

# TRS-80<sup>TM</sup> SOFTWARE CATALOG NO. 3



**H & E COMPUTRONICS, INC.**

**GENERAL LEDGER**

# H & E COMPUTRONICS INC.

MATHEMATICAL APPLICATIONS SERVICE™

Box 149  
New City, New York 10956  
(914) 425-1535

DEAR TRS-80 OWNER:

HERE IS YOUR NEW H & E COMPUTRONICS INC. CATALOG. FEEL FREE TO RIP THE PAGES APART. EVERYTIME YOU PLACE AN ORDER, WE WILL SEND YOU A NEW CATALOG.

DO YOU SUBSCRIBE TO THE TRS-80 MONTHLY NEWSLETTER? HERE'S WHAT YOU GET WITH YOUR SUBSCRIPTION:

(1) A NEW ISSUE EVERY MONTH OFFERING LISTINGS OF MAJOR PROGRAMS, A BEGINNERS CORNER, HELP IN LEARNING MACHINE LANGUAGE, BUSINESS PROGRAMS AND AIDS, LATEST INFORMATION ABOUT NEW RADIO SHACK PRODUCTS (AND INSIDE INFORMATION ABOUT PRODUCTS NOT YET RELEASED), HELPFUL HINTS AND ADVICE...AND MUCH MORE.

(2) A FREE WORD PROCESSOR (THAT SIMULATES MANY OF THE FOUND ON ADVANCED WORD PROCESSING SYSTEMS).

(3) MONEY BACK GUARANTEE ON ALL SOFTWARE PURCHASED FROM US (LESS \$3 FOR PROCESSING AND MAILING COSTS).

(4) INSTANT PROCESSING OF ALL ORDERS (ALL ORDERS ARE NOW PROCESSED WITHIN 24-HOURS).

(5) PHONE ORDERS ARE ACCEPTED (24-HOURS PER DAY). ORDERS TAKEN BY MARYANN, OUR SOFTWARE MANAGER (9 AM TO 5 PM-NEW YORK TIME-MONDAY-SATURDAY). AT OTHER TIMES, A TELEPHONE ANSWERING MACHINE WILL TAKE YOUR ORDER.

(6) ALL SUBSCRIBERS WILL RECEIVE VOLUME III OF THE H & E COMPUTRONICS INC. SOFTWARE CATALOG WHICH WILL INCLUDE A NUMBER OF NEW PRODUCTS (HARDWARE & SOFTWARE).

REMEMBER-WE ARE IN NO WAY RELATED TO RADIO SHACK. RADIO SHACK (PART OF TANDY CORPORATION) IN AN INDEPENDENT COMPANY. OUR GOAL IS TO SUPPORT TRS-80 OWNERS BY PROVIDING INFORMATION, PRODUCTS AND SOFTWARE FOR THE TRS-80...NOT SOLD BY RADIO SHACK.

WE ACCEPT VISA, MASTERCARD, CASH, CHECK OR C.O.D. ORDERS. THERE IS NO CHARGE FOR POSTAGE ON ORDERS SHIPPED WITHIN A U.P.S. AREA (UNITED PARCEL SERVICE). ADD \$3 FOR ORDERS TO BE SHIPPED BY U.S. MAIL (OUTSIDE OF THE UNITED STATES OR OUTSIDE OF THE U.P.S. SHIPPING AREA). ADD \$3 FOR ALL C.O.D. ORDERS. ADD \$1 FOR ALL ORDERS UNDER \$10. ADD NEW YORK STATE LOCAL SALES TAX ON ALL ORDERS TO BE SHIPPED WITHIN NEW YORK STATE.

**5-STAR EDITION**  
for users of  
Radio Shack's TRS-80\*



**5-STAR EDITION**  
for users of  
Radio Shack's TRS-80\*

# TRS-80 TRANSFORMED WITH PROFESSIONAL SOFTWARE PACKAGES

## AND MUCH MORE

**CP/M-operating system** modified for use with TRS-80 computer and disks. In addition to the standard CP/M utilities of Editor, Assembler, Debugger etc. we have added: DCV2 (Utility to convert system tapes to CP/M files), DISKAS & CASDISK (Utilities to back up files to tape and recover to disk), MOVER (Program to transfer files with single drive systems) **\$145/\$25**

**All items listed below operate in conjunction with the CPM operating system.**

**MAC** — 8080 Macro Assembler Full Intel macro definitions Pseudo Ops include RPC, IRP, REPT, TITLE, PAGE and MACLIB. Z-80 library included. Produces Intel absolute hex output plus symbols file for use by SID (see below) **\$100/\$15**

**SID** — 8080 symbolic debugger Full trace, pass count and break-point program testing system with back-trace and histogram utilities. When used with MAC provides full symbolic display of memory labels and equated values **\$85/\$15**

**TEX** — Text formatter to create paginated, page-numbered display of memory labels and equated values **\$85/\$15**

**DESPOOL** — Program to permit simultaneous printing of data from disk while user executes another program from the console **\$50/\$1**

**Disk Extended BASIC** — Version 5 ANSI compatible with long variable names WHILE/WEND chaining variable length file records **\$300/\$25**

**BASIC Compiler** — Language compatible with Version 5 Microsoft interpreter and 3-10 times faster execution. Produces standard Microsoft relocatable binary output. Includes Macro-80. Also linkable to FORTRAN-80 or COBOL-80 code modules **\$350/\$25**

**FORTRAN-80** — ANSI 66 (except for COMPLEX) plus many extensions. Includes relocatable object compiler. Linking loader library with manager. Also includes MACRO-80 (see below) **\$400/\$25**

**COBOL-80** — ANSI 74 Relocatable object output. Format same as FORTRAN-80 and MACRO-80 modules. Complete ISAM, interactive, ACCEPT/DISPLAY, COPY, EXTEND **\$625/\$25**

**MACRO-80** — 8080 Z80 Macro Assembler. Intel and Zilog mnemonics supported. Relocatable linkable output. Loader, Library Manager and Cross Reference List utilities included **\$149/\$15**

**EDIT-80** — Very fast random access text editor for text with or without line numbers. Global and intra-line commands supported. File compare utility included **\$89/\$15**

**PAYROLL SYSTEM** — Maintains employee master file Computes payroll withholding for FICA, Federal and State taxes. Prints payroll register, checks, quarterly reports and W-2 forms. Can generate ad hoc reports and employee form letters with mail labels. Requires CBASIC. Supplied in source code **\$605/\$35**

**APARTMENT MANAGEMENT SYSTEM** — Financial management system for receipts and security deposits of apartment projects. Captures data on vacancies, revenues etc. for annual trend analysis. Daily report shows late rents, vacancy notices, vacancies, income lost through vacancies etc. Requires CBASIC. Supplied in source code **\$605/\$35**

**INVENTORY SYSTEM** — Captures stock levels, costs, sources, sales, ages, turnover, markup etc. Transaction information may be entered for reporting by salesman, type of sale, date of sale etc. Reports available both for accounting and decision making. Requires CBASIC. Supplied in source code **\$605/\$35**

**CASH REGISTER** — Maintains files on daily sales. Files data by sales person and item. Tracks sales overruns, refunds, payouts and total net deposits. Requires CBASIC. Supplied in source code **\$605/\$35**

**CBASIC-2** Disk Extended BASIC — Non-interactive BASIC with pseudo-code compiler and runtime interpreter. Supports full file control, chaining, integer and extended precision variables etc. **\$90/\$15**

**Flippy Disk Kit** — Template and instructions to modify single sided 5 1/4" diskettes for use of second side in singled sided drives **\$975**

**Selector III** — Multi (i.e. up to 24) Key Data Base Processor. Comes with applications programs including Sales Activity Inventory, Payables, Receivables, Check Register, Expenses, Appointments and Client Patent. Requires CBASIC. Supplied in source code. Enhanced version for CBASIC-2. **\$345/\$20**

### G2 Level III BASIC by Microsoft

Powerful extensions to Level II BASIC including 10 machine language user calls, long error messages, keyboard bounce graphics commands and much more. Price includes User Manual, a Quick Reference Card and a pre-programmed cassette tape **\$45**

Lifeboat Associates, specialists in microcomputer disk software, is proud to offer the first professional disk-based language and utility package for the Radio Shack TRS-80 computer. Written by Microsoft, creators of Level II BASIC, the package runs on a TRS-80 system with 32K RAM, one or more drives and TRSDOS. The software is supplied on diskettes and consists of:

**FORTRAN** a true relocatable machine code compiler for ANSI FORTRAN X3.9 (except COMPLEX variables)

**MACRO ASSEMBLER** a disk-based macro assembler utilizing Zilog mnemonics and producing relocatable code

**LINKING LOADER** to link-edit and load FORTRAN and assembler modules for execution

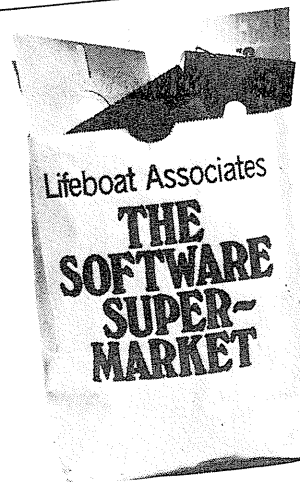
**SUBROUTINE LIBRARY** a complete library of subroutines existing as relocatable linkable modules for FORTRAN or assembler programs—e.g., double precision square root, natural log, transcendental, etc.

**DISK TEXT EDITOR** to create and modify FORTRAN and assembler programs as disk files. Also can be used as a general purpose text editor for correspondence and other documents

This high-powered professional software package with full documentation is available at the  
**DISCOUNT PRICE OF \$150.** PER COMPUTER SYSTEM

The Macro Assembler, Loader, Editor, and Cross Reference Utilities alone **\$80**

The Fortran Compiler, Loader, Editor, and extensive library of scientific functions alone **\$80**



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Box 149

Please send the following:

Software		Price
<input type="checkbox"/> manual alone		
<input type="checkbox"/> manual alone		
<input type="checkbox"/> shipping		
<input type="checkbox"/> UPS C.O.D.		
<input type="checkbox"/> Visa		
<input type="checkbox"/> MasterCharge		
Total		\$1. for C.O.D.

Account # \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

My computer configuration (specify disk system) \_\_\_\_\_

Name \_\_\_\_\_

Address (No P.O. Box) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

\*Radio Shack and TRS-80 are trademarks of Tandy Corporation



# CHECKBOOK II

BY ALAN MEYERS

FOR LEVEL II 16K & 32K TAPE BASED  
TRS-80'S

The technical expertise of TBS has been synthesized into a program that upgrades checkbook analysis to an interesting, informative and fun portion of your regimen. This program outshines the other programs of its type to such a degree that it is a new category of checkbook analysis for the consumer. FEATURING:

- \* Keyboard input with 5 character spaces for check number, 16 for whom to, 4 for code plus the ability to handle amounts up to \$99,999.99.

- \* Graphic listing of checks in memory starting at any given check number.

- \* Complete editing mode allowing changes in any or all columns plus deletion module.

- \* Checkbook balancing with balance brought forward held in memory and recorded on tape. Program will handle balances up to \$999,999.99. Graphic screen printout starting at any given check number.

- \* Bank reconcile with listing of all outstanding checks. Program automatically deletes all cleared checks if checkbook balances.

- \* Search and total routine with the capability of searching all checks in memory or an entire month, by date, check number, whom to or code.

- \* Tape input/output with the ability to record from any given check number. Automatically names file by check numbers.

- \* Complete printout of everything on screen with the press of a button from anywhere in the program.

- \* Visual numeric sort routine. Automatic after keyboard input.

- \* 16K version handles 75 transactions. The 32K version (without DOS) can handle an amazing 400!

- \* Plus many other interesting devices to make checkbook balancing enjoyable, for a change.

Checkbook II does the job RIGHT! Your bad experiences with personal finance programs are over. The Checkbook II is the personal finance program you need. You owe it to yourself to start using Checkbook II now.

CHECKBOOK II

T80-0015

SHPG WGT: 1 lb. PR: \$18.50 QTY: 1

## M E N U

1. KEYBOARD INPUT
  2. LIST AND EDIT
  3. PRINT WITH BALANCE
  4. SEARCH AND TOTAL
  5. RECONCILE
  6. SORT
  7. INPUT FROM TAPE
  8. OUTPUT TO TAPE
  9. CHECK FILE LENGTH
  10. CLEAR
- WHICH NUMBER? ..

CHK#	DATE	KEYBOARD INPUT TO WHOM	AMOUNT	CODE
710	4/10/79	ATLANTA GAS	34.55	GAS
711	4/11/79	TBS	51.50	SOFT
712	4/11/79	HOME AUTO SALES	3,452.87	AUTO
712.1	4/11/79	DEPOSIT	3,000.00	LOAN
713	4/12/79	RADIO SHACK	125.33	AUTO
714	4/13/79	GEORGIA	43.55	TAX
715	4/14/79	IRS	348.66	TAX
715.1	4/14/79	DEPOSIT	675.87	SAL
716	4/15/79	COMPUTER STORE	123.45	COMP
717	4/20/79	COMPUTER STORE	14.44	COMP
717.1	4/20/79	DEPOSIT-COMPING	500.00	KINC

CHK#	DATE	CHECK BALANCING TO WHOM	AMOUNT	BALANCE
709	4/09/79	GEORGIA POWER	46.78	3,525.64
710	4/10/79	ATLANTA GAS	34.55	3,492.09
711	4/11/79	TBS	51.50	3,440.59
712	4/11/79	HOME AUTO SALES	3,452.87	12.28
712.1	4/11/79	DEPOSIT	3,000.00	2,987.72
713	4/12/79	RADIO SHACK	125.33	2,862.39
714	4/13/79	GEORGIA	43.55	2,818.84
715	4/14/79	IRS	348.66	2,470.18
715.1	4/14/79	DEPOSIT	675.87	3,146.05
716	4/15/79	COMPUTER STORE	123.45	3,022.60
717	4/20/79	COMPUTER STORE	14.44	3,008.16

PRESS ENTER TO CONTINUE.



# TRS-80<sup>TM</sup>

## DISK PACS

### MAIL PAC

- STORES OVER 1200 RECORDS PER DISKETTE (850 ON D.O.S. DISKETTE)
- COMPLETE RANDOM ACCESS
- VARIABLE FIELDS (DOES NOT LIMIT THE LENGTH OF ANY NAME OR ADDRESS)
- SORTS BY LETTER CODE, NUMBER CODE, NAME, STREET ADDRESS, CITY, STATE, ZIP, CODE OR COMBINATION
- ALMOST INSTANT SORTING (INCORPORATES THE EFFICIENT GSF MACHINE LANGUAGE SORT — 30 TIMES FASTER THAN ANY BASIC ROUTINE)
- INDEX ALLOWS FOR INSTANT ACCESS TO ANY RECORD BY NAME OR NUMBER
- COMPLETE MANUAL AND DOCUMENTATION
- PRINTS MAILING LISTS BY NAME OR ZIP CODE (1,2, 3 or 4 ACROSS MAILING LABELS)
- PRINTS COMPLETE MAILING LIST BY NAME OR ZIP CODE (1 RECORD PER LINE)
- CAN BE USED WITH 1, 2, 3 or 4 DISK DRIVES
- REQUIRES 32K or 48K SYSTEM AND GSF OR DOSORT (DESCRIBED IN THE H & E COMPUTRONICS, INC. CATALOG)

### COMPROC COMMAND PROCESSOR (FROM RACET COMPUTES)

- AUTOMATICALLY LOAD AND EXECUTE ANY SEQUENCE OF SYSTEM AND/OR BASIC PROGRAMS AND DATA FROM POWER UP.
- COMMAND FILES CREATED, SAVED AND EDITED IN BASIC
- SOPHISTICATED OPTIONS INCLUDE INTERACTIVE PROMPTING AND SUBSTITUTIONAL PARAMETERS
- ALLOWS NON-COMPUTER PERSONNEL TO EASILY EXECUTE PROGRAMS
- NOW (FOR EXAMPLE) YOU CAN SEE THE DIRECTORY, LOAD A SYSTEM PROGRAM (SUCH AS GSF), LOAD BASIC, LOAD A BASIC PROGRAM (SUCH AS MAIL), AND LOAD A DATA FILE (SUCH AS AN INDEX) — ALL AT THE TOUCH OF ONE-BUTTON (TO TURN ON YOUR TRS-80) THE USER CAN USE COMPROC TO SPECIFY ANY SERIES OF UP TO 9 AUTO COMMANDS.

## **"SOME COMMON BASIC PROGRAMS"** **(FROM THE BASIC BUSINESS SOFTWARE COMPANY, INC.)**

This package consists of 76 Programs which appeared in Osborne & Associates book, "Some Common Basic Programs," which was written by Lon Poole and Mary Borchers. The programs are broken up into four different areas:

- |                |                   |
|----------------|-------------------|
| (1) Statistics | (3) Math          |
| (2) Finance    | (4) Miscellaneous |

This package is useful to many individual needs for it covers a very broad range of applications. On the following page is a list of all the programs which are included in this package.

The programs were originally written in Wang Basic, but we have converted these basic programs to the individual basic languages that we have listed below for sale. All packages include one or more floppy disks, a supplementary instruction manual and may also include the above mentioned book, "Some Common Basic Programs," which does serve as the users manual. This book provides listings of all the programs, example runs and information on how to alter the programs if you desire to change it slightly for a particular need.

### **STATISTICS** **(FROM THE BASIC BUSINESS SOFTWARE COMPANY)**

**The Following Statistics Programs Are Included  
And All Will Run In 8K Of Memory**

- |                                 |                                |                                     |
|---------------------------------|--------------------------------|-------------------------------------|
| 1. Permutations + Combinations  | 9. Power Curve Fit             | 17. Bivariate Normal Distribution   |
| 2. Basic Statistics             | 10. Multiple Linear Regression | 18. Geometric Distribution          |
| 3. Moments, Skewness * Kurtosis | 11. Normal Distribution        | 19. Poisson Distribution            |
| 4. Anova (one-way)              | 12. T-Statistics Evaluation    | 20. Binomial Distribution           |
| 5. Anova (two-way)              | 13. T-Distribution             | 21. Weibull Distribution            |
| 6. Linear Regression            | 14. Chi-Square Evaluation      | 22. Spearman's Rank                 |
| 7. Exponential Curve Fit        | 15. Chi-Square Distribution    | 23. Contingency Table               |
| 8. Logarithmic Curve Fit        | 16. F-Distribution             | 24. Logarithmic Normal Distribution |

**PRICES INCLUDES 100 PAGE MANUAL AND DISKETTE**

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**ALL PROGRAMS ARE FULLY DOCUMENTED**

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#### **PLEASE SEND ME:**

MAIL (\$99.95) \_\_\_\_\_ GSF (\$24.95) \_\_\_\_\_ DOSORT (\$34.95) \_\_\_\_\_ STATISTICS (\$30.00) \_\_\_\_\_  
SOME COMMON BASIC PROGRAMS (\$30.50) \_\_\_\_\_ COMPROC (\$19.95) \_\_\_\_\_  
FOR GSF OR DOSORT SPECIFY 16K \_\_\_\_\_ 32K \_\_\_\_\_ 48K \_\_\_\_\_

CREDIT CARD NUMBER \_\_\_\_\_ EXP. DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

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# H & E COMPUTRONICS INC.

MATHEMATICAL APPLICATIONS SERVICE™

## TRS-80™ LIBRARY 100

### FROM THE BOTTOM SHELF

100 TRS-80 LEVEL II PROGRAMS

\$49.50 for ALL 100 Programs

5 cassettes - from the first mass marketer of ready to load software.

Quality in Quantity - a value in excess of \$500.00 (Check the price per program in other ads).

For the first time there are enough users of a single type of computer to justify mass marketing of high quality, ready-to-load programming. We are only able to market at this price because WE EXPECT TO SELL A GOB OF THEM . . . .

Available for immediate delivery. Buy now!! Volume only will allow us to continue marketing the **LIBRARY 100** at the **\$49.50 price**.

- 25 - **BUSINESS AND FINANCE.** Moving ad, Sales-Cost Margin, RE Investment Analysis, Interest Determination, Depreciation, and 19 more.
- 15 - **GRAPHICS.** Advertisement, Red Baron's Enemy, Fireside, Blocks, and 11 more.
- 15 - **EDUCATION.** 5 Math, and 10 subjects.
- 15 - **HOME.** Nutrition, Xmas List, Travel Mileage, Shopping List, and 11 more.
- 30 - **GAMES.** Star Trek, Tiger, Shark, Memory Quiz, Stingray, and 26 more.
- 100 - programs which cost you 49.5 cents a piece!

The Greatest Bonus of all (**FREE** with order ) **TINY PILOT**. No, **TINY PILOT** does not fly small airplanes. It is the first new language for your **TRS-80**. With just 6 of its commands even a child can be programming in minutes.

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## LIBRARY 100 CONTENTS

### BUSINESS AND FINANCE

PRESENT VALUE OF FUTURE SUM	SIMPLE INTEREST FOR DAYS
FUTURE VALUE OF PRESENT SUM	AMORTIZATION SCHEDULE
COMPOUND INTEREST	INSTALLMENT LOAD INTEREST RATE
DAYS BETWEEN DATES	TERM OF INSTALLMENT LOAD
PRESENT VALUE OF PAYMENTS	REAL ESTATE INVESTMENT ANALYSIS
NOMINAL-EFFECTIVE INTEREST	INTERNAL RATE OF RETURN
FUTURE VALUE OF DEPOSITS	ALL DEPRECIATION CALCULATIONS
BOND-PRESENT VALUE	BOND-YIELD TO MATURITY
SALE-COST-MARGIN	DAY OF WEEK
MOVING SALES AD	

### EDUCATION

ADD\*\*\*SUBTRACTION\*\*\*MULTIPLY\*\*\*DIVIDE\*\*\*FRACTIONS\*\*\*DECIMALS  
\*\*\*BASE NUMBERS\*\*\*EDUQUIZ\*\*\*PILOT\*\*\*

### GRAPHICS

FRONT COVER\*\*\*WIERD\*\*\*RATRACE\*\*\*RANDOM AD\*\*\*FIRESIDE\*\*\*  
LEFT RIGHT\*\*\*BLOCKS\*\*\*HERRING\*\*\*LAUNCH\*\*\*BLINKER\*\*\*SNOOPY\*\*\*  
SNOW\*\*\*STEP AD\*\*\*GRAPHIC\*\*\*WAR GAME\*\*\*STAR TREK\*\*\*SPEEDY\*\*\*  
LIFE\*\*\*COUNT\*\*\*ROAD RACE\*\*\*FIFTEEN\*\*\*

### HOME

BARTENDER\*\*\*NUTRITION\*\*\*CONVERSION\*\*\*CALENDAR\*\*\*  
BASE CONVERSION\*\*\*CALCULATOR\*\*\*VACATION\*\*\*TELE CODE\*\*\*  
MESSAGE CENTER\*\*\*NIGHT CHECKOFF\*\*\*EXPENSE\*\*\*BABY SITTER\*\*\*  
DRUNKOMETER\*\*\*REMEMBER\*\*\*XMAS LIST\*\*\*MILEAGE\*\*\*

### GAMES

JUMBLE 1\*\*\*SEARCH\*\*\*MEMORY LETTERS\*\*\*STRING RAY\*\*\*  
RUSSIAN ROULETTE\*\*\*WHEEL OF FORTUNE\*\*\*TOWERS\*\*\*DECISION\*\*\*  
MEMORY NUMBERS\*\*\*DOOMSDAY\*\*\*SKETCH\*\*\*FLIPPER\*\*\*STAIRS\*\*\*  
ODD ONE\*\*\*SPY SHIP\*\*\*HORSE\*\*\*SCISSORS\*\*\*CRAPS\*\*\*  
STAR BLAZER\*\*\*TIGER SHARK\*\*\*UNJUMBLE\*\*\*MIND READER\*\*\*  
ROACH RACE\*\*\*JUMBLE 2\*\*\*GYPSY\*\*\*

**RADIO SHACK COMPUTER OWNERS**

# **TRS-80 BUSINESS PACS**

**DISK \* CASSETTE**

- **ACCOUNTS RECEIVABLE**  
INCLUDES COMPLETE CUSTOMER LISTINGS AND REPORTS.
- **ACCOUNTS PAYABLE**  
INCLUDES COMPLETE VENDOR LISTINGS AND REPORTS.
- **INVENTORY CONTROL**  
COMPLETE INVENTORY LISTINGS AND EDITING WITH STOCK STATUS ALERT.
- **INVOICING**  
PREPRINTED TRACTOR FEED FORMS OR PRINTS CUSTOMER FORM ON PLAIN WHITE TRACTOR FEED PAPER.
- **PAYROLL**  
COMPLETE LISTINGS OF EMPLOYEE RECORDS, CALCULATIONS OF COMPLETE PAYROLL BY EXACT CALCULATION METHOD USED ON TAX TABLES.
- **COMPLETE BUSINESS PAC**  
INCLUDES ACCOUNTS RECEIVABLE, ACCOUNTS PAYABLE, INVENTORY CONTROL, INVOICING AND PAYROLL (ALL DESCRIBED ABOVE PLUS A COMPLETE GENERAL LEDGER, BALANCE SHEET, INCOME STATEMENT AND BUDGET ANALYSIS).
- **MAILING LIST**  
PRINTS LABELS (1 OR 2 ACROSS), STORES NAMES ON DISKETTE, SORTS BY ZIP CODE, ALPHABETICAL ORDER, BY NUMBER OR BY CATEGORY. INVOICING OPTION ALSO ALLOWS FOR CUSTOMER BILLING.
- **COMPLETE HOME BUDGET**  
THIS PROGRAM WILL DO IT ALL. IT WILL KEEP TRACK OF ALL YOUR MONTHLY BILLS...LET YOU KNOW WHAT BILLS ARE STILL UNPAID...LISTS OUTSTANDING CHECKS...BALANCES YOUR CHECKBOOK AND LISTS ALL DEDUCTIONS AT THE END OF THE YEAR FOR FEDERAL INCOME TAX RETURN.
- **SMALL BUSINESS ACCOUNTING PAC**  
INCLUDES DOME BOOKKEEPING JOURNAL.  
COMPLETE CHART OF 42 EXPENSE AREAS.  
PROVISION FOR CUSTOM ACCOUNT AREAS.  
REPORTS FOR YEAR TO DATE, YEAR TO LAST WEEK AND THIS WEEK.
- **CUSTOM PROGRAMMING**  
WE HAVE A STAFF THAT CAN WRITE ANY CUSTOM BUSINESS PROGRAM. ALL BUSINESSES DIFFER. WE WILL WRITE A PROGRAM TO CONFORM TO YOUR EXACT NEEDS. CALL FOR MORE INFORMATION.

- **INCOME TAX PAC A**

FOR LEVEL II 16 K  
DOES FORM 1040

SCHEDULE A	ITEMIZED DEDUCTIONS
SCHEDULE B	INTEREST AND DIVIDENDS
SCHEDULE D	CAPITAL GAINS AND LOSSES
SCHEDULE G	INCOME AVERAGING
SCHEDULE TC	TAX COMPUTATION

- **INCOME TAX PAC B**

FOR LEVEL II 16 K WITH OR WITHOUT PRINTER.  
HAS ALL FEATURES OF INCOME TAX PAC A **PLUS**

FORM 1040 A  
WORKS WITH OR WITHOUT LINE PRINTER  
FORMATS FORM 1040 AND 1040A FOR TRACTOR FEED FORMS  
SCHEDULE C INCOME FROM A PERSONALLY OWNED BUSINESS  
FORM 2106 EMPLOYEE BUSINESS EXPENSE

- **PROFESSIONAL INCOME TAX PAC C**

FOR LEVEL II 16 K WITH DISK AND PRINTER (OPTIONAL)  
HAS ALL FEATURES OF INCOME TAX PAC B **PLUS**  
AUTOMATIC MEMORY STORAGE FOR INCOME TAX PREPARERS  
INSTANT LINE CHANGE

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**ALL ORDERS PROCESSED IMMEDIATELY**



# RADIO SHACK COMPUTER OWNERS

# TRS-80<sup>TM</sup>

GENERALIZED  
SUBROUTINE  
FACILITY

FROM  RACET COMPUTES 

**GSF INCLUDES**

**EIGHTEEN ROUTINES DESIGNED TO PROVIDE THE TRS-80 WITH MUCH  
CREATED FLEXIBILITY AND EXTENDED CAPABILITIES.**

- SORT 1000-ELEMENT ARRAYS in 9 SECONDS!!
- SORT DATA 30 TIMES FASTER than the FASTEST BASIC SORT ROUTINE
- COMPRESS and UNCOMPRESS DATA
- MOVE DATA FROM ONE LOCATION TO ANOTHER
- DUPLICATE MEMORY
- READ and WRITE DATA TAPES RAPIDLY
- ELIMINATE TAPE INPUT-OUTPUT ERRORS
- FAST HORIZONTAL and VERTICAL LINES
- DISPLAY SCREEN CONTROL  
AND MORE

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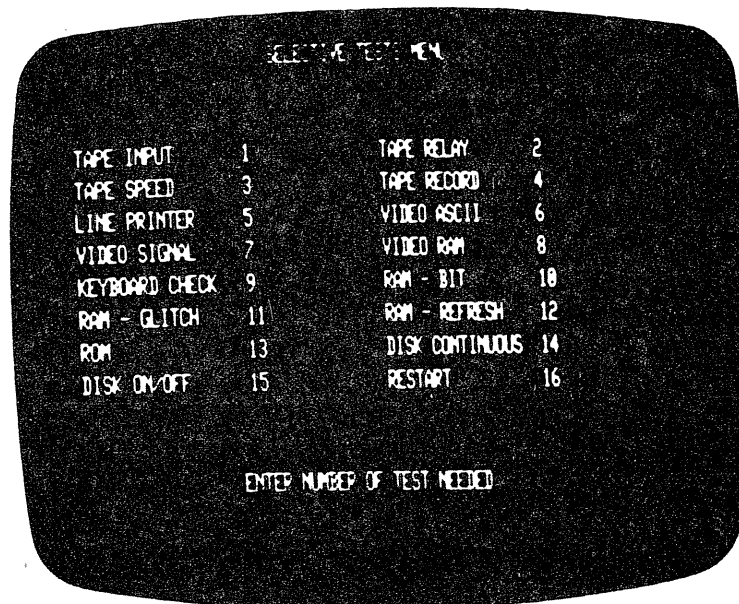
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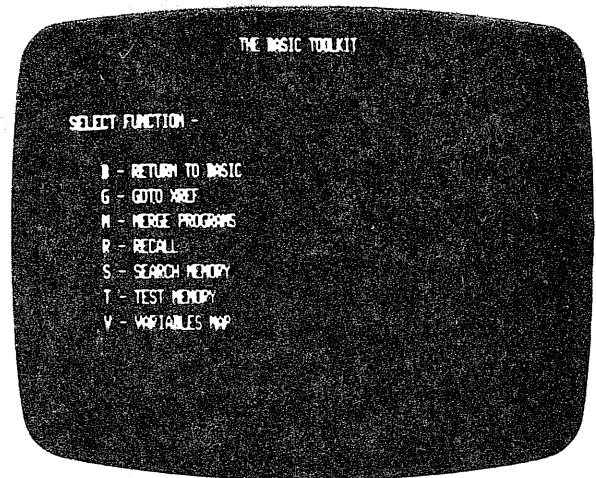
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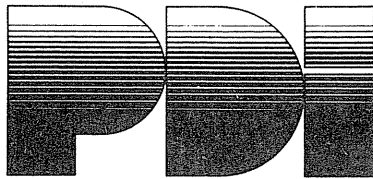
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MON-3  
RSM - 2  
RSM-2D

DCV-1  
BASIC-1  
AIR RAID

## MON-3 MACHINE LANGUAGE PROGRAMMING FOR BEGINNERS

By Dr. Hubert S. Howe, Jr.

- BEGINNERS can learn to interact directly with the computer in machine language.
- COMPLETE manual provided with program.
- SIMPLE commands, easy for beginners to use.
- ADVANCED commands for assembly programmers and disk systems.

The features of the monitor allow you to do the following things:

- SAVE or READ SYSTEM tapes.
- SAVE SYSTEM tapes on disk.
- DISPLAY contents of memory in different ways.
- DISASSEMBLE memory to see machine language commands.
- SEARCH through memory to find specific values.
- MOVE and COMPARE memory blocks.
- MODIFY and initialize memory blocks.
- RELOCATE object programs.
- PRINT output either on video display or line printer.

MON-3 is a powerful utility program that is as useful for beginners as it is for advanced programmers. Its commands provide you with nearly everything you need to interact with the TRS-80 in machine language. More advanced features include a command that produces a symbolic tape of the disassembly that can be loaded and reassembled using the TRS-80 Editor/Assembler, and a feature that allows object programs that are to be executed anywhere in memory to be saved on disk, even if they run in the same area used by the TRSDOS system.

The program is available only for Level II BASIC computers. Specify whether you have 16K, 32K, or 48K RAM. All versions are compatible with cassette or disk.

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## **RSM-2 MACHINE LANGUAGE MONITOR**

A 27-command monitor program with capabilities for entering, executing, saving and loading machine language programs. Commands to search, display, edit, zero, exchange, test, fill and verify memory. Also provides links for keyboard and CRT display access for users.

Provides access to all memory locations. You may examine your Basic ROM's, test your RAM, enter and execute machine language programs, read and write machine language tapes.

You can set BREAKPOINTS in your programs, write SYSTEM tapes, READ SYSTEM tapes and display their name and starting address, and PRINT any command with the TRS232 printer interface or the Radio Shack expansion interface! Disk commands (see RSM-2D) are included for future expansion of your system. RSM-2 loads from cassette into the top 5K of memory in Level I or Level II 16K computers so that it can reside in memory with other programs!

## **RSM-2D**

This special disk version of RSM-2 has all the commands of both RSM-1S and RSM-2, including two commands that read or write disk sectors directly! You can read any number of disk sectors into any memory area, or write any memory area to disk! A truly unique tool for use with disk systems. RSM-2D is furnished on disk with three versions that load and run in the top 5K of 16K, 32K and 48K computers. A special loader program prompts you to select the desired version, which then loads and executes. If desired, you can make CMD files of RSM-2D by use of the TAPE-DISK command for direct execution from TRSDOS.

## **DCV-1 CONVERTS MACHINE LANGUAGE PROGRAMS FROM A TAPE TO A DISK PROGRAM**

DCV-1 is a special SYSTEM tape that allows you to convert nearly any machine language program from a tape to a disk program. Nearly all of our software may now be executed from your disk system! This includes RSM monitors, The Electric Pencil, Air Raid, RSL-1, ESP-1 or any program that occupies less than 5K (Larger programs may be handled if you have more than 16K of memory). After DCV-1 is loaded, DCV-1 then loads any SYSTEM tape into memory starting at 6C00 Hex. A short block-move program is added at the beginning of the program, and the parameters necessary to create a disk file are displayed on the screen. TAPEDISK is then used to create a disk file. When accessed, the program loads at 6C00 Hex, moves itself to its correct address, then jumps there and executes! A super accessory for disk systems!

## **BASIC-1 LEVEL I BASIC FOR LEVEL II MACHINES**

Level I and II without extra hardware. This program will read a 12K maximum level I program and execute it as is. It is possible to switch back and forth between level I and level II without reloading the program. Works under level II and DOS BASIC. All level I abbreviations are supported.

## **AIR RAID A REAL-TIME SHOOTING GALLERY**

AIR RAID is an arcade-type action game that uses the high speed machine language capabilities of the TRS-80. AIR RAID offers enough challenge to keep the attention of the most dedicated of game haters, and has been known to become nearly an obsession to more than one individual. Just about the time you finally achieve that magic score of 10,000, someone points out that you're still playing the game at one of the low speeds!

AIR RAID is played on the TRS-80 video screen. A random sequence of large slow aircraft and small fast aircraft traverse the screen in both directions at seven altitudes. A missile launcher that can be pointed in 5 different directions launches missiles under your command. After launch, the flight path may be modified (if you're fast enough)! When hit, aircraft explode dramatically and the debris rains to the bottom of the screen, destroying any aircraft in its path! On occasion, two aircraft collide, destroying the aircraft and creating a parachute which settles slowly to the ground. These, of course, offer additional targets, but they are much harder to hit than the aircraft. To compensate, a higher score is tallied for parachute hits!

AIR RAID also runs in a continuous demonstration mode, providing an interesting display for shows or computer meetings. AIR RAID will provide hours of fun for you, and is an ideal program for entertaining your friends!



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## REMODEL • PROLOAD • COPSYS • TIMSER LEVEL II TRS-80 PROFESSIONAL PROGRAMMING TOOLS YOU HAVE BEEN WAITING FOR

NOW FOR THE FIRST TIME WITH **REMODEL** YOU CAN:

- **RENUMBER** any portion or all of a basic program with line number references adjusted.
- **MOVE** any portion of a basic program from one location to another.
- **DELETE** lines or ranges of lines while using the utility.

WITH BOTH **PROLOAD** AND **REMODEL** YOU HAVE THE ADDITIONAL POWER TO:

- **LOAD** all or any portion of a basic program from tape (CLOAD format).
- **LOAD MULTIPLE** basic programs - renumbering and merging into any location.
- **SAVE** combined/merged programs or any portion of a program to tape.
- **VERIFY** bit-for-bit the contents of saved programs.

AND WITH **COPSYS** YOU CAN:

- **COPY SYSTEM** (machine language object) tapes rapidly and accurately.
- **MERGE** independently assembled object tapes into one load module.
- **VERIFY** bit-for-bit system tapes duplicated by COPSYS.

**REMODEL** is a powerful utility that for the first time allows the TRS-80 user to **RENUMBER** any portion or all of a basic program **MOVE**, any portion from one location to another, or **DELETE** any range of lines. This includes readjusting line number references where required. The user will find REMODEL to be an indispensable tool in program development by assisting in the creation of well organized, readable, and easy to document programs. Specify 16, 32, 48K.

**PROLOAD** extends the power of REMODEL with features to **LOAD** all or any portion of a basic program, **COMBINE** basic programs with renumbering and merging into any location, **SAVE** combined/merged programs or any portion to tape, and to **VERIFY** bit-for-bit the contents of saved programs. Users can now create libraries of BASIC programs or DATA statements which can then be loaded individually or in combination with other programs, thus expanding programming productivity and versatility. Requires REMODEL (16, 32, 48K). Special combined PROLOAD + REMODEL tape.

**COPSYS** is designed to **COPY SYSTEM** tapes (machine language object code) generated from the Radio Shack Editor/Assembler program. COPSYS can be used to duplicate those valuable system tapes before they become damaged.

**TIMSER** is a Time Series Analysis program that fits data to nine different 1st, 2nd and 3rd order curves. Goodness of fit data, tables, including projected data and confidence limits, and graphical displays of curve fit and variance are included. The program provides for correction factors and functions to test seasonal variations, inflation corrections, or cyclical variations. A detailed Users Manual is included complete with illustrated examples.

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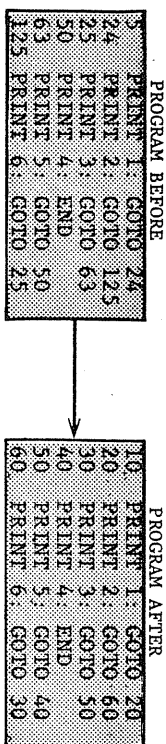


## REMODEL EXAMPLES

The examples below illustrate some of the capabilities of REMODEL. A trivial sample program is used to show the status before and after the specified action is completed. User input is underlined and modified areas are shaded.

1. REQUIREMENT: Renumber the entire program using a starting number of 10 and incrementing by 10.

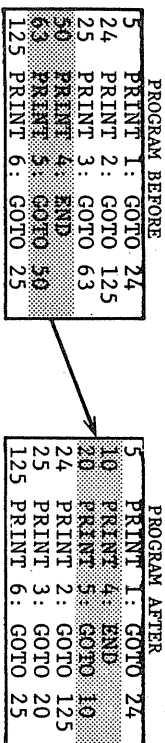
User: START?      END?      NEW?10      BY?      MODE?      BY?10      MODE?NUM  
Used: START?5      END?125      NEW?10      BY?10      MODE?NUM



COMMENTS: Note that default values were supplied automatically for the fields left blank.

2. REQUIREMENT: Move lines #50-63 between lines #5 and #24, renumbering the increments of 10 starting at 10.

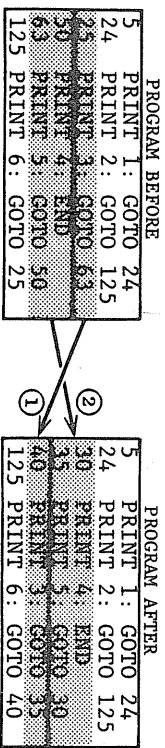
User: START?50      END?100      NEW?10      BY?      MODE?      BY?10      MODE?MOV  
Used: START?50      END?63      NEW?10      BY?10      MODE?MOV



COMMENTS: Blocks may be moved to any new location as long as there is sufficient room between sequence numbers, as above.

3. REQUIREMENT: Move lines #50-63 between lines #24 and #25.

User: START?25      END?25      NEW?40      BY?      MODE?      BY?10      MODE?NUM  
Used: START?25      END?25      NEW?40      BY?10      MODE?NUM  
User: START?50      END?63      NEW?30      BY?5      MODE?      BY?5      MODE?MOV  
Used: START?50      END?63      NEW?30      BY?5      MODE?MOV



COMMENTS: Two steps were required in the above example. The first renumbered line #25 to #40, and the second moved lines #50-63 between #24 and #40 producing the desired result.

REMODEL CAN BE USED IN DOS OR NON-DOS ENVIRONMENT

## PROLOAD EXAMPLES

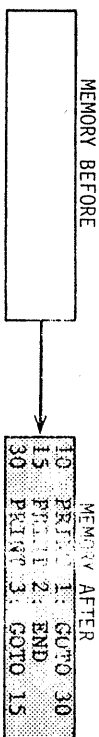
PROLOAD expands the capabilities of REMODEL as illustrated in the examples shown below. For these examples it is assumed that the following two program are on tape and positioned correctly when needed:



User input is underlined and areas loaded or saved to tape are shaded.

1. REQUIREMENT: Load program "A" into memory.

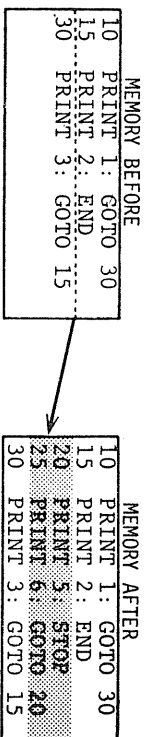
User: START?      END?      NEW?      BY?      MODE?"A"  
Used: START?0      END?65535      NEW?      BY?      MODE?"A"



COMMENTS: Default values were supplied for the START and END fields. The NEW and BY fields were not used, as a result the statements were not renumbered.

2. REQUIREMENT: Load statements #30 and #35 of program "B" between lines #15 and #30 of program "A", renumbering to #20 and #25.

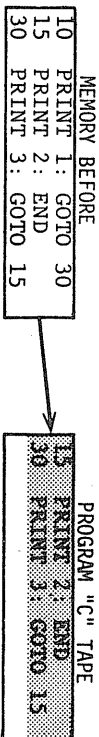
User: START?30      END?35      NEW?20      BY?5      MODE?"B"  
Used: START?30      END?35      NEW?20      BY?5      MODE?"B"



COMMENTS: This operation was successful because there was room between statements #15 and #30 for the two lines desired.

3. REQUIREMENT: Save the contents of memory which contains program "A" from lines #15 to #30 to tape, renaming to program "C".

User: START?15      END?30      NEW?      BY?      MODE?"C"  
Used: START?15      END?30      NEW?      BY?      MODE?"C"



COMMENTS: Note that the NEW and BY fields were not used. Any range of lines can be saved to tape. Tapes written can be verified by using the =C= mode as for the example above.

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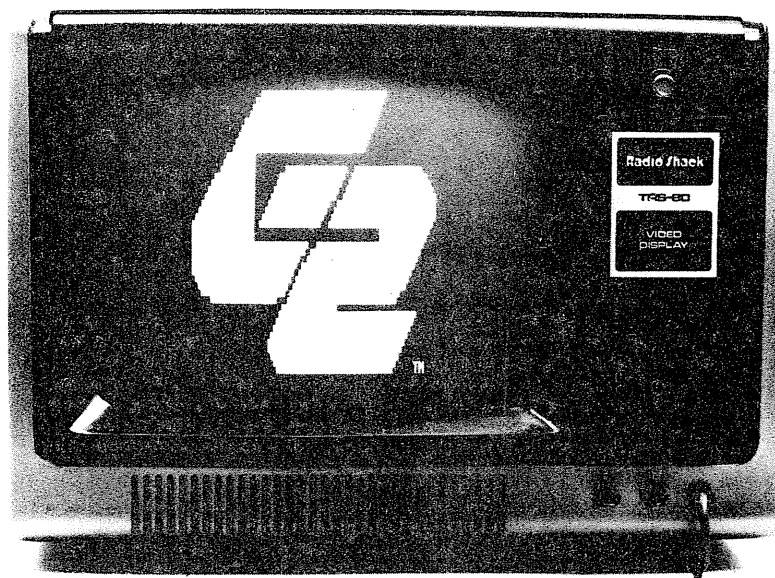


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