollar/float fields.

FIXDEL is included to rechain all deleted records in a data file should the deleted record chain become broken. If you are encountering failures in re-using your deleted records, then FIXDEL is the utility program for you.

Z80 Assembler

EDAS [DOS 6 M-21-082] [LDOS 5.x M-20-082]

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 [DOS 6.x M-21-083] [LDOS 5.x M20-083]

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 converting 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 [DOS 6 M-31-033] [LDOS 5.x M-30-033]

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 [DOS 6 M-31-053] [LDOS 5.x M-30-053]

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 [T80 M-30-054] [CPM M-32-054]

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.

Communications Terminal

LS-Host/Term [DOS 6.x L-35-281]

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 [DOS 6.x M-21-064] [LDOS 5.x M-20-064]

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 (available separately), 2 disk drives, and upper/lower case.

Structured BASIC

TBA [LDOS 5.x L-21-010] [DOS 6.x L-21-011]

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 introduces 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 irrelevent sections ignored when processing the source to executable code.

BASIC Compiler

EnhComp [DOS 6 M-21-072] [LDOS 5 M-20-072]

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 reclens 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 #M-21-073

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.

LS-DOS 6.3.1 has something for everyone

- ☆ 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).

MISOSYS, Inc.
P. O. Box 239
Sterling, VA 22170-0239
703-450-4181 [orders to 800-MISOSYS (647-6797)]

DoubleDuty Version 2.6.0

DoubleDuty works with all expanded memory known to the DOS; a BANK parameter lets you use any two adjacent pair of memory banks for its "second 64K Model 4". If you have an XLR8er board installed with 256K additional memory (banks 3-11), you could install DoubleDuty using banks 10 and 11. In this way, you would have a 128K Model 4 partition and a 64K Model 4 partition still with six more memory banks available. Programs which use extra memory but are not "expanded memory literate", such as Multiplan or enhanced Visicalc, could be installed in one DoubleDuty partition and use 128K, still having another program installed in the other DoubleDuty partition. Have PRO-WAM and DoubleDuty both installed above bank 2 in expanded memory. What a machine!

If you already own DoubleDuty and have expanded memory known to the DOS (see the MEMORY command of LS-DOS 6.3.1), then you really ought to have this version of DoubleDuty. Just send your original DoubleDuty master disk to MISOSYS for a disk refresh; the fee is $10 plus S&H ($2 in U.S. & Canada, $3 elsewhere). It doesn't matter if your DoubleDuty was purchased from Radio Shack or direct from MISOSYS; I'll take it either way and convert it into a 2.6.0 "expanded memory literate" version.

If you don't already own it, maybe now is to time to think about acquiring DoubleDuty; it. turns a 128K (or greater) machine into two partitions with a third able to invoke DOS library commands. 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. But DoubleDuty does let you run two programs such as Multiplan and Superscripsit without having two terminate one to run the other.

PowerSoft's World Famous Utilities and Software for TRS-80 Computers with Floppies and/or Hard Disks.

Now available exclusively from MISOSYS!

SUPER UTILITY PLUS • *The greatest utility ever written for the TRS-80. Every TRS-80 magazine has said so!*

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

"The King of Utilities" **- 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, has received many 5-Star reviews and this could be your last chance to purchase a copy at this unheard of price. 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 (Mod III & I) - Disk repair, password removal plus 65 other functions with manual.

Super Utility Plus 4/4P/4D (same as above for TRS-80 Model 4, 4P, 4D - Reads/Writes 4, III & I.)

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 ModelA/III ROM file. Many other niceties for the 4 have been implemented in this version of Super Utility.

Extra Super Utility manuals, disks or unprotected disks:

Need an extra manual for your SUPER UTILITY? Pick up an extra manual (3-hole punched) for only $10. Need an extra disk? Send $10 (if registered) for an extra copy. Want the unprotected CMD file version? Send $20 and your serial number (if registered) and we'll send you the unprotected CMD file version.

LDOS ToolBox (Hard Disk Check, Repair, Modify, much more! Like a "SU+" for hard disk)

> Original 1986 price: $49.95 - by Kim Watt, author of Super Utility+, PowerMail+ and many more great programs!
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 (same for Model 4 TRSDOS 6 use. OK for 6.3. Like a "SU+" for hard disk)

> Original 1986 price: $49.95 - by Kim Watt, author of Super Utility+, PowerMail+ and many more great programs!
This is similar to the LDOS TOOLBOX, except it is for the Model 4 TRSDOS 6 operating system (all versions).

>>>> BOTH LDOS TOOL BOX AND MODEL 4 TOOLBELT FOR ONLY $44.95! <<<<

Back/Rest - Super Fast Hard Disk Backup and Restore. Saves hours of time! For I, III or 4.

> Original 1986 price: $99.95
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!

Superior Hard Disk Drivers for Tandy disk systems. Mix Model III and 4 easily.

> Original 1986 price: $99.95
These hard disk drivers out-perform the Tandy drivers in many ways. Our 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.

PowerMail Plus (Please specify Model 4, III/I.) 5 Star mailing list-data system!

> Original 1986 price: $99.95
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.

Text-Merge Form Letter Module - 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.

PowerSCRIPT - A Major Enhancement for SCRIPSIT 4, III and I (not SuperScripsit)

> Original 1986 price: $39.95

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 configureable 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.

PowerDraw (animated TRS-80 screen graphics! Easy to use. Great for kids or adults!)

> Original 1986 price: $39.95 - by Kim Watt

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. First, PowerDRAW allows you to create graphics (mixed with text if desired) and save them to disk. It also 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, and others. These can then be merged into your own programs, etc., 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 graphic's and convert them to BASIC listings like a BASIC program generator!

PowerDOT 2.0 for printers. Mix text with graphics - no problem. Build new fonts.

> Original 1986 price: $49.95

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 ads, 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.

PowerDriver Plus for SuperSCRIPSIT and SCRIPSIT PRO and Epson printers

Allows EPSON or compatible printers to be fully utilized with SuperScripsit.

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!

TRS-80 GAME COLLECTIONS ON DISK - for Mod I, III, 4 (in III mode)

Leo Christopherson TRS-80 Animated Game Disk with sound (Leo's Greatest Hits)

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.

KIM WATT GAME DISK - Space Colony, Symon, Capture, Horse Race Slots - 3 with Sound

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.

LANCE MICKLUS' GREATEST GAMES - 3 Disk Set!

This 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.

MISOSYS, Inc.

P. O. Box 239

Sterling, VA 22170-0239

703-450-4181 (Orders only to 800-MISOSYS [647-6797])

Please include $2 S&H per program package in US; Canada is US+$1; Foreign is US*3. COD (cash/money order) is $3 additional.

Virginia residents add 4.5% sales tax, VISA/MC accepted.

MISOSYS 20 or 40 MB Hard Drives for your Model III or 4

Our 15.5" x 7" x 5.25" (LWH) beige drive case has space for two half-height drives, 115V/230V 60 watt power supply and fan, hard disk controller (HDC), host adaptor, and a 50-pin SCSI female connector for the host interface. Our host adaptor sports a hardware real time clock. With its internal battery lifetime in excess of 10 years, never enter date and time again. A joystick port option adds a 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 provided with the host adaptor includes: a low level formatter; an installation utility and driver; a high level formatter used to add DOS directory information; 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. 20MB drive packages are currently built with a Kalok 3.5" drive; 40MB packages use a Seagate ST251-1 28 millisecond drive. Drive packages are offered as '*pre-assembled kits*', assembled to order and fully tested; all you will need to do is plug it in and install the software. 50-pin host interface cable included.

1991 Prices currently in effect:

Complete Drive Kits:	
20 Megabyte kit:	$450
40 Megabyte kit:	$575
Joystick option	$20
LDOS software interface	$30
Piece Parts:	
20 Meg drive (KL320)	$200
40 Meg drive (ST-251-1)	$320
Case & Power Supply	$125
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

PRO-WAM™ Version 2

Window & Application Manager

Our applications turn your 128K Model 4 into a sophisticated business or personal machine because easily installed PRO-WAM comes with many useful and powerful menu-driven time savers and work organizers. PRO-WAM is accessed with a single keystroke; its export and import functions allow you to move data across windows between programs.

- Address CARDS, LABELS, and HEAD display & export
- BRINGUP tickler file; new PRINTING and sorting
- CALENDAR flags BRINGUP items visually on screen
- Ten 3 x 5 CARD files with FORMS and FIELDS
- Virtual PHRASE access for export
- New TODO list manager with "who does it"
- Plus many other vital applications!

PRO-WAM **M-51-025**

PRO-WAM

Programmers' Toolkit

The **Programmers' Toolkit** provides all you need to know in order to write programs for the PRO-WAM environment. The package includes revised documentation which is in a convenient 5.5" by 8.5" format; the same as PRO-WAM release 2. The included WINLINK device driver supports programmed invocation of applications from any programming language environment which supports device I/O. Also included is a WINDOW/CCC function library for MC, and an assembler source code file for the PHRASE application to better illustrate how to write a PRO-WAM application.

Programmers' Toolkit **M-51-225**

PRO-WAM Application Pack

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.

Mister ED **M-51-028**

Ribbon Cable Assemblies

We use a Cirris Systems tester for 100% test of shorts and opens on custom manufactured ribbon cables. Using switchable test assemblies, different kinds of cables can be assembled and tested for you. We can custom fabricate a cable according to your specifications or provide standard replacement cables; these all use unshielded ribbon cable. Cables can use: DB-9 and DB-25 M/F; 20, 34, 40, or 50-pin header; 34 or 50-pin edgecard M/F; 36-pin printer; 50-pin SCSI M/F.

We make replacement FDC-Floppy cables @ $20 for all TRS-80 Model 4's (4, 4D, 4P); printer cables @ $20 for Model III/4 or II/12/16/6000; RSHD primary-secondary interconnect cables @ $20/set; RSHD host cable @ $20. Need a replacement RS232 or printer cable? We also stock KelAM 34-pin M/F edgecard connectors ($13/pair).

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VISA and MasterCARD accepted
Virginia residents please include 4.5% State sales tax

Floppy Drives and Accessories

5.25" 360K 1/2-height	$75+$5S&H
3.5" 720K in 5.25" 1/2-height frame	$85+$4 S&H
2SV5 drive case & P/S	$60+$6 S&H
Single drive host cable *	$12.50
Dual floppy extender cable **	$18

Our Model 2SV5 dual vertical external floppy disk drive case will hold two 5.25" half-height disk drives or one standard height drive. * needed for one or two drives; ** needed for two drives. S&H prices are UPS ground to continental U.S.

TRS-80 Software and Hardware from MISOSYS

BASIC Sort Utility

BSORT [DOS 6.1.2+ L-32-210] [LDOS 5.x L32-200]

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.

Text Editor

LED [LDOS 5.x L-30-020] [DOS 6.x L-30-021]

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: *overtype*, *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.

TRSDOS 6 Source books

THE SOURCE, 3-Volume Set L-60-020

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.

Disk Sort Utility

DSM [DOS 6.x L-35-205] [LDOS 5.x L-35-204]

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.

Action Game

The Gobbling Box M-55-020

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 joystick 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!

Hard Disk Driver

RSHARD M-12-013

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

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

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

❸ **HDCHECK** checks the performance of your drive.

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

❺ **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).

Quizzes and Answers

QuizMaster [LDOS 5.x L-51-500]

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.

Adventure-type Game

Lair of the Dragon [Mod 3&4 M-55-021]

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 prepared for a worthy opponent.

MegAdventure rips the door to adventure right off its hinges!

Hard Disk sub-partitions

diskDISK [LDOS 5.x L-35-211] [DOS 6.x L-35-212]

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.

Finally, 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.

TRS-80 Software and Hardware from MISOSYS

Model III DOS

LDOS 5.3 [Mod 3/4 M-10-033] [MAX80 M-10-833]

Provides *portability* between models and systems. LDOS 5.3 for the Model 3 and Model 4 LS-DOS 6.3 all use the same disk format, providing data diskette compatibility. If you use LS-DOS 6.3, you should use LDOS 5.3 on your Model 4 for Model 3 mode software.

Over the old 5.1.4 release, LDOS 5.3 adds:

✔ Date support through 12/31/99, time stamping for files
✔ DATECONV converts older disks to extended dating
✔ On-line **HELP** facility for DOS and BASIC - 117 screens
✔ **FORMS** lets you change printer filter parameters
✔ **SETCOM** lets you change RS-232 parameters
✔ paged displays in LIST; full-screen hex mode
✔ MEMORY displays data on high-memory modules
✔ Access to LIB commands from LCOMM
✔ **TED**, a full screen text editor for ASCII files.
✔ PATCH supports D&F patch lines and REMOVE fix
✔ line COPY and line MOVE in BASIC.
✔ a powerful **INPUT@** for screen fielded input.
✔ CMD"V" dumps an active variable list.

LDOS 5.3 is available only as an upgrade kit to 5.1.4. New users should also purchase the LDOS 5.1.4 User Manual

DOS Manual

LDOS User Manual L-40-020

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.

Mod 4 features for Mod III

Hardware Interface Kit M-12-110

This will allow you access to your Model 4 *hardware features* while using **LDOS 5.3**. Here's what you get:

✔ **KI4** keyboard driver: uses <CTRL> key for control; <CAPS> key for caps lock; and the three function keys generate values for both unshifted and shifted activations.

✔ **SET2RAM** switches to Model III RAM mode. By eliminating the cassette routines, it adds memory management facilities. The @BANK handler provides bank switching capability; @EXMEM extended memory handler allows for easy programming of I/O from/to memory banks.

✔ **MemDISK** is a RAM disk which provides a one or two bank memory drive - the same as TRSDOS 6. With it you can create another "disk" drive of up to 63K.

✔ **BANKER** is a utility to manage 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.

Model III Utilities

Utility Disk #1 L-32-070

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 [LDOS 5.x L-32-053]

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
✔ LISTBAS 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 L-32-150

Filters and *Utilities* for DOS 6.x:

✔ **PRCODES** gives control of **boldface** and underlining
✔ **TRAP** discards any user-defined character.
✔ **MAXLATE** is a translation filter system for I/O devices. Does 1:1 or 1: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.

Speed Up & Memory Addon

XLR8er R-MB-004

We're convinced that this speedup/memory board is a **necessary** enhancement of your Model 4. See how it can improve your operation by reading our article on SPEED in *THE MISOSYS QUARTERLY* issue 2.2. Comes with RAMDISK and bank-switching software, and more

✔ **Improved speed:** 64180CPU up to 8MHz Z80 equivalent
✔ Optional **Expanded RAM:** 256K memory (8 more banks)

When ordering, you must specify your exact machine model [26-1069, 26-1069A, 26-1070, etc., & if hires graphics].

Switch Boxes

Printer Switch Boxes

For 2 computers and 1 printer; or 1 computer and 2 printers; or 2 computers and 2 printers; how have you lived without a printer switchbox? Aren't you tired of unplugging cables? These boxes switch all 36 leads of Centronics connectors.

R-SB-PAB, AB 2-position switch box
R-SB-PAD, ABCD 4-position switch box
R-SB-PX2, AaBb cross switch box

R-06-CMM, 6-foot male-male cable for box to printer.

FORTH Compiler

HartFORTH [DOS 6 M-21-071][DOS 5 M-20-071]

HartFORTH is a ***full FORTH*** that conforms to the **79-STANDARD**. The Model I/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 kernal 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 kernal 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.

MISOSYS, Inc.
PO Box 239
Sterling, VA 22170-0239
703-450-4181
800-MISOSYS (647-6797)

More Software

Maintenance

GO:MTC [M-33-100]

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** reconstructs a corrupted Granule Allocation Table; **IOMON** traps disk input errors; **MAPPER** checks the granulization 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 [M-33-200]

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 [M-33-300]

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.

DoubleDuty doubles your Model 4

DoubleDuty [M-02-231]

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 there 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! **Just $49.95+$2S&H.**

More Hardware

Model 4P internal 1200 bps modem

TT512P Modem H-4P-512

MISOSYS has acquired 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 Components

Our drive kit packages plug into Model 4/4P/4D and Model III computers. The 15.5" x 7" x 5.25" (LWH) beige drive case has space for two half height drives, 115V/230V 60 watt power supply and fan, hard disk controller (HDC), host adaptor (H/A), and 50-pin SCSI female connector. Optional Joystick port with joystick.

Complete Drive Kits:
20 Meg drive kit, complete
40 Meg drive kit, complete
Hardware RTC (provided)
Joystick port/joystick option $20
Includes software for Model 4 DOS; LDOS software $30 addl

Component Piece Parts:
Kalok 20M drive; Seagate 40M drive (ST251-1); case & P/S $125; H/A with software; Xebec 1421 HDC; Adaptec 4010 HDC; power Y cable; XT drive cable set.

Note: freight charges are additional and vary.

Floppy Drives and Accessories

5.25" 360K 1/2-height
3.5" 720K in 5.25" frame
2SV5 drive case & P/S
Single drive host 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..

RAM, Cables, etc...

H-72-PAL U-72 PAL for 26-1069 128K upgrade	$8+S&H
Model II/12/16/6000 printer cable	$20+$3S&H
Model 4 FDC to floppy cable (specify model)	
We custom manufacture ribbon cables	$varies
R-KA-P17 KelAm male 34-pin connector	$8+S&H
R-KA-R17 KelAm female 34-pin connector	$5+S&H

Let our LB Data Manager solve your data storage problems

LB Version 2: A Flat File Data Manager with more powerful and easy to use features in this latest enhancement of Little Brother!

We've added many features asked for over the past few years by LB users; yet LB is still just about the easiest, most flexible data manager you can use for managing your data. It's menu driven for ease of use; absolutely no programming is needed to create a database with numerous fields, construct input screens for adding and editing data, and creating 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. 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!

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.dddddddd, *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; keep one alphabetic, another by address. 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.

Report generation:

Report generation incorporates a great deal of 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 or strip trailing spaces. 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.

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.

Specify MS-DOS or TRS-80 (M4) version. LB is priced at $99 + $5 S&H.
To upgrade from version 1.0, send Table of Contents page and $40 + S&H.
Remit to:

MISOSYS, Inc.
PO Box 239
Sterling, VA 22170
703-450-4181 or orders to 800-MISOSYS