## Radio Shack®

Expanding the Horizons of Personal Productivity TRS-80 Microcomputers for 1982





## THE "MICRO" REVOLUTION: RADIO SHACK MADE IT HAPPEN

#### Just what is a computer?

It's a tool for managing data. Working with numbers and alphanumeric data like names, words, addresses and stock numbers, a computer can be programmed to repeat the same function over and over. It evaluates information given to it, acts on its own findings, stores huge volumes of data for future use, reference and updating, and even "converses" with its operator.

#### What can a TRS-80 computer do?

TRS-80 computers can be used to do billing, bookkeeping, payroll, inventory control, mailing lists and data analysis. They can sort a mailing list by name, address or other criteria, spot slowing inventory items, or simply catalog your stamp collection. They can become tutors, lab assistants, word processors or entertain with

exciting games . . . virtually anything they are programmed to do.

#### TRS-80 is a breakthrough

Radio Shack designed and built the TRS-80s to offer these capabilities at an affordable price. And this year we feature four great computer systems offering more power-per-dollar than anything else available.

#### It's easy to use a TRS-80

TRS-80s are programmed from the keyboard, or depending on the model, from a prerecorded cassette tape, a disk, or a plug-in Program Pak. There are over 140 ready-to-use programs in our library. And if you'd like to write your own programs, TRS-80 BASIC is an easy-to-learn, plain English programming language included with all our computers.

#### **Computers for Business**

Demanding applications call for high speed and the capability of storing larger amounts of data. That's why we designed the TRS-80 Model II—it's "strictly business." Twice as fast as our original Model I system, this year it features optional disk storage of more than 30 million characters. With added software packages, Model II can even communicate with large mainframe computers. Available on our Leasing Plan, too.

#### TRS-80 expandability benefits you

You can enjoy the TRS-80 computer system you need right now, without having to pay for more computer than you need. Later, as your needs grow or change, you can add more capacity through accessories and expansion options.

#### TRS-80 also stands for top value

In 1977, TRS-80s started at \$599. Now you can buy a TRS-80 Model III - with more capabilities and features - for just \$699. The reason is simple: economies of scale and our own manufacturing facilities make every TRS-80 model a tremendous value

#### What about support?

TRS-80 is the best supported microcomputer in the world! You can order TRS-80 equipment from over 8100 locations worldwide. In addition, we have 180 Radio Shack Computer Centers staffed with experts who will help you with sales. service, advice and even classroom training. Owners can also receive our Microcomputer Newsletter which is loaded with the latest information. Plus, you'll find more non-Radio Shack programs and accessories for TRS-80 than any other micro available.

#### Our "Extended Service Plan" agreements

Over 160 company-operated service centers maintain only our own TRS-80s. What's more our "Extended Service Plan" agreements offer priority response to service needs, protect against surprise repair bills, and protect you against inflation.

Our In-Shop plan is the most affordable. Simply drop your equipment off at your local Radio Shack. All parts and labor costs are covered. In many areas our On-Site plan provides service at your location. During regular working hours, all parts, labor, mileage and expenses are covered. We also include installation and scheduled preventive maintenance. One of our Extended Service Agreements is available at a discount when purchased with your equipment. For details, contact your local Radio Shack or

call TOLL FREE (800) 433-5502. Texas residents call (817) 390-3801.

#### TRS-80 goes to school

More TRS-80 systems are used for educational assistance than any other computer. Radio Shack supports educators with teacher guides. course materials, and a full line of educational software. Our National Bid Department at 400 Atrium, One Tandy Center, Fort Worth, Texas. 76102, will be happy to quote on bid invitations and RFQ's from schools.

#### Choose Number One!

And go with the most popular computer in the world! We offer the broadest line of personal and small-business computers anywhere, for every use, need and budget. You can't go wrong with a TRS-80!

#### TRS-80—THE WORLD'S MOST EXCITING LINE OF COMPUTERS AND COMPUTER ACCESSORIES

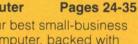
#### TRS-80 Color Computer

#### Pages 36-42



The "ideal" family computer with professional features. Offers color and sound. Attaches to any TV set. Low cost . . . high computing power.

#### TRS-80 Model II Computer



A completely self-

contained desktop com-

puter designed for both

Easily expandable, too.

home and office use.

Our best small-business computer, backed with low-cost business software - from accounting to word processing

#### **TRS-80 Printers**





Radio Shack offers a variety of printers to fit every budget and every need from fast line printers to graphics plotters.

#### **TRS-80 Accessories**

#### Pages 12-44

#### TRS-80 Model III Computer

#### Pages 4-11



Pages 46-47 **TRS-80 VIDEOTEX** 

> TRS-80 VIDEOTEX turns your TV or computer into a 2-way information retrieval system. Get the latest news, stock reports and much more!



A complete line of accessories for all TRS-80 models is as close as your nearby Radio Shack Computer Center, Store or participating Dealer.

Radio Shack's Education

Division is dedicated to

professional support to

providing complete,

#### **TRS-80 Pocket Computer**

#### Pages 43-45



A true computer the size of a calculator - but far more powerful. It's the TRS-80 computer for people on the go!

#### **Quantity Discounts**

Software, Books and Accessories	6-11	12-49	50-499	500-Up
	of 1 item	of 1 item	of 1 item	of 1 item
and Accessories	10%	15%	17%	20%

For discounts on diskettes and cassettes, see page 15. For quantity discounts on TRS-80 computers, write Director of Special Marketing, 400 Atrium, One Tandy Center, Fort Worth, Texas, 76102

learning institutions everywhere.

TRS-80 Educational Products Pages 16-18

© 1981 Tandy Corporation, Fort Worth, Texas 76102. Retail prices shown in this catalog may vary at individual stores and dealers. The Company cannot be liable for pictorial or typographical errors. Some computer equipment may require special order. VisiCalcrITM Personal Software, Inc. Time Manager, Project Manager, Personal Humager Project Manager, Project Mana

# THE AFFORDABLE "ALL IN ONE" PERSONAL COMPUTER

- · Completely Self-Contained
- · Built-In Printer Interface
- Compatible With Most Model I Programs
- High Resolution 12" Monitor
- 65-Key Keyboard With 12-Key Datapad
- Easy Internal Expansion Capability to Grow With Your Needs

699<sup>00</sup>

4K Level I
BASIC

99900 16K Model III BASIC N EN INTERVALS. PIRINT HISTOGRAM OR (EIND PROGRAM

Model III is the compact, easy-to-use desktop computer designed for work or play!

Expansion covers simulate disk drives in non-disk units

Radio Shack's TRS-80 Model III is the new standard in low-cost personal computer "starter systems." Many features that you'd expect to pay "extra" for are standard on the Model III. It's a beautiful, functional system that's designed to fill a wide range of needs. And with our beginner's manual it's the perfect way to learn how to write your own programs.

Huge Software Library. Over 100 Radio Shack programs and thousands of non-Radio Shack programs are available for the Model III, making for a wide selection of applications. There are many personal programs available, including entertainment, budget-keeping and stock portfolio analysis. Professionals can put Model III computing power on their desks for forecasting, engineering and word processing. And educators have discovered Model III to be a compact, inexpensive teaching aid, with a full line of

courseware available. All you need to store and load programs and data on inexpensive audio cassette tapes is an optional recorder and connecting cable.

**Easily Expandable.** Model III is hard to outgrow. You can start with our most affordable Model III, featuring the popular Level I "learner's" language and 4,000 characters (4K) of internal memory. Later you can expand to the very powerful MODEL III BASIC with 16K memory. There's room inside for up to 48K memory, an RS-232 interface board, plus one or two disk drives. Your local Radio Shack store, dealer or Computer Center can arrange for fast, easy installation of upgrade kits. Other options, like a digitizer, a printer, plotter, or a third and fourth disk drives (external) are ready to plug in anytime.

Model III, 4K RAM, LEVEL I BASIC.	
26-1061	699.00
Model III, 16K RAM, Model III BASIC.	
26-1062	999.00

#### Specifications

Microprocessor: Advanced Z-80 8-bit processor Clock speed 2.03 MHz.

Keyboard: Full-size "typewriter" style. 65-key integral keyboard includes 12-key numeric pad for data entry.

Video Display: Memory mapped with high-resolution 12" monitor. Includes 96 text characters. 64 graphics characters and 160 "special" characters. Screen format for Level I and Model III BASIC is 64 characters by 16 lines. Model III BASIC also provides 32 characters by 16 lines of upper and lower case characters plus repeating keys.

Memory: Includes 4K ROM (Level I) or 14K ROM (Model III BASIC) RAM expandable internally to 48K.

Input/Output: Computer-controlled cassette interface standard, 250 Baud for Level I, 500/1500 Baud selectable under Model III BASIC. Includes parallel printer interface and buffered Model III Bus. Provisions for adding 2 internal, plus 2 external doubledensity 51/4-inch disk drives and internal RS-232-C.

Power: Integral power supply; 105-130VAC, 60 Hz, U.L. listed. Dimensions: 12½x18½x18½".



#### Level I BASIC For Model III

Radio Shack's TRS-80 Level I language is the easiest way for beginners to learn computer programming. It's a simplified version of the BASIC (Beginner's All-purpose Symbolic Instruction Code) programming language, and allows you to "talk" to the computer using simple English commands and statements. Even if you have no prior knowledge of computer operation or programming, the easy-to-understand 236-page manual (included) will have you programming the TRS-80 in no time. Level I includes most standard BASIC commands and features, a screen display of 16 lines of 64 upper-case characters, 48x128 video graphics. 250-baud cassette input/output rate, floating point arithmetic, 6-digit numeric accuracy, single dimension array, limited string variables, command abbreviations, and simplified error codes. Level I for Model III now includes printer commands LPRINT and LLIST. Level I is stored in 4K of Read-Only Memory so it's ready to use the instant you turn on your TRS-80 computer.

#### Model III BASIC

Get more features, accuracy and computing power with our Model III BASIC in 14K ROM. Execution time is 30% faster than Level I's and it adds features like repeating keys, a screen format of 16 lines of either 32 or 64 upper and lower case characters - with automatic scrolling, and a screen print command. There's dual-speed (500 and 1500-baud) cassette operation. You get multidimension arrays, definable cursor, comprehensive-string variable handling, automatic line numbering, extensive editing commands, TRACE, PEEK and POKE, call-up of machine language routines, initialization of the optional RS-232 port, scroll protect, 23 specific error codes and even a special graphics character set. There's 16-digit numeric accuracy (intrinsic functions remain at 6-digit accuracy). Compressed storage format for video display text. Program lines, logical lines, and string variables may be up to 255 characters long. Includes comprehensive reference manual and 340-page beginner's manual.



## "Starter" System **1196**95

Here's an ideal computer system for the beginner. It's perfect for hundreds of uses from education to learning computer programming to entertainment. We've teamed the 4K Level I Model III (26-1061) with the Line Printer VII (26-1167) and Printer Cable (26-1401) to provide a listing of your programs, in addition to graphics output. Plus, the CTR-80A Cassette Recorder (26-1206) lets you store and retrieve your own written programs, or you can use our prepared software. And this system will easily expand as your skill and needs grow.



## "Engineer" System 2557<sup>95</sup>

For technical applications, the 16K Model III (26-1062) with powerful Model III BASÍC is for you. This system is easily programmed, and offers advanced math features you'll need to cut technical computations down to size. The TRS-80 Graphics Plotter/ Printer (26-1190), and Printer Cable (26-1401) will list your program or provide excellent high resolution diagrams. charts and graphs. Save your programs and data on cassette tapes, then re-enter them using the CTR-80A Cassette Recorder (26-1206). Expand to disk storage at any time.

## NOW WITH 48K MEMORY AT LAST YEAR'S LOW PRICE ... STILL ONLY \$2495

Here is a complete business system (except for your choice of printers) — now with a full 48,000 character memory. It's the personal computer designed to increase the productivity of every manager. Everything — including two doubledensity disk drives with 306,000 characters of available disk storage, typewriter-style keyboard and 12" upper and lower case video display — is built into the contemporary-style one-piece cabinet. Also included are a 12-key datapad, repeating keys and printer port. Use the Model III to solve many business problems. Our VisiCalc® planning program allows fast and accurate "what if ...?" projections. With Profile III Plus, Model III retrieves information and can print reports the way you want

them. Our SCRIPSIT® program and an optional printer turns Model III into a time and labor-saving word processing system. Or use Time Manager® to schedule appointments, prioritize work activities, and remind you of items needing follow-up. The RS-232C Serial Communications Interface is built in—just add a modem and cable to allow your Model III to communicate with other computers over the phone lines. Add one or two more external disk drives (shown at right) any time. Comes with the Disk BASIC and TRSDOS Operating System disk, owner's manual and comprehensive programming manual. U.L. listed.



#### Expand Your Model III With up to Four Disk Drives



Any Model III can easily be expanded with up to 4 drives for up to 656,000 bytes of on-line storage. Each of the diskette's 40 tracks consists of eighteen 256-byte double-density sectors. The first Disk Drive includes a diskette containing our powerful TRSDOS and Disk BASIC. It allows about 131K of user storage space. Certain system information and a directory are required on each diskette, leaving 175,000 bytes available on each of the second, third and fourth drives. The system diskette containing TRSDOS and Disk BASIC must always be in your first drive unit.

<b>Disk Drive Kit 1.</b> Includes TRSDOS and Disk BASIC. (Requires installation.) 26-1162
<b>Disk Drive Kit 2.</b> (Requires installation.) 26-1163

26-1164 499.00 **Disk Drive 4.** (External) U.L. listed. 22-1161 499.00

Disk Drive 3. (External) 61/4 x 31/2 x 141/2." U.L. listed.

#### The "Extras" Are Built in!

The Model III Desktop Business Computer gives you all the features of our \$999 16K Model III, plus a lot more:

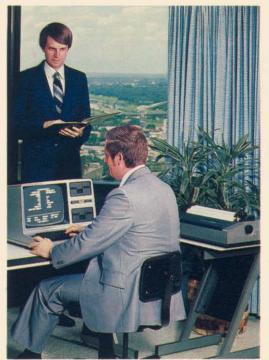
- 48K of Random Access Memory
- Two Built-In Double-Density Disk Drives for 306K Storage Capacity
- Built-In RS-232C Serial Communications Interface
- Our Powerful TRSDOS Operating System
- Disk BASIC An Expanded Model III BASIC Programming Language
- · Disk System Owner's Manual

### TRS-80 MODEL III COMPUTER SYSTEMS FOR EVERY NEED



## Word Processing System 3432<sup>95</sup>

Our SCRIPSIT® software (26-1563) and Model III Desktop Business Computer (26-1066) team up to give you low-cost, fullfeature word processing. Letters and documents can be composed on the video screen making editing easy. Next, save the completed text on disk. Then print all the correction-free "originals" you need with the highquality dot-matrix Line Printer VIII (26-1168) at 23 lines per minute. The Printer Cable (26-1401) is included. Typing will never be the same!



## The Manager's System 3972<sup>00</sup>

The Desktop Business Computer (26-1066), with our Line Printer VI (26-1166) and Printer Cable (26-1401), make a manager's dream! Add VisiCalc® to speed your financial planning and modeling, Profile III Plus to create your personal electronic filing system, and even do drafts of correspondence and reports with our SCRIPSIT™ program. Includes System Desk (26-1305) and Universal Printer Stand (26-1308), forming an ideal system for any manager's business office. The greatest time saver & productivity multiplier available!

#### Model III Disk System Operating Software

#### TRSDOS<sup>®</sup> Operating System

Model III Desktop Business Computers include TRSDOS to provide the input/output functions needed to operate the disks. TRSDOS lets you take advantage of the vast file storage space and faster access times you get with disks. Model III TRSDOS includes many important additions to our popular Model I TRSDOS and contains features from our Model II TRSDOS. These include:

- HELP "On-line" assistance for command syntax
- ERROR Provides meaning of error codes
- DO Files Allows automatic execution of previously-stored commands
- DUAL Automatic printing of screen display
- TAPE Transfers machine language tapes to disk

- FREE Visual display of disk space allocation
- TIME/DATE Keeps track and displays
- DEBUG Aid for debugging in-memory machine language programs
- Utilities Provides Copy, Backup, Patch and other "housekeeping" utilities

#### Disk BASIC

Disk BASIC provides a number of extensions to our ROM-based Model III BASIC, including many features for disk file access. Disk System Owner's Manual includes sample programs and full explanations. Features of Disk BASIC include:

- CMD functions Examine Disk directory from Disk BASIC, protect programs from BREAK key, perform printer status test, return error display, sort strings, cross reference string variables and reserved words, delete spaces and remarks and more
- FILE Access Provides sequential or random access of files

- Machine Language Options USR calls from BASIC to machine language routines
- DEF FN Create your own functions for often-used routines
- INSTR String search function for searching portions of a string
- LINE INPUT Accept any keyboard character including commas and quote marks

## **INEXPENSIVE PROGRAMS FOR PERSONAL AND FAMILY USE**

Exciting Computer Games — Educational and Entertaining

"Quick. Watson." You play the role of super-sleuth Sherlock Holmes: find the culprit from the computer's clues. (4K Level I, 16K Level II. Model III BASIC rea'd.) 26-1802 ..... 4.95



Haunted House. Solve the mysteries and get out alive. (4K Level I, 16K Level II or Model III BASIC 

Backgammon/Blackjack. (16K Level II or Model 

Microchess. Three levels of difficulty. For beginners or advanced players. (4K Level I - Model I only, 16K Level II or Model III BASIC reg'd.) 

Dancing Demon. The "Demon" tap dances to "Ain't She Sweet" with computer accompaniment — or create your own music and dance routine! (Audio amplifier, 16K Level II or Model III BASIC 



Micro Marquee. Create 1-inch high letters that move up your TRS-80 screen. 13 characters per line. Great attention-getter for home or business use. (4K Level I. 16K Level II or Model III BASIC 

Micro Movie. Draw and playback animated "movies" on TRS-80 video screen. (4K Level I. 16K Level II or Model III BASIC reg'd.) 

Micro Music. Compose music in a five octave range with sharps, flats, whole, half, quarter, eighth notes. (Audio amplifier, 4K Level I, 16K Level II or Model III BASIC reg'd.) 26-1902 . . 9.95

Space Warp, Fastaction space adventure! Find and destroy aliens. (4K Level I. 16K Level II or Model III BASIC rea'd.) 26-1912 ..... 14.95



Flving Saucers. Shoot 'em down in "real time" with your laser cannon. (4K Level I, 16K Level II or Model III BASIC reg'd.) 26-1905 .......9.95

Invasion Force. Destroy the aliens before they destroy you! (16K Level II or Model III BASIC 

Checkers 80. Competition "forced jump" game with two levels of skill. (16K Level II or Model III 

"Eliza" Artificial Intelligence. Discuss your problems. (4K Level I. 16K Level II or Model III 

Paddle Pinball, Combines pinball field with fast paddle action. (Audio amplifier, 16K Level II or Model III BASIC rea'd.) 26-1914 . . . . . . . . . 9.95





Backgammon/Blackjack. Two old favorites at one low price. (4K Level I reg'd.) 

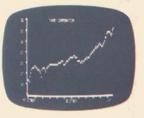
Astrology. Personal horoscopes. Produces chart with optional printer. (16K Level II or Model III 

Raaku-Tu. Challenging jungle adventure. (16K Level II or Model III BASIC rea'd.) 

Casino Games I. Craps, Keno, Slot Machine. Roulette, Wheel of Fortune, Baccarat. (16K Level II or Model III BASIC reg'd.) 26-1806 ..... 19.95 Personal Financial Programs

Cassette Portfolio.

Keep close tabs on your investments. Includes transactions, summary, options, and index. Keeps records on 20 stocks, 10 bonds, 5



funds, and 10 options. (16K Level II or Model III 



Trendex Stock Trend Analysis. Provides trend change indications for short, medium and long term periods based on formulas used by professionals. Maintains portfolio for stocks of vour choice. Provides trend recognition aid, not investment counsel. (16K Level II or Model III BASIC, 32K 2-Disk reg'd.) 26-1509 ..... 49.95

**Budget Manage**ment. Up to 60 accounts with 25 expenses, 20 savings transactions, 50 checks per month. (16K Level II or Model III BASIC: or 32K, 2 Disk reg'd.) 26-1603 ..... 19.95



Personal Finance. A complete personal accounting system that tracks and totals all of your income and expenses by expense accounts. Balance your checkbook, maintain a monthly budget. (4K Level I reg'd.) 

### READY-TO-RUN BUSINESS APPLICATIONS AND UTILITIES

#### **Business Programs**

Cassette Mailing List. 80 names per data file with 16K. 250 names with 32K. (16K Level II or Model III BASIC reg'd.) 26-1503 . . . . . . . . . 19.95

**Real Estate III.** Detailed property income calculations, appreciation/depreciation estimates. (16K Level II or Model III BASIC req'd.). 29.95

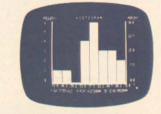
 Prepare "Correction-Free" Letters and Other Documents

SCRIPSIT® Word Processing. The cassette version of our popular word processing system! Compose and edit your text on the video display. Then use



#### Analyze Data and Forecast Trends

Advanced Statistical Analysis. This useroriented data analysis system is ideally suited for applications in business,



#### Especially for Programmers . . .

 **Debug.** For entering, testing and debugging machine language programs. Allows modifications to RAM and registers. Level II and Model III BASIC include single step execution of programs, breakpoint interruption of execution. (4K Level I, 16K Level II or Model III BASIC reg'd.) 26-2000 ...... 19.95

#### Find What You're After in the TRS-80 Applications Sourcebook

Over 2300 Program Listings

For Only 295

Includes Business, Education, Specific Industry/Profession, Statistics/Math, Home and Games Programs



A listing of TRS-80 applications by a variety of vendors, with descriptions, prices. We haven't seen or tested the programs so we cannot be responsible for any problems. This is "the" place to look for the software you need! 26-2114 2.95

## DATA BASE MANAGEMENT

Profile. Access names, addresses, accounts, personnel records, and more — in just seconds! Powerful editing features make changes easy. Files can interact with simple BASIC programs. Printer optional. (32K 1-Disk). 26-1562 .... 79.95



Profile III Plus. Includes most of the capabilities of our TRS-80 Model II Profile and Profile Plus. It can store up to 8000 records, then provide access to your data with up to 36 user-defined search criteria. An indexing file allows high speed access. The math package analyzes records and stores computed results. Provides the ability to specify records of up to 1000 characters in length. Create as many as 99 categories per record, with up to 5 screen formats per record. Stores up to 2400 records on a data disk. Provides "tailored" menus, and prints up to five different user-defined reports per file (requires printer). (48K 1-Disk — Model III only). 26-1592 Avail. 12/30/81

## MANAGEMENT PLANNING

VisiCalc.® This program alone will justify your owning a TRS-80! It's a versatile management and engineering planning and forecasting tool that replaces pencil, calculator, and columnar pad. It lets you create an "electronic worksheet."



Each time vou change a variable, VisiCalc updates every related number in seconds! For example, suppose you're considering leasing or purchasing new equipment. Simply enter the new costs and savings into a VisiCalc spread sheet containing current and projected profit and loss figures. VisiCalc will instantly recalculate every related figure to show the possible effects, and help you decide whether to lease or buy. Instant "what if . . ." projections are a real aid for the decision maker. VisiCalc provides numeric accuracy of up to 11 digits, scientific notation, and functions like SIN, COS, TAN, LOG and more - so it's ideal for solving complex engineering problems. Produce bar graphs, access VisiCalc data files from BASIC, and print any portion of your worksheet with an optionalextra printer. (32K 1-Disk - Model I only). 

**Model III VisiCalc.** All the features of Model I VisiCalc (above), plus enhancements that give you fast sheet growth, expanded printer control, and an entry editor to speed worksheet preparation. It allows you to modify formulas and labels without having to reenter or edit current entries. (48K 1-Disk). 199.00

#### **Word Processing**

scripsit. Lets you enter, correct, and edit letters, memos, reports or other documents, then print your text "correction-free"! Frequently used letters, reports and forms can be stored on diskette for use again and again—and updated at any time! You can edit, insert, move or delete text; and even search for a specified word or phrase and replace every occurrence with a different one. Advanced features include reformatting, hyphenation, automatic page numbering, and more! SCRIPSIT is easy to learn, and comes with training manual, audio cassette course, and reference card. Requires printer. (32K 1-Disk).

Super SCRIPSIT.<sup>®</sup> A new and expanded version of SCRIPSIT! Features true proportional-spaced printing, multiple line spacing within a document, underlining, double underline, boldface, super and subscript, pause during printing to permit additions from keyboard, and more. User-defined keys can recall up to 127 predefined keystrokes. Comes with training manual, audio cassette course, and reference card. Use with our Profile III Plus program to generate form-type letters. (48K, 1-Disk). 26-1590 Available 12/30/81 . . . . . . . . . . 199.00

#### **Complete Word Processing System**



This Model III system is ideal for word processing, plus many other applications described here. Includes 48K 2-Disk Model III (26-1066), dot-matrix Line Printer VIII (26-1168) and Printer Cable 3333<sup>00</sup> (26-1401).

#### **Boost Your Productivity With These New Management Aids**



Time Manager. A personal calendar/reminder, and electronic notebook with time management principles built-in! This

#### MODEL I AND III DISK SOFTWARE



#### Accounting

#### Software for Specific Needs

Replace Your Pegboard System With Our Computerized Bookkeeper!

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DEDLE	MM62 D	TE 86/18/1	1 MON	28
		MPE (Pal	RINT' MINNE	
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Check Writer-80.<sup>™</sup> Gives you a check writer and register, plus an expense tracking and bank reconciliation system that's ideal for small business bookkeeping. It's as easy to use as filling out a check or deposit slip, yet you get all the speed and accuracy of the computer. Handles multiple banks and up to 9 bank accounts, 75 payees, 31 expense categories, and about 2700 active checks. Even enter handwritten checks. Prints check registers, expense summaries, description lists of banks, and payees. Requires printer. (48K 2-Disk—Model III only). 26-1584 Available 10/30/81

#### **Languages and Utilities**

**COBOL.** Radio Shack's COBOL (COmmon Business Oriented Language) is based on the ANSI '74 COBOL standard, and provides a single-step compiler for fast execution, multi-key ISAM for quick data access, COBOL editor for creating and changing source programs, and a DEBUG for program development and testing. Includes System User's Guide, COBOL Editor Guide, and an extensive COBOL Reference Manual. (48K 2-Disk). 26-2203 ... 199.00

**Run-Time Diskettes.** For those who intend to sell software developed on our Compilers.

Run-Time Diskette	For TRS-80	Cat. No.	Each
COBOL COBOL	Model III	26-2206 26-2207	30.00 30.00
Compiler BASIC Compiler BASIC	Model II Model III	26-2208 26-2209	20.00

#### **BASIC Programming Courses**

Model III Disk Course. Four self-paced lessons on diskette that cover Disk BASIC and TRSDOS, including sequential and random access files with examples of their use. (32K 2-Disk). 26-2014 .........29.95

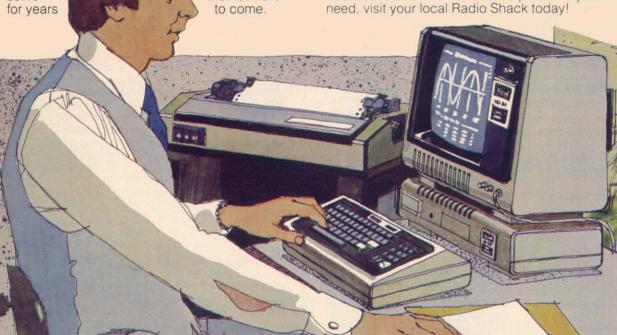
#### OUR TRS-80 MODEL I STARTED THE REVOLUTION IN SMALL COMPUTERS

## WE STILL SUPPORT THE REVOLUTION

Ever since our famous TRS-80 Model I was introduced back in 1977, it's been recognized as the most affordable, best supported microcomputer ever built. Model I systems are hard at work all over the world keeping rec-

ords, producting world keeping records, producting paychecks and ing engineering problems, entertain-These tems will serve for years in the world keeping records and ing paychecks and ing engineering teaching, ing and more. Model I syscontinue to their owners to come.

There are more non-Radio Shack programs and accessories available for the Model I than for any other computer. Although production of the Model I has ceased, we still provide full support for the systems in use. In fact, several new Model I/III compatible hardware products and software packages are introduced in this catalog, and more are on the way! With four affordable systems, a low-cost terminal, and a host of options, TRS-80 continues to be the world's most complete line of small computers and accessories. To find the TRS-80 products you



#### Model I Expansion Options — Get More Out of Your TRS-80

It's easy to add expansion options to your TRS-80 Model I. Just bring in your keyboard and we'll take care of the rest. (Prices below are for parts only—required installation is extra.)

**Lower Case Kit.** Add lower case to your Model I. "Driver" tape included. NOTE: Some non-Radio Shack software will not run with this kit installed.

#### **RS-232C Interface Board**

Let your Model I communicate with the "outside world"! Mounts inside Expansion Interface and lets you connect modems, card readers, serial line printers and more. Includes

RS-232C Communications Software. (16K, Level II; Model III BASIC; or 32K 1-Disk.) 26-1149 ......39.95

#### New Low Price On Some Items!



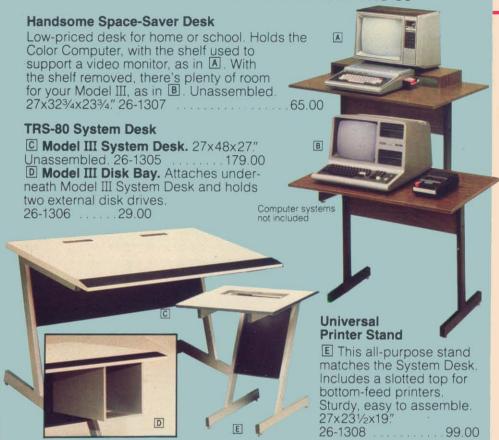
Acts as a base for the video monitor and becomes the expansion "hub" for your Model I system. Allows you to add up to 32K of additional RAM and 4 Mini-Disk drives, a printer, dual cassette recorders, and RS-232C board for communications. 4½x16½x8." Level II and 16K RAM required. U.L. listed AC operation.

#### Model I Mini Disk Drives

Connect up to four drives through the Expansion Interface for 307K bytes of storage! First drive includes TRSDOS and Disk BASIC on diskette and a man-



#### **Furniture & Dust Covers for Your TRS-80**



#### **Dust Covers to Protect Your System Components**



#### **GENUINE TRS-80 ACCESSORIES**



Let your TRS-80 "talk" with other computers over the phone lines! Transfer data and programs with other TRS-80 users and access time-share and information networks anywhere in America.

▲ Telephone Interface II. To use, just dial the desired phone number and place telephone handset on the interface. FCC approved. 26-1171

**Specifications.** Baud Rate. Up to 300. Mode: Originate and answer, full or half duplex. Receive Sensitivity: –45 dBm. Power Requirement: U.L. listed 120-volt AC power module. Size: 29/8x49/x101/4"

**Specifications.** Baud Rate: 300. Modes: Compatible Bell 103 Ans./Orig. modes. Full Duplex. Sensitivity: -43 dBm (orig.); -48 dBm (ans.). Connectors: DB25 and 4-pin DIN. Power Requirement: U.L. listed 120-volt AC power module. Size: 2x6½x7½:" (Not for multi-line use.)

**Cassette Software.** For use with Model I systems without Expansion Interface or RS-232. 26-1139 9.96 **Cable.** Required by above software. 26-3009 4.9

© Direct-Connect Modem II. A fully-programmable direct-connect modem with Auto-Dial and Auto-Answer capability. Automatically dials or answers the phone, receives and transmits data and even hangs up the phone. Remote and local test modes. LED indicators for On, Off-Hook, Terminal Ready, Carrier Detect, Transmit Data and Receive Data. FCC approved. 26-1173.

Specifications. Baud Rate: 300. Mode: Originate and answer, full or half duplex. Receive Sensitivity. –45 dBm. Dial System: Rotary or tone. Power Requirement: U.L. listed 120-volt AC power module. Size: 2x6½x7½" (Not for multi-line use.)

#### Plug 'n Power<sup>™</sup> Controller— 24 Hour Light and Appliance Control **39**95

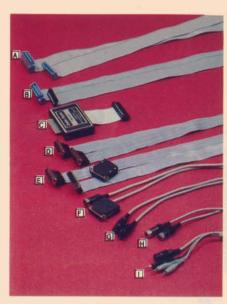
## Set Up a Computerized Remote Control System



Appliance Module, U.L. listed.	
61-2681	16.99
Lamp Module, U.L. listed.	
61-2682	16.99
Wall Switch Module. U.L. listed.	
61-2683	17.99
Universal Appliance Module, U.L.	isted.
61-2684	
Wall Outlet Module, U.L. listed.	
61-2685	21.95
PROPERTY INVESTMENT OF THE PROPERTY OF THE PRO	ACTIVITY OF THE PARTY OF THE PA

## COMPLETE SELECTION OF COMPUTER CABLES

Cat. No.	Description	Function	Price
26-1401	A 34-pin edge card to 36-pin plug	Model I/III to std. parallel printer	39.00
26-4401	B 34-pin header to 36-pin plug	Model II to std. parallel printer	39.00
26-1411	C Active parallel interface, edge card connectors	Model I bus to std. parallel printer	59.00
26-1408	Male DB25 to DB25 5' flat cable	Model III RS-232C serial interface	19.95
26-4403	E Male DB25 to DB25 5' flat cable and terminator	Model II RS-232C serial interface	39.95
26-3014	F 4-pin DIN to DB25	Color Computer to RS-232C interface	19.95
26-3020	G 4-pin DIN to 4-pin DIN	Color Computer serial interface	4.95
26-3009	H 5-pin DIN to 4-pin DIN	Model I cassette special serial interface	4.95
26-1207	5-pin DIN to Audio (3 plugs)	Model I, III, Color Computer CPU to audio cassette	5.95







## Store and Protect Tapes and Diskettes



#### Your Work Goes Easier With Radio Shack's Support!



Logic Flowchart Template. ANSI flowchart symbols for fast, concise program development. Helps reduce logic errors and spot design improvements. 1/10" layout grid. Clear plastic. 4x10." 26-1312 .... 3.95

Printviewer. Magnifies and highlights a single line on printouts. Reduces errors, increases reading speed. Clear plastic with yellow "line window." Includes 10, 12 cpi scales. 11/2x15." 26-1313 . . . . 2.95



Power Line Filter

#### TRS-80 Anti-Glare Mask



You Can See the Difference!

Reduces Glare And Reflections Instantly!



Reduces Surface Reflections



Cuts Overhead Glare

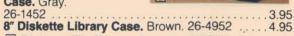
Reduces glare with no loss of resolution. Reduces eye strain and fatigue. Installs easily in seconds. For TRS-80 Models I, II, and III. Not for color monitors. 26-511

#### **Organize Your Work Area**



⚠ Diskette Library
Cases. Holds 10 diskettes. Protects against dust, prevents curling.
Easel insert "pops-up" for easy selection.
Polystyrene.

Polystyrene. 51/4" Diskette Library Case. Gray.



Diskette File Boxes. Store up to 50/60 diskettes. Index dividers simplify filing. Acrylic shell. Handsome smoke color.

<b>51/4" Diskette File Box.</b> 26-1453	29.95
8" Diskette File Box. 26-4953 .	39.95

#### RADIO SHACK HAS SUPPLIES FOR YOUR TRS-80

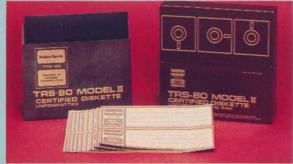


#### 51/4" Certified Diskettes

<b>New Low Prices!</b> Individually-tested. Single-sided 40-track double-density soft sector.
51/4" Diskette. 26-305 Was \$5.95 in RSC-5 4.95
<b>Diskette 3-Pack.</b> 26-405 Was \$16.95 in RSC-5
<b>Diskette 10-Pack.</b> 26-406 Was \$49.95 in RSC-5

Quantity (10 Packs)	Per 10 Pack
1-4	39.95
5-9	34.95
10-Up	33.95

**51/4" Diskette Labels.** 26-306 . . . . . . . Pkg. 100/1.95



#### Model II 8" Blank Diskettes

Custom-manufactured to assure compatibility, and certified against defects. Single-sided, double-density soft sector.

Blank 8" Diskette. 26-4905	7.50
Diskette 10-Pack. New Low	Price!
26-4906 Was \$69.95 in RSC-	559.95

Quantity (10 Packs)	Per 10 Pack
1-4	59.95
5-9	53.95
10-Up	49.95

8" Diskette Labels. 26-4908 . . . . . . . . . Pkg. 50/1.95



#### **TRS-80 Computer Cassettes**

Use these high-quality tapes for program and data storage

C-20 Certified Leaderless Cassette. 26-301 ... 3.69 C-10 Low-Cost Cassette. Standard leader.

Quantity	C-20 Each	C-10 Each
1-11	3.69	1.79
12-23	3.29	1.59
24-47	2.89	1.40
48-Up	2.49	1.25

Cassette Labels. 26-303 ..... Pkg. 100/1.95

## TRS-80 PRINTER RIBBONS AND PAPER

Every TRS-80 printer is fully supported with replacement ribbons and paper supplies.

				-	Use With Printer												
Cat. No.	Description	Char. Life	Price	26-1150	26-1152	26-1153	26-1154		-					26-1166	26-1167	26-1168	26-1190
26-1413	Ribbon Pack	2M	3/18.95	X	X		X					X					
26-1414	Ribbon Cart.	2M	13.95						X				X				
26-1418	Ribbon Cart.	1M	11.95											X		X	
26-1419	Carbon Film Cart.	250K	3/24.95								X						
26-1449	Nylon Ribbon Cart.	1.6M	10.95								X						
26-1424	Ribbon Cassette	1M	8.95												Х		
Cat. No.	Description		Price														
26-1402	81/2" Roll Paper		2/19.95	X			X					X				X	
26-1403	91/2" Fan Fold Green Bar 3100 sheets		37.95		X		X		X	X.	X.	X	X	X	X	X	
26-1404	Mail Label, 15/16x41/4" 4000 labels, 5" carrier		19.95		X				X	X.	×.		X	X			
26-1405	Electrostatic, 43/4" Roll		3/16.95			X											
26-1412	Electrostatic, 2%" Roll		2/3.95					X									
26-1417	141/6" Fan Fold Green Bar 3200 sheets		49.95						X	X.	X.		X	Х			
26-1423	91/2" Fan Fold White Perforated margin 500 sheets	•0	7.95		x		X		×	×·	×.	×	×	X	×	×	
26-1456	Dry Gum Labels, 91/2" Fan Fold 1x41/4" 2 up, 2400	4	9.95		X		X		X	×.	×·	×	×	×	X	X	
26-1407	9" Roll Paper, 81/2" pin-to-pin, 100'		4.95														X





\*Optional tractor-feed required





#### Anti-Static Spray

Prevents static electricity build-up which attracts dust and dirt and may harm computer accessories or destroy valuable data. Apply to equipment, display screen, carpet, etc. Lasts until washed off or worn away. Perfectly safe to use. 16 oz. 26-515 . . . . . 4.95

#### **B** Universal Disk Drive Head Cleaning Kits

The safe, easy way to clean dirty drive heads. Helps prevent read/write errors. Just apply special solution to cleaning diskette, and run in drive for 30 seconds. Includes the cleaning diskettes and 4 oz. solution.

### **OUR COMMITMENT** TO EDUCATION

The people at Radio Shack believe that along with the development of a practically-priced microcomputer, there exists an accompanying obligation to make the system and its potential available to the education community. To meet this obligation, Radio Shack is supporting an extensive development effort to produce instructionally sound, effective and properly validated microcomputer-based educational materials for use in the classroom.

#### Courseware

What is courseware? It is a special kind of computer program designed to teach. Any computer or microcomputer is useless without a program - a special set of instructions written in a computer language that tells the computer how to solve a problem, such as calculating a payroll, alphabetizing a list of names, or printing mailing labels. For an instructional application, a computer program must incorporate an additional level of design — it must implement some acceptable instructional strategy. Special courseware such as this is costly and difficult to develop, and has been a restricting factor in applications of microcomputers in schools.

Radio Shack is addressing the problem of courseware. We have involved the experts the teachers and curriculum developers in the schools - in designing and field testing our new courseware products. The educational programs discussed on these pages represent a growing commitment to the development of courseware by Radio Shack.

#### Scholarship for Teachers Program

Operating a microcomputer such as the TRS-80 isn't the same as operating a movie projector or a tape recorder. Some instruction and training is desirable. That's why we offer free training classes to teachers and school administrators. One of our specialists can conduct these classes to fit your schedule - contact your nearest Radio Shack Computer Center for details.

#### Special Section For Educators Featuring Teaching Aids You Asked For

#### The Microcomputer as a Medium of Instruction

Computer Assisted Instruction (CAI) is based on using the computer to assist the teacher in teaching subjects like reading, math, physics and chemistry. Proven CAI techniques have centered on individualized learning where the computer generates and presents student exercises in a given subject area.

#### K-8 Math Program, Vol. I

Includes self-paced drills in addition, subtraction. multiplication and division for Kindergarten through 8th

grades. Features

student placement, drill, and test modes of operation. 16K Level II or Model III BASIC reg'd 

#### AlphaKev<sup>™</sup>



Helps children 4 to 6 years old become familiar with the keyboard and alphabet. A report is given after each lesson, 16K Level II or Model III BASIC rea'd. 

#### **Essential Math Program Volume 1**

Self-paced drill and practice program designed to reinforce math concepts introduced by the teacher. 16K Level II or Model III BASIC reg'd. For grades 7-12. 26-1716 ......... 199.00



#### **Euclid Geometry Tutor**

Designed to reinforce basic geometry concepts introduced by the teacher. Allows students to develop proofs using 9 basic postulates of Euclidean Geometry. 16K

Level II or Model III BASIC rea'd. 

#### Radio Shack's High Motivation Reading Series

Charles Lindbergh/Amelia Earhart. For reading levels 4-6 Includes 4 copies of the student reader, 2 diskettes with computer activities that measure reading skills, a read-along cassette and instruction manual. Requires TRS-80 PILOT Plus. For Model I 32K lower-case Disk System

Student Records System. Use with above to maintain a complete record of student activity scores. Printer optional. 26-2508 ..... 24.95

#### Math and Physics Programs

Problem-solving exercises for secondary students, 16K Level II or Model III BASIC rea'd. Advanced Graphics 29.95 26-1714

Vector Addition. 29.95 26-1720 Interpreting Graphs in Physics: Position and Velocity Vs. Time. 26-1721 Graphical Analysis of Experimental Data. 

#### K-8 Math with **Student Management**

The original K-8 Math program with student management. Monitors promotions and demotions, and allows for teacher review of scores. 32K Model I or Model III disk system reg'd. Printer optional. 



#### K-8 Math Worksheet Generator

Prints worksheets and answer sheets for exercises in addition, subtraction, multiplication, and division, using selected problem sequences from K-8 Math. Teacher can

choose headings, lesson number, number of problems. 32K Model I or Model III disk system required, plus any TRS-80 line printer. 

#### Introduce Your Students to the Computer Age with TRS-80

### The Microcomputer as an Object Of Instruction

The computer age is barely 30 years old. During that time, we have seen the evolution of the giant computers of industry into compact, low-cost systems used for everyday jobs such as supermarket checkouts and flight reservations. Today, computer technology touches and influences every aspect of our daily lives.

It is not surprising that more and more educators are investigating the impact of computers on the education process — not just as tools for learning, but as a means by which schools can prepare students to function in a world increasingly dependent on the use of computers. In a matter of only a few years, people who know nothing about computers may well be among the educationally disadvantaged portions of the population.

As an educational publisher, Radio Shack is addressing these needs with a new Computer Education Series (CES) designed for use in the classroom at the secondary and college levels. Each program in this series includes a teacher's manual, 25 student workbooks, and a set of transparencies for an overhead projector. Developed and thoroughly field-tested in schools, this material is designed for use by all teachers, regardless of their knowledge of microcomputers and programming skills. Watch for additional programs in the CES series.



### Part 1: Introduction to BASIC

A complete classroom teaching package that introduces secondary students to TRS-80 and BASIC language. All programming exercises are designed to be entered and run by students with hands-on



**Additional Workbooks.** Set of 25 student workbooks for use with above. 26-2151 ......65.00



## Part 2: BASIC Programming

A complete classroom teaching package that continues the BASIC programming concepts introduced in Part 1. Includes a teacher's manual, 164 transparencies and 25 student

workbooks. 26-2152 ...... 199.00

Additional Workbooks. Set of 25 student workbooks for use with the above. 26-2153 ..... 99.00

#### Part 3: Advanced BASIC Programming

A complete classroom teaching package that introduces the INKEY\$ statement, ASCII character set, action graphics, cassette data files, mathematical and trigonometric functions, and multi-dimensional



Additional Workbooks. Set of 25 student workbooks for use with above. 26-2155 ...... 99.00

#### Radio Shack Courseware Development Systems

These new authoring systems make it easy to create courseware with the TRS-80. No extensive knowledge of programming is required.

#### Quick Quiz: A Mini Authoring System

Teachers can create, store, and give multiple-choice tests using a TRS-80 computer. Handles up to 40 questions with 4 answer choices per question. Up to 50





#### **TRS-80 PILOT Plus**

Allows user to create or adapt courseware from curriculum suitable for computer-assisted instruction to the TRS-80. Includes user's manual with hints for using PILOT Plus effi-

#### TRS-80/AUTHOR I

A screen-oriented authoring system that allows teachers with no previous computer experience to create CAI materials. Features include full-screen editing, use of graphics, student management module and score-keeping. The



#### TRS-80 EDUCATIONAL SUPPORT

## EDUCATIONAL RESOURCE MATERIALS FROM RADIO SHACK

Federal Funding Guide. An invaluable guide to obtaining funding for computer education. Identifies major sources of Federal funding, outlines essential elements of a proposal, offers suggestions for continuing and increasing funding. 26-2108 ......2.50



**Proposal Writing Guide.** A step-by-step guide for educators who are seeking funding from an external source (such as the Federal government or a private foundation) for computer-related education projects. The guide leads you through all procedures necessary to the writing of a successful proposal, detailing the most important elements. 26-2754 Available 1/1/82 9.95



Introduction to TRS-80 Level II BASIC. A textbook for teaching BASIC programming, with explanations and examples. Features sequential introduction of new concepts, with exercises at the end of each chapter. 26-2116 9.95

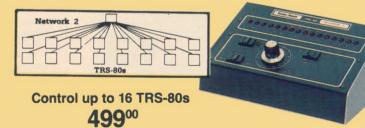


K-8 Math Cross-Reference. Coordinates individual lessons of K-8 Math with specific chapters and pages of six popular math basals. Provides a quick means of finding the K-8 lessons which reinforce material being presented in your class. 26-2750 . . . . . . 4.95

#### **Basic Computer Literacy: Computers Past and Present**



#### Network 2 Controller



#### I.Q. Builder Program

#### **Level I BASIC Instruction Course**

## Introducing the Latest In Educational Courseware, From Radio Shack Available January, 1982

**Investigations in Integral Calculus.** Secondary math program that allows the student to graph and compute areas of functions. Includes student activities and teacher's manual. (16K, Level II or Model III BASIC). 26-2600 . . . . 39.95

Numeric Data Entry Practice. Helps students increase speed and accuracy on a standard numeric keypad. Includes disk-based record-keeping system. Printer optional. (32K Model I or Model III Disk System). 26-2601 . . . . . 39.95

Radio Shack High Motivation Reading Series. Student readers and read-along audio tapes accompany computer program written in TRS-80 PILOT Plus. The computer measures comprehension in several skill areas, such as understanding the main idea, sequence of events, details, separating fact and opinion. Records test information for teacher's review. The HMRS series is based on motivational reading materials for reading levels 4-6, using an illustrated format. System can be used with optional student records system that keeps long-term individual files stored on disk. (Requires TRS-80 PILOT Plus and 32K Model I lower-case Disk System. Line Printer and HMRS Student Records System are optional.)

 HMRS Hound of the Baskervilles.

 26-2501
 59.95

 HMRS Dracula. 26-2502
 59.95

 HMRS Moby Dick. 26-2503
 59.95

 HMRS The Beatles. 26-2504
 59.95

 HMRS 20,000 Leagues Under the Sea.

 26-2505
 59.95

## **BOOKS FOR BEGINNERS AND "OLD PROS" ALIKE**



TRS-80 Assembly/Language Programming.
Covers microcomputers, hardware and software. 304
pages. 62-2006
Computer Programming in BASIC For Everyone.
Introduction to computers, writing programs. 156
pages. 62-2015
BASIC Computer Language. Self-paced pro-
grammed instruction for Level I BASIC quickly gets
you into programming. Sample programs. 232 pages. 62-2016
Level II BASIC. Self-study Level II BASIC for the
TRS-80 Model I and III. 351 pages. 62-2061 9.95
Programming Techniques for Level II BASIC. An
excellent supplement to Level II BASIC (above). 142
pages. 62-2062
TRS-80 Graphics. Shows how to create graphic dis-
plays — from line drawings to geometrics to simple
moving-figure animation. 142 pages. 62-2063 5.95
TRS-80 Programs. 32 fully documented, ready-to-
run programs. 267 pages. 62-2064
Program in Style. Packed with applications for the
TRS-80 Level II, plus ideas for creating your own programs. 343 pages. 62-2067
Computer Games. Exciting and challenging games
for the Level II TRS-80. 152 pages. 62-2068 7.95
Home Computer Programs. Includes finance, auto-
mobile-related, kitchen helpmates, tutorial, recrea-
tion, more. 330 pages. 62-2069
Introduction to TRS-80 Graphics. Discusses line
drawing, special graphics characters, pixel graphics,
simple animation. 134 pages. 62-2073

Advanced Level II BASIC. Helps you fully realize the
capabilities of the TRS-80 Model I and III. Sample
programs and chapter summaries. 250 pages.
62-2072
Understanding Computer Science. Covers history,
hardware, programming and languages of computers. Includes operating system programs.
256 pages. 62-13832.95
Understanding Digital Electronics. Explains digital
electronic devices, circuits and systems. 240 pages. 62-2010
Understanding Microprocessors. Learn what
microprocessors are and how they can be used. 296
pages. 62-2017
Understanding Digital Computers. Easy-to-read
programmed course on digital computer basics.
160 pages. 62-2027
How to Program the Z-80. Educational text and
self-contained reference. From basic concepts to
advanced data structures manipulations, with com- prehensive description of all Z-80 instructions. 626
pages. 62-2066
Understanding Satellite Communications Sys-
tems. Description of the basic means of electronic
communications. 256 pages. 62-2018 2.95
TRS-80 Model II Reference Manual. A comprehen-
sive, illustrated "owner's manual" for Model II users.
(Included with all Model II systems.) 26-492029.95
TRS-80 Model II Technical Reference Manual.
Includes theory of operation for the CPU Module,
FDC, video/keyboard, video display, disk drives, and
the power supplies. 26-4921

Getting Started With Color BASIC. Learn to write Color BASIC programs with graphics and sound. Over 300 pages of instructions written for the beginner. Entertaining and fun. 26-3191 5.9
Going Ahead With Extended Color BASIC.  Describes features of Extended Color BASIC like advanced graphics, complex sounds, and more.  Over 280 pages of instructions. 26-3192 5.9
Color Computer Technical Reference Manual. For the "technical-minded." Explains how the Color Computer works — including input/output and joystick ports. 26-3193
TRS-80 Applications Sourcebook. Over 2300 TRS-80 applications of all types for sale by a variety of vendors. 26-2114
<b>Model III Disk System Owner's Manual.</b> Covers Disk operation, TRSDOS and Disk BASIC, with programming examples. 161 pages. 26-2111 6.9
<b>Model III Reference Manual.</b> Provides detailed information on Model III operation, including BASIC language section. 259 pages. 26-21125.9
Getting Started With TRS-80 BASIC. Entertaining introduction to Level II and Model III BASIC programming. Excellent for beginners. Sample programs and exercises. Over 300 pages. 26-21076.9
Model III Technical Reference Manual. Provides technical information and theory of operation on

Model III hardware for use in troubleshooting and adding interfaces. 26-2109 .......................9.95

#### TRS-80 LINE PRINTERS & ACCESSORIES



### Low-Cost, Full-Performance Printer With **Dot-Addressable Graphics**

ABCDEFGHIJ abcdef9hij 012345 :; <=>?

ABCDE abcde 012:; <:

The benefits of a much higher-priced printer! Serial interface works directly with Color Computer. Bit Image mode allows printing of high-density graphic information, similar to that on the Color computer screen. (See screen print software below.) Prints 80 upper and lower case 5x7 matrix characters on an 8" line. Provides parallel interface for use with Models I, II, III. Adjustable tractor, 41/2 to 91/2." Uses standard 91/2" fanfold paper. Includes re-inking ribbon cassette, U.L. listed. 26-1167 ..... 399.00

Specifications. Print Density: 5 or 10 characters per inch. Graphic Density: 3780 dots/sq. in. Print Speed: 30 characters per second, 16 lines per minute. Character Set: 96 ASCII. Bit Image: 480 addressable 7-dot cols. Dimensions: 5.32x16x 8.25" Weight: 8.6 lbs. Power: 120VAC, 60 Hz. 85W.

Our Newest Printer Offers W.P., D.P. Plus Graphics

A compact, high-density dot-matrix impact printer! The 9-wire head prints near letterquality, proportionally-spaced characters in each line. Good-looking 9x8 monospaced characters, normally at 10 cpi (80 char. per line), can be elongated or condensed. Proportional characters and bit image dot information can be elongated — offering a wide range of character styles. Features full or half-line forward and reverse; underline capability; superscript, subscript capability; upper and lower case English letters. European symbols, and block graphic characters; selectable parallel or serial interface. Uses 91/2" fanfold, single sheet and roll paper. On-Line/Off-Line,

Restart/Reset controls, Power LED, U.L. listed. 26-1168 ..... 799.00

Specifications. Print Density: 4.35 to 22.2 characters per inch. Graphic Density: 4320 dots/sq. in. Print Speed: 40 to 100 characters per second, 23 80-col, lines per minute. Character Set: 96 ASCII + 32 international and 30 graphic Bit Image: 480 addressable double 7-dot cols. per line. Fixed Pin Feed: for Standard 91/2" fanfold paper. Dimensions: 4.7x15.4x11" Weight: 16.5 lbs. Power: 120VAC. 60 Hz. 85W.

#### Cassette Screen Print Program

Designed to print (in black-and-white) contents of the TRS-80 Color Computer display memory if you're in one of the three two-color high resolution modes. For use with above printers. 16K, Ext. BASIC, cassette recorder rea'd. 26-3021 .......... 4.95



Line **Printer VIII** 

ABCDEFGHI abcdefgh Ø1234 ! 0#\$%

ABCDEFGHIJKLMNO abcdefghijklm 01234567 !@#\$%48\*

ABCDEFGHIJ abcdefghijkl 0123456 !@#\$%\*

ABCDE abcd Ø12 !a#

ABCDEFGH abcdef 0123 !a#\$

ABCDE abcde 012 !@#



#### Paper Supplies

91/2" Green Bar Fanfold. 3100 Sheets. 14%" Green Bar Fanfold. 3200 Sheets. 91/2" White Fanfold. 500 Sheets. 81/2" White Roll Paper. 2 Rolls. 2400 Dry Gum Labels. 2 up. 91/2" Fanfold Sheets 26-1456 4000 Mailing Labels, 26-1404 19.95 See pages 14 & 15 for complete printer



7x9 Matrix for Good-Looking Copy Plus L/C Descenders

#### **Ribbons and Cables**

Ribbon Cartridge for LP V. 2 million characters. 26-1414 13.95
Ribbon Cartridge for LP VI & VIII.
1 million characters. 26-1418 11.95
Ribbon for LP VII. 1 million characters. 26-1424 8.95
Model I, III Printer Cable. 26-1401 39.00
Model II Printer Cable. 26-4401 39.00
Color Computer Serial Interface Cable. 26-3020 4.95
See pages 14 & 15 for complete printer accessories



Low price on a full-feature 15-inch wide impact printer! Compact, low-profile styling makes it an ideal printer for Model III. A 7-wire head prints up to 132 upper and lower case characters in 4 sizes, plus many graphic characters and symbols. Has bidirectional logic-seeking carriage. Removable, adjustable tractor feed allows use of friction feed. Uses 4" to 14%" fanfold or single-sheet paper. Handles single to 3-part forms. Automatic Paper-Out sensor stops printer if paper runs out. Has standard parallel interface for connection to printer ports on TRS-80 Models I, II or III. Manual controls for LINE FEED, V12 LINE FEED, SELF TEST, RESET. On-Line, Off-Line

switch. Built exclusively to Radio Shack's demanding

1160°°

Line

Printer VI

ABCDEFGHIJ abcdefg 01234 :; <=>

ABCDEFGHIJKLMN abcdef9hij Ø123456 :; <=> ?a

ABCDEF Ø123:;<=

ABCDEFGHI 012345 :; <=>?

Specifications. *Print Density:* 10 characters per inch; 5, 7.5, 15 characters per inch optional. *Print Speed:* 100 characters per second, 33 lines per minute. *Dimensions:* 24½x6¾ox 13¾o". Weight: 28 lbs. *Power:* 120VAC, 60 Hz, 85W.



### Daisy-Wheel II "Letter Quality" **Word Processing** Printer

196000

For fast, superb quality printing, depend on the TRS-80 Daisy Wheel II. With its high-speed interchangeable character wheel and carbon ribbon, you get the "electric typewriter look" you want for your important typewritten documents. And when you're ready for a different character style, just snap in another print wheel. Each wheel provides clear, clean printing of up to 40million characters. The printer features 124character print wheels, forward and reverse paper feed and ½-line feeds, underline, backspace, friction-feed mechanism adjustable for up to 5 carbons, and switch selectable print densities (10 or 12 characters/in, or proportional pitch). Prints an average of 43 characters per second (500-plus words per minute). Comes supplied with Courier 10 print wheel. U.L. listed. 26-1158 ..... 1960.00

#### **Specifications**

Print Density: 13.6" Line; Switch selectable 10 cpi (136) characters per line); 12 cpi (163 characters per line); or proportional spacing. Appropriate print wheels required for proper appearance. Print Speed: 43 cps Nominal: 19.5 LPM at 10 cpi, 132-col. (Approximately 500 words per minute minimum). Carriage Motion: Unidirectional, logic seeking. Character Set: 124 (96 ASCII + international). 17 control codes. Paper: Up to 16" paper, original plus 5 copies, friction feed, Ribbon: Multi-strike carbon cartridge - 250,000 nominal characters - may vary with text used. Nylon cartridge — 1.6 million characters. Interface: Standard 8 Data Bit parallel; 36-pin Ampenol connector. Power: 120 VAC, 50/60 Hz, 141 watts. U.L. listed. Size: 8x241/2x151/2." Weight: 28 pounds.

#### Replacement Ribbon Cartridges

Choose our carbon ribbon for highest print quality or an economical nylon ribbon for long life.

Carbon Ribbon. 26-1419 .... 3/24.95 Nylon Ribbon.

26-1449 . . . . . 10.95





#### Interchangeable Print Wheels Let You Print with Style



Snap-on print wheels make the TRS-80 Daisy Wheel II the right printer for a variety of applications. Each wheel features upper and lower case characters, punctuation marks and special characters.

Choose From a Variety of Wheels



- ABCDEFGH abcdefg 01234 :; <=>?
- ABCDEFGHI abcdefgh 012345:: <=>?@
- C ABCDEFG abcdefghi 012345 :: <=>?@
- ABCDEFG abcdefahi 012345 :: <=>?@
- E ABCDEFGHI abcdefgh 012345:; <=>?@

Pick just the type of printwheel you need for

business of personal uses.	
A Courier 10 pitch. 26-1420	29.95
B Prestige Elite, 12 pitch. 26-1421	29.95
© Madeleine PS. 26-1422	29.95
D Cubic PS. 26-1425	29.95
E Title Italic 12 pitch. 26-1426	29.95

#### **Tractor Feed for Continuous Forms**

Just snap into place to use fan-fold paper with your Daisy Wheel II! Ideal for printing labels, multi-part forms and long data processing runs. Removes easily when single sheets are

used. 63/8x203/8x13." 26-1446 . . . . . . . . . 289.95

Printer not included



#### **TRS-80 Acoustic Cover** for Super-Quiet Printing

39900 Stand not included

Reduces Daisy Wheel II noise dramatically — ideal for office work areas! Cover lifts for easy access to your printer. 14x28x 211/2" — fits perfectly on our TRS-80 Printer Stands. 26-1455 ..... 399.00 Automatic Sheet Feeder — The **Ultimate in Convenience** 

**1495**<sup>00</sup>

Installation Required not included Printer not included

Ideal for printing hundreds of letters on your own letterhead. Feeds and stacks up to 200 sheets, single - or multi-part form sets. Removes for single sheet or tractor use 85/8x201/2x105/8," U.L. listed, 26-1448 ....... 1495.00

#### TRS-80 PLOTTERS—THE GRAPHIC DIFFERENCE

TRS-80 Plotter/Printer Uses Roll Paper for Graphs of Almost Unlimited Length

Now Get Single Sheet Graphics in Six Colors!



146000

Responds To Simple BASIC Commands

The TRS-80 Plotter/ Printer can be programmed with simple BASIC LPRINT statements to draw a wide assortment of straight

or curved lines and geometric figures, as well as the standard ASCII text characters. The writing device? An easily replaceable ballpoint pen! Features include four character sizes and rotations, front panel control of pen and paper motion and simple vector commands for drawing varied straight lines, arcs, circles, triangles and rectangles. U.L. listed.

Specifications

Printing Speed: Average 10 char/sec. Step Speed: 667 steps/sec. Step Size: 0.095525 mm, X&Y axes. Characters/Line: 80 char./7.3" Paper Size: 9" roll paper. Life of Ballpoint Pen: Approx. 500.000 characters. Power Requirements: 120 VAC, 60 Hz. Dimensions: 6%x16x12%" Weight: 13.2 lbs. without paper.

1995<sup>00</sup> Available 10/15/81

#### Color Adds a New Dimension To Charts and Graphs

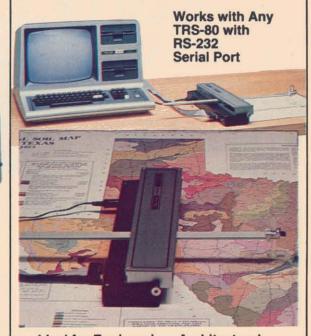
The new TRS-80 Multi-Pen Plotter brings an affordable price to color graphics! Comes with six standard ballpoint color pens—red,

black, blue, green, violet and orange. RS-232 serial interface. Features include automatic pen selection, chart hold down, touch panel pen motion controls. Simple BASIC commands draw varied straight lines, arcs and circles. Includes exclusive software for Model II and III, to draw line charts, pie charts, bar charts, saves and recalls, graphs, more. U.L. listed.

Specifications

Paper Size: 8.5x11" Plot Size: 7x10" Step Speed: 600 Steps/Sec. Step Size: 200/in. Power Requirements: 115VAC 50/60 Hz. Dimensions: 6x13½x10½" Weight: 20 pounds.

#### New! TRS-80 Digitizer Offers Unique Data Input Capabilities



#### Ideal for Engineering, Architectural Work, Drafting, Medical or other Chart Analyses, and much More

#### Specifications

Resolution: 100 Lines per in. Repeatability: ± 2 LSD. Repetition Rate: up to 100 points/sec. Size: 2½x15½x 4½". Power: 120 VAC, 60 Hz. Operation: Point or Continuous mode.

#### Pens for Your Color Plotter...\$3.95 Each

Color	Ball Point (For Paper)	Felt Tip (For Transparencies)
Red	26-1460	26-1470
Blue	26-1461	26-1471
Green	26-1462	26-1472
Violet	26-1463	26-1473
Brown	26-1464	26-1474
Orange	26-1465	26-1475
Black	26-1466	26-1476

TRS-80 MODEL II BUSINESS COMPUTER

## THE HEART OF A POWERFUL BUSINESS SYSTEM

64K System 3899<sup>00</sup>

Ideal for Business Applications Ranging From Accounting and Management Planning to Word Processing

TRS-80 Model II is Radio Shack's fastest and most powerful business microcomputer. It combines high power and low cost to make it the right computer for countless applications. Radio Shack supports the Model II with a growing line of software and total before-and-afterthe-sale service. And it can quickly go to work for you with no formal operator training using our inexpensive user-oriented, well-documented software programs for payroll, accounting, inventory control, mailing lists, with more to come. Model II features easy expandability, compatibility with external equipment, communications and multi-language programming capabilities, as well as low start-up and operating costs.

In large companies, Model II can do jobs that are too "hot" to wait for shared computer time and those too small for cost-effective handling by your mainframe. Model II can also be used to create diskettes in IBM 3741 single-density format. And Model II can support remote bisynchronous communications in several IBM formats (see page 34.) Why not arrange a TRS-80 demonstration soon?

#### Accounting

Model II has the memory and storage capacity for many accounting applications. It can help



you improve your cash flow and establish a more effective budget for accounts receivable. It can also print checks using an optional printer, reduce paperwork for your payroll, simplify inventory control by spotting slow-moving stock items, make invoicing procedures easier and give you up-to-the-minute accounting reports.

#### **Management Planning**

With our VisiCalc<sup>®</sup> "electronic spreadsheet" and statistical analysis software, Model II becomes an invaluable planning and modeling tool. By using your company's historical data, Model II can provide managers with valuable insights as to future performance.

#### Office Efficiency

A Model II system with printer is one of the easiest and most affordable ways to boost office productivity. It can easily become a powerful word processing system, and even an electronic filing system that can search through your records to find just the information you're looking for, in seconds.

#### **Programming Languages**

Model II BASIC is an advanced version of this plain English programming language. It is an easy-to-use enhanced version of our Level II

interpretive language. Radio Shack also offers several optional languages for the Model II. Our COBOL, the advanced business language, is an exclusive "minicomputer" version of ANSI '74. For scientific or technological applications, there is FORTRAN. Our advanced BASIC Compiler offers ISAM file capabilities and protected source code. For more advanced programming techniques, our Editor/Assembler lets you program in Assembly Language using either Z-80 or 8080 Mnemonics, with constants specified in octal, hexidecimal, and even binary.

#### Communications

The TRS-80 Model II is ideal for use in existing data processing environments because it offers the versatility a mere terminal lacks. With our communications packages, Model II provides low-cost access to large mainframe computers. And since it's a complete stand-alone computer, Model II can be used to tackle the tough problems within your department, such as inventory control, billing and forecasting without tying up your mainframe. With our TRS-80 VIDEOTEX package (see page 47) and a modem, you can also access national information sources for up-to-the minute news, weather and financial information.

## AN INSIDE LOOK AT THE TRS-80 MODEL II COMPUTER

The basic Model II is contained in one compact. desktop cabinet including a built-in 8" disk drive for storage of programs and data, a highresolution 12" video display, and a detachable keyboard designed to be similar to the familiar typewriter keyboard. The keyboard is simple to use because "special" keys have been kept to a minimum. For quicker and more accurate numeric input, a calculator-type keypad with its own ENTER key is provided. The high-resolution video screen will display 24 lines of 80 upper and lower case characters. Optionally, doublewidth characters — 40 per line — or reverse characters can be selected by your program. Model II is available with either 32K or 64K of Random Access Memory (RAM). This means you can store 32,000 or 64,000 characters of information in the computer's internal memory. A 32K Model II can be expanded to the full 64K of internal memory at any time with our 32K RAM Add-On option.

#### **Disk Storage**

The double-density disk drive provides 416,000 characters of storage for your programs and data on interchangeable "floppy" diskettes. If that's not enough, just plug in a Model II Disk Expansion Unit (page 27) with one, two or three more drives. Each added drive stores another 486,000 characters, bringing the total capacity of a four-drive system to about two-million characters. For the fastest possible access to large amounts of data, Model II can be outfitted with up to four 8.4 million-character hard disk drive systems.

#### **Expand Anytime**

TRS-80 Model II is easily expanded to cope with growing or changing requirements. It won't become obsolete in a few years. One standard parallel port and two RS-232C serial ports allow you to add printers, plotters, digitizers, communications with data-bases and other computers. Internal plug-in card slots are also provided for other options such as the hard disk drive inter-

face. Model II includes a comprehensive reference manual and a diskette that contains the very powerful Model II Interpretive BASIC language and "TRSDOS" disk operating system. Additional program packages are described on pages 29 to 35. U.L. listed.

32K, 1 Disk TRS-80 Model II. 26-4001 ... 3450.00 64K, 1 Disk TRS-80 Model II. 26-4002 ... 3899.00 32K Memory Add-On. 26-4102 ... ... 449.00\* Model II RS-232 Cable. 26-4403 ... ... 39.95 \*Installation Required (not included).

For value, versatility, ease of use, and support, you can't beat the Model II. It's all business!

#### Specifications

Microprocessor: Z-80A 8-Bit Processor. Clock Speed, 4 MHz. Separate Keyboard and Video Processors, Direct Memory Access and Vectored Interrupts for Faster Throughput.

External Connections: One Standard Parallel Port, Two RS-232C Serial Ports, One External Disk Bay Port.

Disk Drive: Built-In Dual-Density 8" Floppy, up to Three More Available in External Bay. Optional 8.4 Meg. Hard Disk Drive (up to 4 may be added). Maximum System May Include 4 Floppy Disk Drives and 4 Hard Disks.

Power Requirement: Built-In Filtered Power Supply for 120VAC, 60 Hz.

Keyboard: 76-Key Professional-Type Including Numeric Entry Keypad. Special Keys include HOLD, ESCape, BREAK, CTRL, CAPS, REPEAT, Up, Down, Right, Left and Two Programmable Special Function Keys, (F1 and F2).

Video Display: High-Resolution 12-Inch Monitor with 80 or 40 Characters Per Line, 24 Lines, Automatic Scrolling, Displays Upper and Lower Case Characters with Descenders. Partial Screen Scroll Protect Available, 32 "Business Graphics" Characters.

Memory: 32K or 64K RAM. "Bootstrap" ROM is Bankswitched Out After "Boot" Startup. Includes Power-Up Diagnostics.



## TRSDOS®—The Disk Operating System for TRS-80 Model II

TRSDOS ("Triss-Doss") is the system that manages disk operations of the TRS-80 Model II. It is a comprehensive system with many powerful features for the programmer, yet it is very easy to use and virtually "transparent" to the non-programmer using pre-written software. TRSDOS occupies space on the System diskette and is automatically loaded for use after system power-up. The Supervisor program, input/output drivers and other essentials are always in memory. However, only a small portion of TRSDOS is actually in memory at any one time. Auxiliary code is loaded as needed into an "overlay area."

TRSDOS provides a full set of library commands, utility programs and many useful system routines that can be called directly by user programs.

Some of the 37 Library Commands include: ATTRIB—to change a file's password. CREATE—to preallocate data file space for faster execution. COPY and MOVE—to transfer files. DEBUG—to isolate errors in machine language programs. DO—for automatic powerup execution of a sequence of commands. FORMS—to set printer page length and width, line width, top of forms and to toggle parallel or serial printer drivers. HELP—to help clarify TRSDOS commands. PATCH—to modify the code in our system's software so you can implement updates we provide. RENAME—to change the name of a file. SPOOL—to save printer output in a disk file for later printing, and also to allow printing while other operations are being entered.

The Utility Programs are: BACKUP—to copy a diskette. FORMAT—to organize a diskette. MEMTEST—to check out RAM.

You also get a complete set of Communication commands: ECHO—to begin echo of keyboard input to display. HOST—to allow keyboard input from and video output to a remote terminal. RECEIVE—to input data into RAM from serial interface. SETCOM—to set RS-232 port parameters. TERMINAL—a versatile menudriven ASCII communication program.

Machine language programmers can use Supervisor Calls which are Operating System routines. They can be used without worrying about hard address changes which could occur in later software releases. The routines alter certain System functions and conditions; provide file access; perform I/O to the keyboard, video display and printer; plus perform various computations. TRSDOS allows keyaheads of up to 80 characters — you can type in the next command while previous ones are being executed.

Model II TRSDOS responds to commands with positive feedback. For example, if you type "KILL 'file name,'" TRSDOS will respond with "'file name' KILLED" or "'file name' NOT FOUND." You also get numbered error messages with detailed explanations available on the display, and a password system that can be used to prevent unauthorized use or duplication of your programs and data. The System diskette and comprehensive TRSDOS User's Guide is housed in a deluxe 3-ring binder, included with each TRS-80 Model II.

## Model II BASIC — Our User-Oriented Programming Language

All of Model II's operating software is loaded into Random Access Memory from the System diskette every time you power-up the computer. So whatever language you choose, it leaves the maximum available user memory. No addressable memory space is committed to Read-Only Memory (ROM). The Model II contains just a small amount of ROM that merely loads the operating software, then is switched out.

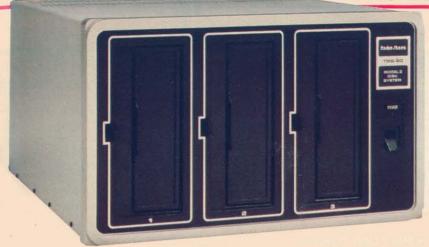
TRS-80 Model II BASIC is an easy to use, expanded version of our Level II interpretive language. It's a 17K disk-based interpreter, and features detailed error flagging and quick editing that make it especially easy to use for program development and debugging. If you

can program in Level II BASIC, you'll find Model II BASIC very familiar, with more versatility and power. Some of its outstanding features are—

- Advanced string handling
- · Multidimensional arrays
- Error trapping Full editing
- Program line renumbering
- Hex and octal conversion
- Direct and sequential access to data in disk files
- Ability to execute most TRSDOS commands and return to BASIC with program and variables intact

- Special functions to allow BASIC programs to call machine language subroutines
- · Recovery from operator errors

Command compatibility has been maintained to the greatest possible extent for the convenience of Model I and III owners who decide to move up to the additional speed and capability of the Model II. And Model II BASIC does offer quite an improvement for the machine language programmer.



## Disk Expansion Units For More On-Line Storage

Expand TRS-80 Model II Disk Storage Capacity Up to 2 Megabytes 1150°C

For more disk storage, just plug in an external Disk Expansion Unit—available with one, two or three 8-inch disk drives. Each individual drive adds about 486,000 characters of on-line storage. And, if you start with a one or two-drive system, you can add Disk Drive Kits at any time to expand to a two or three-drive system. The added drives let you use our SCRIPSIT® Word Processing program to print form letters with names and addresses from our Mailing List or Profile II programs. With two external drives you can use any of our 3-Disk COBOL Business Packages for sophisticated accounting capabilities.

1-Drive Expansion System. 26-4160	1150.00
2-Drive Expansion System. 26-4161	1750.00
3-Drive Expansion System. 26-4162	2350.00
Disk Drive Kit (Drive Only). 26-4163*	600.00

#### **Specifications**

Number of Drives: 1 to 3. Disk Format: Track 0, System information; Tracks 1 through 76; 26 sectors, 256 bytes per sector (double density). Disk size: 8" diskette. Data Transfer Rate: Double Density, 500 kilobits per second. Disk Speed: 360 RPM. Latency: 83 ms, average. Track Access Time: 260 ms average, 10 ms track-to-track. Power: 120VAC, 60 Hz, 150 watts. U.L. listed. Size: 11½x18½x21."

\*Computer Upgrade Kit Prices Do Not Include Required Installation Charges

## Protect Your Model II With a System Cover



Model II Owner's Manual. Comprehensive, fully illustrated reference guide in a heavy-duty 3-ring binder. (Included with all Model II systems.)

#### Model II System Desk And Printer Stand

Desk. Large storage drawer mounts on the right or left. Mount low and place a Disk Expansion Unit above it. Heavy-duty construction with wiring cut-outs in top. 28x48x 29". 26-4301 ...... 369.00



## **BREAKTHROUGH! NEW TRS-80** 8.4 MILLION-BYTE HARD DISK SYSTEM DRAMATICALLY INCREASES MODEL II STORAGE

- · Extremely Fast Access to Over 8 Million Bytes of Data
- · Compatible With Most Existing TRS-80 Model II Software
- · Easily Add Up to Three More Hard Disk Systems for Over 33 Million Characters of On-Line Data and Program Storage
- · Uses All Currently Available TRSDOS Library Commands, Plus Enhanced Features Designed Specifically for the Hard Disk System



Primary Hard Disk System 449500

Available 12/30/81

Now you can have immediate access to vast amounts of data - almost 9 million characters! With Radio Shack's new Hard Disk System, you can set up a powerful data base management system. And you can expand with up to three "secondary" Hard Disk Drives for a total storage capacity of over 33 megabytes. Best of all, most Model II programs will transfer directly to hard disk. The TRS-80 Hard Disk System is comprised of two 8" platters, permanently sealed in a dust-free environment. Both surfaces of each platter are accessed by their own read/write head — forming a cylinder of four tracks under the head at any one time. Winchester technology assures extremely fast read/write times and high-speed data transfer. All current TRSDOS library commands are available, plus two new utilities: SAVE and RESTORE. The SAVE utility quickly and efficiently saves data from the Hard Disk onto one or more back-up diskettes. RESTORE reads the data on the diskette and writes it back onto the Hard Disk. To best utilize the Hard Disk System, Model II's Global Search sequence will examine the hard disks first, then the floppy disks. Expand the storage capability of your Model II with our incredible Hard Disk System! Installation required.

#### Primary Hard Disk Unit.

Secondary Hard Disk Unit.

26-4151 ..... 3495.00\*

#### Specifications

A 2-platter, 4-surface, 8" disk drive employing sealed media with a self-contained, recirculating filtered air system. Disk Format: Each of 4 disk surfaces has one movable read/write head to access 256 data tracks on that surface. A 4track cylinder is accessible under all 4 heads with a single seek. Disk Size: Two, non-remova-

ble 8" disks. Data Transfer Rate: 4.34 megabits/ second. Disk Rotation Speed: 3125 RPM. Latency: 9.6 milliseconds, average. Track Access Time: 19 milliseconds (track-to-track) Power: 120VAC, 60 Hz, 140W, U.L. listed, Size: 51/2×181/2×191/4"



## CHOOSE THE MODEL II LANGUAGES YOU NEED FOR PROGRAM DEVELOPMENT

Language versatility! That's what you get with TRS-80 Model II. Radio Shack has developed several languages — each with a particular need in mind — for the Model II computer system. These reasonably priced languages enable you to purchase our complete package at a fraction of the cost you'd expect to pay just to lease from others!

The TRS-80 Model II adapts easily to your choice of languages because the system has no primary language stored in Read Only Memory. You simply choose your language, load the disk, and you're all set!

Now, just look at what's available to you! For practically any business application, there's our Model II COBOL Development System. For scientific and technical problems, we have Model II FORTRAN. And for general purpose use and ease of programming, there's Model II Compiler BASIC.

Complete program documentation is included with each language package.

#### **COBOL Development System**

COmmon Business Oriented Language is specifically designed for business and accounting applications. TRS-80 Model II COBOL is a high-level implementation of the ANSI-74 COBOL standard for minicomputers. Its features include multi-keyed ISAM for quick access of data, interactive DEBUG for program development and testing with address stop, single step and variable display, CRT control with extended ACCEPT/DISPLAY commands for attractive screen formatting, and full level-2 Input/Output commands. It has an Editor for creating and changing source programs, and a single-pass Compiler which generates an object code for fast execution by the Run-Time Diskette. Sup-

plied on a single diskette with deluxe binder and includes User's Guide, COBOL Language Manual, Run-Time package, and sample programs. Requires 64K TRS-80 Model II. 26-4703 299.00 \*COBOL Run-Time Diskette. For distribution of the COBOL programs you write yourself. 26-4704 40.00

#### **FORTRAN**

FORmula TRANslator is a universal, problemoriented programming language designed primarily for scientific or technical problems expressible in algebraic notation. It requires the programmer to fully define the characteristics of a problem in a series of precise statements, and is designed to simplify the preparation and checkout of computer programs. TRS-80 Model II FORTRAN is based on the ANSI-66 standard. and features complete error documentation in compiler, and hex and octal addresses for compiler listing. The program has five modules consisting of the Editor, Compiler, Linking Loader, Subroutine Library, and a Source and Listing File-Print Utility. Supplied on a single diskette with deluxe binder and includes the User's Manual, along with language, linking loader and editor guides, and sample programs. Requires 64K TRS-80 Model II. 26-4701 ...... 299.00

#### Compiler BASIC

This language package is designed for the development and fast execution of applications programs. It lets you program in the familiar BASIC language, then once compiled, most programs execute several times faster than an interpreter like Model II BASIC. If you're developing programs to sell, compiled programs protect your code against modifications. Compiler BASIC is similar to Model II BASIC but with some powerful extensions. It features a single-



key ISAM to help organize and retrieve data, a cross reference and interactive DEBUG to speed program development, easy calls to assembly language or other object programs. 14-digit floating point decimal format for extra accuracy, full error control, complete CRT control, and a single-pass compiler that generates object programs for fast, efficient execution by the Run-Time Diskette. (Note: Compiler BASIC is not compatible with Model II interpreter BASIC, and cannot be used to compile existing Model II programs. Compiler BASIC is intended for program development and not for conversion of existing software.) Includes Editor, Compiler, Run-Time package, and a detailed reference manual showing the steps of operating, compiling, running and saving programs. Requires 64K TRS-80 Model II. 26-4705 ..... 199.00

\*NOTE: Run-Time Diskettes are available separately for those who intend to sell software developed on our compilers. You don't need to purchase a separate Run-Time Diskette for your own use.

### TRS-80 BUSINESS PROGRAMS GO TO WORK IMMEDIATELY

Anyone in your office can easily learn to use our powerful Model II business and accounting software. Supplied on 8" diskettes with a comprehensive manual, all programs require a 64K Model II and 15"-wide, 132-column printer.

#### **Inventory Management System**

Handles up to 3000 items, 200 vendors, and 999,999 on-hand quantities. Projects your reorder needs based on analysis of past performance and sales trends. Reports include: Master Inventory List, Vendor Listing, Transaction Posting Report, Suggested Order List, ABC Code Analysis, Physical Inventory Worksheets, Physical Inventory Error Report, and Inventory Performance Report. 26-4502 . . . . . . . . 199.00

#### Statistical Analysis

Programs for descriptive statistics, graphic histogram, frequency distribution, one and two-way analysis of variance, one-way analysis of covariance, correlation matrix, chi-square analysis, time series analysis, multiple regression, random data samples, and item analysis and

test/survey scoring. Easily prepare, update, and print your data files. 26-4540 ...........99.00

#### **Payroll**

Handles up to 200 employees. Nine earning, nine deduction, and seven workman's compensation categories. Calculates state and city, or federal withholding tax, plus earned income credit. Prints W-2 forms. Automatic monthly, quarterly, and annual journals. Automatic out-of-balance detection. Easy error correction and recovery. Optional time card calculations with automatic overtime. Multi-drive update to General Ledger (26-4501). 26-4503 ....... 399.00

#### **General Ledger**

Handles up to 504 accounts, up to 11,420 entries per month. Seven optional expenses categories and user-defined account numbers. Automatic out-of-balance detection, entry totaling, and document balancing. Automatic well-defined audit trails. Controlled inputs for error prevention and rapid entries. Easy document correction and error recovery. Reports include:

Charts of Accounts, Trial Balance, Document List, Posting Summaries, Ledger Detail Report, Income Statement, and Balance. Multi-drive update from Payroll (26-4503) Accounts Receivable (26-4504) and Accounts Payable (26-4505). 26-4501

#### **Accounts Payable**

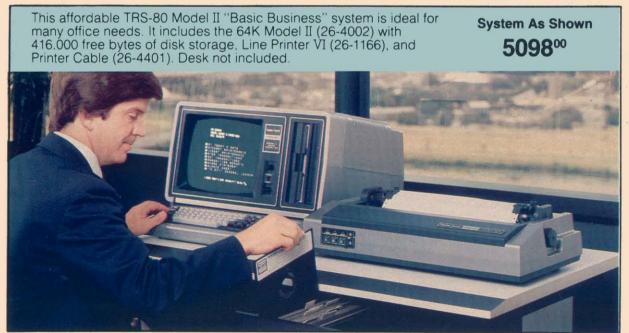
Prints checks, cash requirements, aging reports, and totals. Compatible with either Cash or Accrual Accounting methods. Easy maintenance of accounts for up to 500 vendors and 3000 invoices. Reports include: General Ledger Codes, Vendor Listing, Invoice Listing, Posting Report (with GL totals), General Ledger Recap, Cash Requirements, Aging Status, Check Preview, Check Register, Discount Lost Report, GL Totals after Check Printing, End of Period Processing (with GL totals) and Year End Report. Multi-drive update to General Ledger (26-4501). 26-4505

#### **Accounts Receivable**

A complete invoicing and monthly statement system. Allows "open item" and "balance forward" accounts, and generates both Summary Aging and Detail Aging reports. Automatic customer billing option and flexible open credit reconciliation. Add additional disk drives for increased capacity and automatic update of General Ledger (26-4501). 26-4504 ... 299.00

#### Mailing List II

Stores names and addresses which can be revised at any time—up to 3000 names or 2000 names with a "comment" line. Each name may be assigned up to eight special categories. Choose alphabetical or Zip Code order. Any number of address labels may be selected and printed. Five different label sizes. With a second disk drive, names and addresses can be MERGED with SCRIPSIT (26-4531) for perfect form letters.



## **NEW MODEL II SOFTWARE FOR PROFESSIONALS**

#### Medical Office System

A complete patient and record-keeping system for up to 10 physicians. Handles up to 3000 accounts and 9000 transactions per month. 450 procedures and diagnoses, 4 recall medications, 2 recall dates. and 2 insurance companies per patient. Produces monthly statements, insurance forms, daily recap. transaction review, aged accounts receivable, procedure and diagnosis reports. Requires a minimum of 1 External Disk Drive. Customized letters and mailing labels using Profile II (26-4512) and SCRIP-SIT (26-4531) and extra external disk drive. 

#### Manufacturing Inventory System

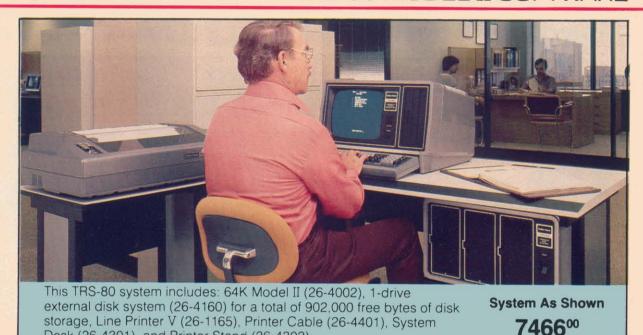
A four module program that lets you review inventory, establish a cycle counting procedure. process inventory transactions, describe parts and quantities required to produce finished goods, determine the status and dollar value of orders, track work in progress, determine estimated vs. actual product cost, project order completion dates, plus labor and material requirements, and more. Requires 2 External Disk Drives. 26-4509 Available 11/30/81 ..... 750.00

#### **Job Costing**

Enables small construction companies to accurately track the progress and cost of each job. Expenses are entered as they are incurred and



Each software package is complete with manual, deluxe binder, and 8" diskette.



are posted to each task by cost category. Detailed and summary information is available on each job. As jobs are completed, year-todate profit and loss is maintained on disk for one year. 26-4513 ......149.00

Desk (26-4301), and Printer Stand (26-4302)

#### **Time Accounting**

Detailed time analysis of jobs performed by up to 14 professionals. A must when exact billing information is needed. Handles up to 1000 clients, 500 jobs, 4500 transactions, and 99 charge code categories. Tracks billable and non-billable time, cost of each individual's time. billable and non-billable expenses, amounts billed, amounts paid, and more. Requires 3 External Disk Drives. 26-4520 ...... 499.00

#### **Litigation Support**

A versatile filing system for the attorney. Enter client's background, case history, and correspondence. Store up to 350 client records, 12 pleas, 10 memos. Program doubles as a paralegal. Type in a subject, topic, case number or keyword, and matching records are displayed. Store up to 575 records, 144 spaces for sources, 255 spaces for description. Complete

report generation. Compose letters and reports using SCRIPSIT (26-4531) and extra disk drives. 

#### Personnel Search

Helps match employers with potential employees. Stores up to 246 records, with up to five referral and placement positions and five client contacted companies. Up to 66 characters for employer benefits, 227 characters for employee duties. Prints reports, plus two mailing labels. 

#### **WESTLAW®**

This package (and registration with the WEST-LAW system) gives you access to WESTLAW's powerful "electronic" legal research library. This interactive system lets you enter words relevant to your case. WESTLAW searches among synopses, headnotes, and the full text of opinions for a similar case. You also have access to West's Topic and Key Numbers, Shepard's Citations, West's Bankruptcy Reporter, federal court decisions, federal tax files, and the United States Code. Requires 1200-baud modem. 

## WORD PROCESSING, FILING AND PLANNING PROGRAMS



### SCRIPSIT<sup>™</sup> 2.0 Word Processing

The latest version of our powerful word processing system for the TRS-80 Model II will speed up any job you are doing now on a type-writer. It's easy to learn and use, with "plain English" prompts and menus that put advanced editing capabilities at your fingertips! Since SCRIPSIT will display up to 22 lines of up to 80 characters on the TRS-80 screen, it's much easier to use than "smart" typewriters

that give you only a one-line display. Letters, reports and manuscripts can be written and edited right on the display screen. Then, with an optional printer, you can print as many "letter perfect" copies as you want, at an incredible 500plus words per minute. Frequently used reports, forms or paragraphs can be stored for use again and again - and updated at any time. SCRIPSIT has many "extra" features including automatic block moving and duplication, easy page numbering and renumbering, plus an information line that keeps track of cursor position, margins, line spacing and page number. SCRIPSIT's Global Search mode will locate a specific word wherever it occurs in your text for selective editing. Floating format and reverse indentation make it easy to set up tables and special formats. You can define up to 20 keys for individualized use - to reprint words and phrases or to access special functions. You can also store up to 11 formats that you use often and select the one you want with just a few keystrokes - a real timesaver for the busy typist! SCRIPSIT offers full headers and footers. as well as underlining, subscripts, superscripts and boldface, depending on the printer you choose. Allows loading and storing of ACSII text files. Stores up to 320,000 characters on each diskette with a one-disk Model II system - plus up to 400,000 characters on each external drive you add to your Model II system. SCRIPSIT's "background" feature even lets you print one document while you're typing or editing a different one. Add a second drive to use the SCRIPSIT Spelling and Hyphenation Dictionary - and you can even "merge" names, addresses and information from our Mailing List II or Profile II (electronic filing) programs for fast, automatic printout of form-type letters. Includes a superb manual as well as a self-paced training course on audio cassette tape. Requires 64K TRS-80 Model II. See pages 20-22 for printers. 26-4531 399.00

SCRIPSIT DICTIONARY. Automatic "proofreading" for SCRIPSIT! Contains over 100,000 words, abbreviations, proper names, contractions and foreign words with hyphenation points. Checks and displays your text on the screen with misspelled words highlighted. You can add up to 2000 words that are used in your environment: medical, legal, engineering, scientific terms, etc. Requires SCRIPSIT 2.0, one external disk drive. 26-4534



This complete TRS-80 system costs less than most dedicated word processors, yet gives you more—the 64K TRS-80 Model II Computer (26-4002) will handle a variety of business and technical jobs in addition to word processing! Includes our "electric typewriter quality" Daisy Wheel II Printer (26-1158), Cable (26-4401), Printer Stand (26-4302) and TRS-80 System Desk (26-4301).

Complete System 6416<sup>00</sup>

#### Profile II

One of our most popular programs — an electronic filing system that can search through your records to find just the files you want — in seconds! Keep track of names and addresses, accounts, bills owed and paid, personnel or customer records and more. You specify the way your files are set up and how information appears on the screen and printed reports. Profile II even includes options that restrict unauthorized users from accessing confidential files. Store up to 99 data fields in a single record, and print up to five different reports for each file. Reports can include automatic page numbers, current date and column totals. With two or more disk drives, Profile II can merge with SCRIPSIT to provide names, addresses and other data to be included in your letters and reports. Stores up to 3000 records with a one-disk 64K Model II system, up to 20,000 with external disk drives. 26-4512

**Profile Training.** Gives you a working knowledge of the endless capabilities of Profile II by taking you through a carefully sequenced, step-by-step learning experience. Four audio cassettes with an excellent 96-page manual. 26-4516

#### VisiCalc<sup>™</sup>

Designed for the decision-maker. VisiCalc is an amazingly efficient management planning tool that can be used for everything from corporate finances to engineering work and family budgets. Computer experience is not required. With VisiCalc, the TRS-80 screen becomes a window through which you view a section of an electronic "worksheet" organized in columns and rows. In each "entry position" you can insert a description, number or formula. VisiCalc goes to work when you alter a number previously "written" on your worksheet - the related numbers change before your eyes as the program instantly recalculates every affected item! For example, you can enter the projected cost of a new employee into a VisiCalc worksheet containing current and projected profit and loss figures. VisiCalc will then recalculate every related figure to show the effect of your addition. Quick "What if ... " studies like this can give you an effective way to predict the results of important decisions. What might take hours with pencil, eraser, calculator and columnar pad is performed in seconds with VisiCalc! Editing is easy and there are built-in math functions for speedy solutions to complex engineering problems. You can also produce simple graphs, and of course save your "worksheets" on disk for future use. Requires one-disk 64K TRS-80 Model II. For printed copies of your worksheets you can add a 

#### Versafile

Permits anyone to create a computerized filing system—no computer experience is needed! Lets you store almost any type of data—you simply type in a sentence. To retrieve information, just type a question containing one or more "key words." Global search function locates any word or phrase. With a TRS-80 printer, you can print all or any portion of the files. 26-4510 69.00

## PROGRAMS TO STREAMLINE YOUR BUSINESS OPERATIONS

#### 3-Disk Business Packages

Each of the programs on this page requires the 64K TRS-80 Model II. 2-Drive Disk Expansion Unit and 15-inch wide tractor-feed printer. Programs are written in COBOL, and source code is available at extra cost after signing a special license agreement. Because of the operation of the ISAM file system, capabilities stated here are only approximate.

General Ledger. A superb "total" system that will interact with 3-Disk Accounts Payable. Payroll and Accounts Receivable programs (below). Features an easy-to-maintain control file that allows you to use multiple profit centers. Reports include. Chart of Accounts, Financial Statements, General Journal Transaction Register, General Ledger Trial Balance for any specified period, General Ledger Worksheet, General Ledger Source Cross Reference (shows entries for each source). Income Statement, Balance Sheet, Supporting Schedules. Statements of Cash Flow, Changes in Financial Position and Changes in Components of Working Capital. Holds up to 400 accounts and 4300 year-to-date detail entries 26-4601.

Accounts Payable. An accrual system that will interface with the 3-Disk General Ledger system (above). Reports include: Vendor File, Alphabetical Vendor List, Accounts Payable Transaction Register, Accounts Payable Aging, Cash Requirements, Pre-Check Writing Accounts Payable Check Register, General Ledger Distribution, Vendor Analysis, Check Reconciliation and Job Distribution. Holds up to 1500 vendors, 800 open payable items, 5000 General Ledger distributions 26-4605 Available 10/30/81

Payroll. A complete, time-saving payroll system that calculates and prints checks and provides distribution to multiple General Ledger accounts (interacts with 3-Disk General Ledger, above). The program gives you efficient handling of hourly and salaried employees and permits seven pay frequencies. Provides a wide variety of special earnings and deductions categories and allows entry of manually prepared checks and adjustments. Lets you track vacation and sick pay and recall up to one year of detailed pay history. Tables for federal, state and local withholding taxes are easy to maintain. Prints federal, state and local withholding reports; W-2 forms, payroll worksheets, check register and more. Handles up to 200 employees per year. 599 00

Accounts Receivable. An open item and/or balance forward system that will interface with Radio Shack's 3-Disk General Ledger as well as our Order Entry/ICS (26-4607) and Sales Analysis program (26-4608). The program prints Aging Report (with or without detail) for all or selected customers. It provides a General Ledger Distribution Report and allows easy access to frequently used General Ledger accounts for rapid entries. Prints a Cash Application Worksheet, showing balance owing, the valid discount and the net amount due from each customer. Optional user-defined features include: Accumulating revenue and expense by profit center (product line); Calculation and

addition of sales tax based on customer tax code, Calculation of commissions and printing commissions due report, and more. Stores up to 800 accounts, 2500 transactions, 26-4604.

Order Entry/ICS. Allows both single-pass invoicing and two-pass open order entry with separate billing. Will run in conjunction with the 3-Disk Accounts Receivable (26-4604, four disk drives required). Allows maintenance of the item file and prints a Numeric Item List and an Alphabetic Item List. Orders can be entered and edited on request. The program also provides entry and editing of inventory receiving transactions and prints an Item Receivings Register. Allows selective billing of open orders and prints a Billing Edit List. Also prints: Picking Tickets: Order Edit List: Price List; Item Stock Status Report; Purchasing Advice Report; Sales Analysis by Item, by Product Category and by Item Sales Volume. Has full backorder retention and control, and prints back orders by item and by customer Maintains 1500 items 26-4607 Available 11/30/81

Sales Analysis. Gives you an effective way to examine and evaluate sales information for your company. Data is obtained from the customer file of the Accounts Receivable program (26-4604) or the item file of the Order Entry/ICS program (26-4607). The program prints eight reports, each of which shows sales activity from a different perspective—by customer, by customer type, by customer sales volume, by salesman, by state, by item, by item category or by item

Inventory Control System (ICS). This efficient and easy-to-implement inventory management system has features that allow you to custom-design your own reports. The program posts receipts, prepares labels and gives you complete maintenance of the referenced files — add, delete, inquire/edit and list. Prints purchase orders by P.O. number and six major reports — Master List, Vendor List, Items with a Zero Reorder Point. Price List, Open Purchase Orders and Cost Inventory. With 2-Disks it will handle up to 3000 inventory items — capacity is 6000 items with a 3-Disk Model II, and up to 9000 items with a 4-Disk system.

Order Entry With Inventory Control. A unique package that will interface with and become a vital part of the Model II Accounts Receivable program (#26-4504). The program reduces duplication of efforts, and saves time in filling orders, producing invoices and posting sales and adjustments to each customer account. Designed primarily for non-manufacturing distributors that maintain up to 650 accounts in accounts receivable and up to 2000 items in inventory. Requires 4 disk drives and a 15-inch wide printer such as TRS-80 Line Printer V (page 21).



A high performance TRS-80 Model II system that's ideal for these and other business applications. Includes 64K TRS-80 Model II (26-4002), 2-Drive Disk Expansion Unit (26-4161), TRS-80 Line Printer V (26-1165), Cable (26-4401), Stand (26-4302), and TRS-80 System Desk (26-4301).

8066<sup>00</sup>

#### TRS-80 MODEL II COMMUNICATIONS SOFTWARE



## NOW YOUR TRS-80 MODEL II CAN BE COMPATIBLE WITH IBM® MAINFRAMES

#### ReformaTTer®

Now programs and data for use with IBM equipment can be prepared using the TRS-80 Model II.

ReformaTTer handles the transfer of files between TRSDOS and IBM-compatible diskettes. It organizes data to conform to the 3741 single-density IBM format, performs an EBCDIC/ASCII character conversion, and automatically initializes diskettes to the IBM format, including all necessary fields, eliminating the need for specially pre-formatted diskettes.

You have full control over all aspects of an IBM diskette with ReformaTTer. Creation/expiration date, record length, beginning of extent, end of extent, write protect, accessibility, and bypass and verify fields can all be modified. Also, any "data set" label can have its contents altered, the data set can be renamed, and even deleted data sets can be reactivated. ReformaTTer allows you to examine and alter existing data on an IBM diskette directly without transferring the data to a TRSDOS diskette — so you save time

and money. And the convenient menu presentation and descriptive prompting messages make it easy to learn and use.

#### **Binary Synchronous Communications 3270**

This program lets your TRS-80 Model II emulate an IBM 3270/3271/3275/3277 display station.

The Model II can communicate through a modem and telephone line to a remote computer, using standard IBM Binary Synchronous Communications (BSC) protocol for the IBM 3271 or 3275. Such remote computers include IBM Systems 360/370 and 30-series Central Processing Units, plus non-IBM devices equipped with BSC-3270 communications capability.

All functions of an IBM 3270 display station are provided for, including screen formatting, poll-

ing responses, data link control, time out control, and cyclic redundancy checking.

A TRS-80 Model II equipped with the bisync-3270 program may be used interactively with systems such as IBM's TSO, CICS, VM/CMS and IMS, plus with other remote systems that support IBM 3271 or 3275 terminals.

Bisync 3270 communicates in half-duplex mode and may operate at data rates up to 19,200-baud depending on the type of communications connection used. It requires a 64K TRS-80 Model II, modification of the "A" serial port (extra charge), and the Editor/Assembler (26-4702) for mode reconfiguration. 995.00

#### IBM/DEC® Compatible Binary Synchronous Communications 3780

With this communications program, your TRS-80 Model II can function as an IBM-compatible remote terminal or a Remote Job Entry (RJE) terminal connected to a mainframe computer by telephone.

Bisync-3780 allows the selection of IBM 2770, 2780, 3741, or 3780 terminal protocols for communicating with the IBM Systems 360/370 and 30-series computers, IBM 2780 and 3780 terminals, DEC PDP-11 or VAX-11 computers, and other devices equipped with bisynchronous communications ability.

Commands and options are provided which permit you to: send one or a series of files to a remote, receive data from the remote onto a printer or disk files, automatically convert between EBCDIC and ASCII codes, transmit or receive character coded data in transparent or non-transparent modes, automatically pad or truncate records to match transmitted data to required protocol, and decode printer formscontrol commands.

Bisync-3780 communicates in half-duplex mode and may operate at data rates up to 19,200-baud depending on the type of communications connection used. It requires a 64K TRS-80 Model II, modification of the "A" serial port (extra charge), and the Editor/Assembler (26-4702) for mode reconfiguration. 995.00

# MODEL II ASSEMBLY LANGUAGE AND PROGRAM EDITOR

#### Editor/Assembler

The Macro Editor/Assembler allows the advanced programmer to quickly write, edit. test, assemble, and execute programs in Assembly Language. Features include the use of either 8080 or Z-80 mnemonics, plus constants can be specified in octal, hexidecimal or binary. Commands are simple and straightforward, yet powerful enough to accommodate the most demanding user. The text editor allows extensive and sophisticated editing techniques, and it's both line-oriented and characteroriented. A utility program will provide a source listing, plus list to the printer or display any text file. Assembly Language programs and subroutines are edited and assembled, a relocatable object code is generated and stored on disk to be recalled later by the linking loader, loaded into memory and executed. The Editor/ Assembler is supplied on a single diskette with deluxe binder, and includes Editor, Macro-Assembler, Linking Loader, Cross Reference Facility, FORTRAN Subroutine Library, plus User's Manuals and sample program. Requires 

#### **Assembly Language Development System**

A powerful package for developing Assembly Language programs. The features of each module include:

EDITOR — Global find/change, print on video or printer, execute most TRSDOS commands without exiting editor, and load single file or chain multiple files together.

ASSEMBLER — IX and IY registers, separately-linkable multiple program sections, relocatable/absolute object, macros and sorted cross references list, enhanced mnemonic op codes, conditional assembly with optional assembly time

prompting, and support of standard ZILOG® Z-80 and undocumented mnemonics.

LINKER — Indirect command file, optional module cross reference, entry point, and symbol listing.

DEBUGGER—Find/examine/change memory by HEX or ASCII, copy memory to memory or fill memory with constant, two independent memories and one register dump on screen. Permanent/temporary breakpoints plus single step, and examine/modify by file or track/sector. FILE TRANSFER—Automatic multi-file transfers, converts files to target machine's format, automatic SETCOM with default control file, transfers source, data, object and program files, automatic synchronization (either end responds first), and file names may be given directly, by "wild card" or by indirect command file.

The Assembly Language Development System is supplied on a single diskette with deluxe binder and User's Manual. Requires 64K TRS-80 Model II.

26-4712. Avail. 12/30/81 ..... 249.00

#### Editor/Assembler, Series I

Lets you program in machine language for faster execution and more efficient memory use. Editor features automatic line numbering, line renumbering, single-letter commands, global search, plus the source text may be saved in disk files and source files may be loaded together in memory. Assembler features these options: "wait on error," "no symbol table," "list to printer" and "trial assembly", plus single-letter commands, labels up to six characters, and eight pseudo-ops. The Editor/Assembler.

#### **Program Editor**

This package can be used with any of our TRS-80 Model II languages. It consists of a powerful set of subcommands which simplifies programming. When you're inputting long applications programs, the Program Editor is a fast and efficient way to debug your program and get it running quickly. Editing commands allow you to easily modify, delete and insert characters or lines. Global search locates selected text strings throughout the program and makes changes automatically. Line numbers are optional, and tabs are set automatically for the requirements of each language. The Program Editor is supplied on a single diskette with deluxe binder and User's Manual. Requires 64K TRS-80 Model II. 26-4710 ......79.00

#### **Important Software Notice**

All Radio Shack computer programs are licensed on an "as is" basis, without warranty. Radio Shack shall have no liability or responsibility for any loss or damage caused or alleged to be caused directly or indirectly by computer equipment or programs sold by Radio Shack, including but not limited to any interruption of service, loss of business or anticipatory profits or consequential damages resulting from the use or operation of such computer or computer programs.



# TRS-80—THE MOST COLORFUL IDEA IN COMPUTING ANYWHERE!

· Vivid Color Graphics · Exciting Sound Effects

· Ready-to-Run Instant-Loading Program Paks

· Learn to Write Your Own Color BASIC Programs

TRS-80 Color Computer 4K RAM Color BASIC 39900

Enter the exciting world of computers with Radio Shack's versatile TRS-80 Color Computer! It's incredibly affordable and so easy to use. Just plug-in a handy, instant-loading Program Pak® and you're set for thrilling electronic fun. Battle starships in outer space, play football with the pros, even challenge the computer at chess, backgammon or checkers. It's great fun for the whole family!

But playing games is only the beginning. You can set up a budget and keep track of expenses, create an inventory file of household items, even teach your kids math or typing. Everyone will love discovering the many fascinating, helpful, and educational ways they can put their very own personal computer to work or play.

Want to learn to program? Our simple, entertaining "from the ground up" instruction manual will have you writing your own programs with vivid color graphics displays and exciting sound in no time. Simple commands let you quickly produce drawings, diagrams, charts, and more. Add a choice of eight brilliant colors, plus tones for music and sound effects. Save your programs and data on cassettes with an optional-extra recorder.

Compare the TRS-80 Color Computer to others selling for twice our price. You get a 4000-character internal memory that's expandable to 32,000 characters, and a Color BASIC language that includes data and string handling, dimensioned arrays, math functions, 9-digit

numeric accuracy, and it's even expandable to a professional-featured BASIC.

Expand with a printer, disk drives, and joysticks. There's a built-in RS-232 serial interface for easy telephone communications, too — just add a modem. You'll have access to a wealth of news and data by phone using TRS-80 VIDEOTEX software (see page 47).

The TRS-80 Color Computer, ready to attach to any TV, comes complete with instruction manuals. Program Paks sold separately. U.L. listed.

**4K Color Computer.** 26-3001 ...... 399.00

#### TRS-80 13"-Diagonal Color Video Receiver

 Save programs you've written and data on audio cassettes. When needed again, simply play the tape back. Features automatic recording level. Includes connecting cable. U.L. listed AC operation or 4

"C" batteries (not incl.). 26-1206 ......... 59.95

Joystick Controls for Added Versatility

24<sup>95</sup>

Give faster, more realistic action to some games! Use joystick instructions in your own programs, too! On-screen objects can be made to simulate 360° movement. Each has a "single-shot" button. 26-3008 . . . . . . Pair/24.95





Now Extended Color BASIC Brings Affordable High-Resolution Color Graphics to the TRS-80 Color Computer!

#### Kits to Upgrade Your Color Computer System

Computer upgrade kit prices do not include required installation charges

#### Editor/Assembler Program Pak

Now you can do assembly language programming on your TRS-80 Color Computer. This integrated text editor and assembler allows efficient development of 6809 software for storing on audio cassettes. In-memory assembly allows an object code to be assembled directly into memory. Debugger allows programs to be assembled and debugged quickly. 26-3250 ......39.95

# TRS-80 MAKES HIGH RESOLUTION COLOR GRAPHICS AFFORDABLE

Now you can create spectacular color graphics at an amazingly low price! Extended BASIC TRS-80 Color Computers are available in 16K or 32K models, or upgrade your existing TRS-80 color system. Get all the features of our standard model, plus more memory and the capability to produce highly detailed graphics with color and sound! It's a snap to create incredible drawings, charts, diagrams, even simple animation.

Just a few one-line commands make the creation of sophisticated shapes easy. For example, with the LINE command, you can draw a line between two specified sets of screen coordinates, make it the foreground or background color, draw a diagonal of a box, and fill in the box with either the foreground or background color. All that with just one command! Other commands include: CIRCLE—for drawing a full or partial circle with a specified radius at a specified coordinate. You can even change its shape! DRAW—produces a line or series of lines, and lets you specify the direction and angle. And PAINT fills a specified area with the color you pick.

Extended Color BASIC's fast execution time lets you quickly draw and connect fine lines, circles, rectangles, boxes, and much more. Five graphic modes with two color sets give you a screen resolution of up to 49,152 programmable screen pixel points (256x192). And you can choose from eight brilliant colors.

It's easy to add music and sound effects to your programs, too. The TRS-80 Color Computer can produce 255 separate tones using the powerful PLAY command. You can also put instructions for joystick functions into your programs with the JOYSTK command (requires joysticks). Use the joysticks like "paintbrushes" — one for the color, the other for movement — in addition to maneuvering objects on the screen. Plus, you can save programs and data on cassettes (recorder required).

The TRS-80 Color Computer with Extended BASIC is loaded with the dynamic features a serious programmer demands. You get a

screen format of 32 characters per line x 16 lines, multi-character variable names (two significant), string arrays up to 255 characters, full-featured editing, tracing, floating point 9-digit accuracy, trigonometric functions, user definable keys, specific error messages, and PEEK, POKE and USR commands to call machine-language subroutines. Extended BASIC computers come complete with an operator's manual, a 308-page tutorial manual on Standard Color BASIC, and a 214-page tutorial manual on Extended Color BASIC.

You can add accessories at any time! Connect a printer for a copy of programs and data—even a non-color printout of screen displays. Add disk drives for increased storage capacity and quick access to data. And the built-in RS-232 serial interface lets you connect a telephone modem and access news and information by phone using TRS-80 VIDEOTEX software (see page 47).

The Extended BASIC TRS-80 Color Computer is for entertaining, educational and personal uses, too. Just plug-in a Program Pak and you're ready to go—it couldn't be easier! Attaches to any television set. Includes manuals. U.L. listed.

**16K Extended BASIC Color Computer** 26-3002 599.00

#### **Specifications**

Microprocessor: 6809E 8-bit processor. Clock speed: 0.894 MHz Keyboard: 53-keys including up, down, right, left arrows, BREAK and CLEAR. Video Display: 16 lines of 32 upper case characters. Color graphics capabilities range. from 32x64, 8 colors to 192x256, 1 color and background color with 3 intermediate formats. Higher resolutions available through machine language, Extended Color BASIC, or Program Paks. (Some modes require 16K RAM.) Output connects directly to any standard color TV set (300 ohms) and includes video and sound. Memory: 4K, 16K, or 32K internal dynamic RAM. Color BASIC is in 8K ROM, 16K for Extended Color BASIC. Program Paks may contain up to 16K of additional ROM. Input/Output: 1500 Baud cassette (recorder optional). Connectors for two 2-dimensional joysticks with a pushbutton switch on each (optional). RS-232 serial I/O port. Real Time Clock: Accessible from Extended Color BASIC or machine language only. Power. 120VAC. 60 Hz, less than 50W. Dimensions: 31/2x133/4x143/4"

## NOW IT'S EASY TO ADD EXTENDED STORAGE CAPACITY

- Full 156,672 Character Storage Per Disk
- · Quick and Easy Access to Data
- Add Up to 4 Drives for over 626,000 Characters of Storage

First Drive
Complete with Controller
And Cable

599°°

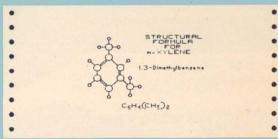
Now you can have increased capacity to store and quickly access complete programs and large amounts of data with your TRS-80 Color Computer — just add one or more Color Disk drives with Disk Color BASIC. Check the many advantages: plug-in Program Pak controller allows guick and easy attachment of disk drives to your Color Computer; does not require the user to understand an "operating system" or learn an alternate operation mode. Color Disk programming has been greatly simplified and some Model I disk commands have been retained (LSET, RSET, MKN\$ and CVN) to allow some Model I programs to be typed in without rewriting all disk routines. It's simply an enhancement of Extended BASIC (required). All standard Extended Color commands remain intact. Additional commands added by Color Disk BASIC include: CLOSE, DIR, FIELD, GET, INPUT, KILL, LOAD, LOADM, LSET, MERGE, OPEN, PRINT #, PUT, RENAME, RSET, RUN, SAVE, SAVEM, SYSTEM, WRITE, CVN, EOF, FREE, LOC, LOF and MKN\$. System utilities included are BACKUP, COPY and



FORMAT. Your first drive kit includes one 51/4" double-density, 35-track floppy disk drive, direct-connecting cable for up to 2 drives, plug-in Program Pak cartridge containing Color Disk BASIC, one blank 51/4" diskette, reference manual and operator's instructions. The Disk Operating system is completely contained in the Program Pak, so the full 156K-byte capacity is available for on-line storage. Included cable allows up to two drives on a system—an optional cable allows up to four drives. Requires a minimum of 16K memory and Extended BASIC. U.L. listed. Color Disk #0 Kit. 26-3022

Increase your storage capacity even further by adding up to 3 more drives. These are additional drives only, and must be used with 26-3022, above. The cable with 26-3022 allows one more drive—an optional cable is available to add up to three drives. For use as Color Disk #1, 2, or 3. U.L. listed. (Requires Disk #0).

26-3023 Available 11/1/81 .... Each 399.00



**Plugs Into Cartridge Port** 

Operating System in ROM Uses Only About 2K of Memory

#### Screen Print Program

This machine language program on cassette is designed to print the contents of the display memory if you are in one of the three two-color high resolution modes. Requires 16K and Extended BASIC. Can be used as a subroutine in your program or as a stand alone method of getting a hard copy of your high resolution screen. 26-3021 . . . . . . . . 4.95

#### Color Disk Drive Specifications

Drive: 51/4" mini floppy disk, 35 tracks, 18 sectors per track, 256 bytes per sector, double-density. Disk Speed: 300 rpm.

Seek Time: 30 milliseconds, track to track. Data Transfer Rate: 250K bits/sec.

Capacity: 156,672 bytes available to user per diskette. Weight: 8.4 pounds.

Size: 61/8x37/16x117/8"

Power Requirement: 120VAC, 60Hz, 36 V-A.

Color: TRS-80 Silver/Black.

### COMPLETE TRS-80 COLOR COMPUTER SYSTEMS



Home Entertainment And Control System

702<sup>80</sup>
Without TV

Here's a system the whole family can enjoy! Subscribe to Dow Jones and CompuServe and get the latest news. Control lights and appliances, too. Includes 4K Color Computer (26-3001), Joysticks (26-3008), Plug-'n-Power controller (26-1182) (control modules extra), TRS-80 Videotex Program Pak (26-2222), Direct-Connect Modem (26-1172), Cassette Recorder (26-1206). (Above system with 13" Color TV Receiver #26-3010, Only \$1101.80)



Student System With Printer

1002<sup>95</sup>

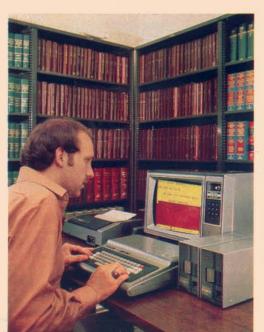
An ideal educational computer system. There are hundreds of uses — from learning computer programming to solving complex equations. We've included a 16K Extended BASIC Color Computer (26-3002), Line Printer VII (26-1167) and Cable (26-3020). (Above System with 13" Color TV Receiver #26-3010, Only \$1401.95)



Home Disk System And Printer

1601<sup>95</sup>
Without TV

A versatile, high-capability system. It's ready for high-volume home financial applications or entertainment with a wide range of stimulating electronic games for everyone. Includes a 16K Color Computer (26-3002), Color Disk Drive (26-3022), Line Printer VII (26-1167) and Cable (26-3020) (Above System with 13" Color TV Receiver #26-3010, Only \$2000.95)



32K 2-Disk Professional Color System

2550<sup>95</sup>
Without TV

A system that does it all—demanding technical programs, home and family financial planning, sophisticated color graphics. Included are a 32K Extended BASIC Color Computer (26-3003), two Color Disks (26-3022 and 26-3023), Line Printer VIII (26-1168) and Cable (26-3020). (Above System with 13" Color TV Receiver #26-3010, Only \$2949.95)

### ENTERTAINING SOFTWARE FOR YOUR TRS-80 COLOR COMPUTER

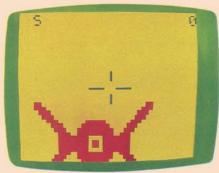


#### Instant-Loading - Just Plug In

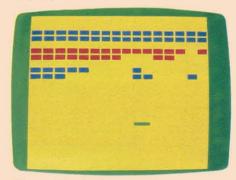
Just plug in a TRS-80 Program
Pak™ and turn the computer on —
it's that easy! In no time at all you'll
be a real "pro" at the game of your
choice. All of our exciting program
paks come in an attractive box,
ideal for gift-giving, and include a
comprehensive, easy-to-read
manual. And keep in touch with
your local Radio Shack outlet.
We've got many more exciting
games in development now.



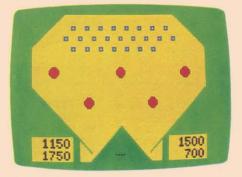
#### Checkers



#### Quasar Commander

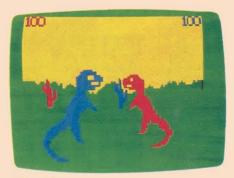


#### **Super Bustout**



#### Pinball

The classic arcade game! Allows up to 4 players to compete — 5 balls per player. Every 10000 points wins a bonus ball. Design your own board for easier or tougher games, or play the standard board. Features "Bumping the Table" and "Tilt." Joysticks control flippers and ball-eject plunger. Action sound. Minimum system, 4K RAM. (Requires Joysticks). 26-3052



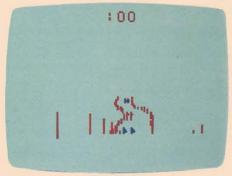
#### **Dino Wars**

An entertaining game for two players! Each player controls a dinosaur. If you aren't quick, you'll find yourself ruthlessly attacked by your opponent. Gain territorial rights. Only the strongest can take command. Minimum system, 4K RAM (16K RAM recommended for best results.) (Requires Joysticks.) 26-3057



#### Football

Join the pros! You quarterback the offense with a choice of five plays, your opponent calls the defense to protect against the run or pass, or sets to blitz the quarterback. Joysticks control the plays. Cross the end zone for seven points. Catch your opponent behind his own goal line to score a two-point safety. Minimum system, 4K RAM. (Requires Joysticks.)

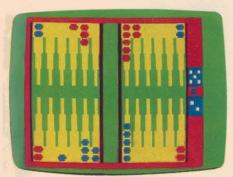


#### Skiing

### GREAT SELECTION—THRILLING GAMES FOR KIDS & GROWN-UPS



#### Chess



#### Color Backgammon

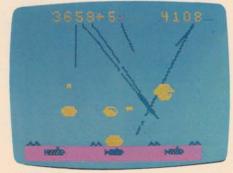
Backgammon's popularity has skyrocketed. And, for good reason—it combines strategy and luck (plus a little blood lust). Allows for vengeance, triumph, cold-hearted assaults and total reversals of the game's flow. And, it won't let you cheat either! Minimum system, 4K RAM. (Joysticks optional). 29.95



#### Space Assault

The object—get the highest possible score by eliminating invaders before they eliminate you! Your efforts will be thwarted as the enemy adds reinforcements, but if you survive long enough, you'll be aided by other defenders for a final stand against the hostile foe. Difficulty levels from beginner to expert. Minimum system, 4K RAM. (Requires Joysticks.)

26-3060 29.95

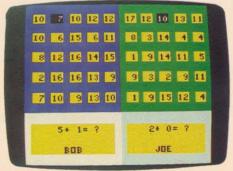


#### Polaris

Available Nov. 1, 1981



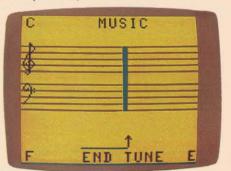
#### **Art Gallery**



#### **Bingo Math**



#### **Project Nebula**



#### Music

Ever had a tune in your head that you wanted to write down, but you didn't know musical notation? Now, you can learn to write melody lines and harmony as well. Experiment with timing, key signatures and tone. Save your compositions on a cassette recorder (optional). Minimum system, 4K RAM. 26-3151

### TRS-80 COLOR COMPUTER PROGRAMS—THE PROBLEM SOLVERS



#### Personal Finance

"How many dollars can I spend?"
"How much should I save?"
"Where does all my money go?"
Answer these and other important questions about your finances. Overcome bad money habits! 26 major expense categories: auto, gas, clothing, food, retirement, more. Minimum system. 4K RAM. 26-3101.....39.95



#### Color Scripsit™

A color word processing system with editing features like string search, replace, block move, copy, variable line widths, much more. Easy to learn. Text can be saved on tape (recorder optional — extra) or printed on optional printer. Minimum system, 4K RAM, 26-3105 Available 11/30/81



#### **Investment Analysis**

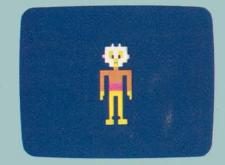
An aid to personal finance. Wide range of calculations to determine interest. loan payments, present values, bond yields, and stock yields. A great help in making financial decisions. A full accounting can be recorded on cassette (optional) for later use. Min. system, 4K RAM. 26-3102 Available 11/30/81 39.95



#### **Typing Tutor**



#### Color File

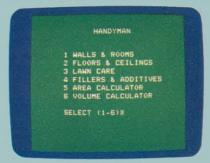


#### Color Computer Learning Lab

The best hands-on, self-teaching programming course we've ever seen! Learn Standard Color BASIC programming with the aid of your computer. Contains 200-page manual, 8 cassette tapes, with 30 lessons. Also teaches you how to apply what you've learned. Minimum system, 4K RAM, 26-3153



#### Spectaculator



#### Handyman

Makes a do-it-yourselfer's work easier! Program asks essential questions — dimensions, specifications, etc. — for a particular job. You just answer with appropriate input to learn how much lumber, insulation or paint is required. Includes comparison shopping feature. Min. system, 4K RAM, 26-3154

# **NEW LOW PRICE** ON THE TRS-80 THAT FITS IN YOUR POCKET!

- · Programmable in BASIC
- · Retains Programs and Data When Power is Off
- Standard Typewriter-Format Alphabetic Keyboard
- 10-Digit Numeric Accuracy

Only

Was 249.00

in Cat. RSC-5

**ACTUAL SIZE** ONLY 11/16x67/8x23/4" **ONLY 6 OZ. LIGHT** 

Radio Shack puts big computing power in the palm of your hand! Program the TRS-80 Pocket Computer in BASIC to solve problems, process data, and assist in your decision-making.

#### You Don't Have to be an Expert

If you've never operated a computer, don't worry, because calculations on this "pocketable" TRS-80 are as simple as using a common calculator — or you can use our convenient cassette software that's ready to run. The Pocket Computer has 15 built-in arithmetic functions you can put to work as soon as you press the "ON" key. You can work with large numbers up to 10 digits (mantissa) and 2-digit exponents. Using trig and angular functions is just as easy because they're also built-in.

#### Advantages of BASIC Programming

The real power of the TRS-80 Pocket Computer comes from it's ability to run programs, either yours or ours. It accepts your instructions on "how to do the job" in BASIC - an Englishbased computer language used by experts and beginners alike for a wide range of jobs. In



fact, Pocket Computer BASIC is very similar to TRS-80 Level I BASIC

You can program the Pocket Computer to do almost any of the smaller jobs (without graphics) that other TRS-80 microcomputers can do. Program it to file a stock portfolio, or to calculate business, engineering or scientific problems. Programs can be saved on cassettes (with the optional cassette interface and recorder), or left in memory for as long as needed. You can even get printed copies with our optional printer.

Multiple programs stored in memory can be identified with a single key label and run simply by pressing the specified key. Programs can accept words and names as data (strings of up to 7 characters) for storage in memory and even sort or search for them. The 1424 step memory is automatically partitioned for program and data storage, and there is a 26 data element memory and a 48-step reservable memory for storing frequently used functions.

Your programs can display prompts in plain English for inputs and display answers with explanations. An Edit and Debug mode make programming much easier than any program-

mable calculator. The keyboard includes 35 keys for alphabetic input and special functions. most having a dual function when used with the Shift key, plus a 20-key section for numeric input, numeric functions mode and editing.

Powered by 4 easy-to-replace, long-life mercury batteries (available at Radio Shack). Automatic power-off saves battery life if no entry is made after 7 minutes. Optional cassette interface holds the Pocket Computer, allows you to store or enter multiple programs and data 

#### Specifications

Microprocessors: Two 4-bit CMOS (one for arithmetic operation, one for BASIC interpreter and key-in). Keyboard: 57 keys alphanumeric. Display: LCD 24character 7x5 dot matrix plus 8 symbols (SHIFT, DEG, RAD, GRAD, DEF, RUN, PRO, RESERVE). Automatic scrolling plus manual playback of line longer than 24 characters. 80character input buffer. Memory: ROM, 11K bytes total (7K for BASIC interpreter, 4K for monitor, approx.) RAM, CMOS approx. 1.9K bytes total with automatic BASIC abbreviation for maximum memory conservation. Subroutines and FOR-NEXT Stacks: 4 levels, each, up to 15 levels of parentheses. Power Supply: Four type 675 mercury batteries, available at Radio Shack. Cat. No. 23-1521. Nominal battery life 300 hours

# COMBINATION PRINTER AND CASSETTE INTERFACE

149<sup>95</sup>

Shown With Pocket Computer (not included)

2:USING "#### #.#":RETURN 3:A=44.86258\*/ (273+T): RETURN 4: GOSUB 2: )? ";H:GOTO 51 PAUSE H 61 GOGUB 2: THPUT "T OWERTYUTO ZXCVBNM

· Prints Highly-Legible Type on Regular Paper

- Load and Store Programs on Cassette Tape
- · Fits Easily in a Corner of Your Briefcase
- · Comes Complete with Batteries and Charger

Now you can get a hard copy printout from your TRS-80 Pocket Computer! This affordable, dotmatrix impact printer is so compact, you can take it with you wherever you go, whether you're travelling, attending meetings, working out in the field - anywhere you need on-the-spot data. Just slip your Pocket Computer into the recessed port, and you're ready to print or list 16 characters per line at one line per second. Long program lines automatically "wrap around" to the next line.

If you write your own programs, a printed listing of the program is a real help in developing and debugging software. The printer uses inexpensive rolls of 13/4" wide cash-register-type paper and an inexpensive long-life ribbon. Printing is approximately one line per second, and you can print about 8,000 lines on one battery charge.

But that's not all. We've combined a cassette interface in the same portable unit! The cable is provided to connect a standard audio cassette recorder like our recommended Minisette-9 The recorder lets you save and load Pocket Computer programs and data on inexpensive cassette tapes.

With the Printer/Cassette Interface and a cassette recorder, your Pocket Computer becomes a complete, portable, and highly versatile computer system.

Controls include paper advance, power on/off, print on/off, and remote (for keying recorder "remote" jack). Also a "low battery" indicator. Comes complete with rechargeable batteries and a U.L. Listed AC adapter/charger - Prints about 8,000 lines per battery charge. Also includes three rolls of paper, easily replaceable ribbon cartridge, cassette cable and manual. 13/4x111/8x33/4" (with Pocket Computer installed). 

### **Pocket Computer** Carrying Case

Take your Pocket Computer and accessories anywhere in this padded vinyl case. For complete system portability, use one for the Pocket Computer and interface and one for the Minisette-9 cassette recorder. Pockets hold extra paper, pen, refer-

#### Low-Cost Cassette Interface

Connects your Pocket Computer to a cassette recorder for program or data storage. Includes cable with plugs for the Minisette-9 and other compatible recorders. Requires 3 "AA" bat-

#### Specifications

Printer: 5x7 Dot-Matrix Impact Printing. Printing Capacity: 16 Columns Per Line with Automatic Wraparound. Print (and Paper Advance) Speed: Approximately One Line Per Second Paper. Radio Shack Catalog No. 26-3506. 125/32" Wide, 31/32" Diameter (Maximum). Power Source: Built-In Rechargeable Ni-Cad Battery. Battery Capacity: Approx. 8,000 Printed Lines - Charging Time Approx. 15 Hours. Power Consumption: 4.8V, 1.84W (DC) Charger/Adapter Included. U.L. Listed. Weight: 0.90 Pounds. Accessories: 3 Rolls of Paper, Ribbon Cartridge, Cassette Connection Cable

#### **Our Recommended Compact** Minisette®-9 Recorder

Save and load your own programs on cassette with the portable Minisette-9 recorder. Features Auto-Stop, tape counter. LED record mode/battery con-

dition indicator, AC and DC adapter lacks, more, Requires 4 "AA" batteries. 15/16x73/16x49/16". 14-812 .....

AC Adapter, U.L. listed. 

#### Extra Printer Paper

For Pocket Computer Printer. 26-3506 ..... 6-Pak/1.75

#### Replacement Printer Ribbon

Spare fits easily in printer case, 26-3507 ..... 2.75



### **READY-TO-RUN TRS-80 POCKET COMPUTER SOFTWARE**



#### Civil Engineering



#### Aviation

A complete flight management system! Calculates altitude, airspeed, headings, Mach number, off-course correction and drift angles, more. Ideal as replacement or double check of sliderule computers. 26-3513 .......24.95



#### Real Estate



#### **Electrical Engineering I**



#### Games Pack I

Fast-paced fun you can enjoy just about anywhere! Includes Cannibals and Missionaries, NIM for two players, Space Ship Landing, Treasure Hunt, Craps, more. 26-3515 ..... 14.95



#### **Business Finance**

A great helper in decision-making! Includes loans, annuities, bond price, yield, compound interest, depreciation, days and dates, internal rate of return, future value and much more.

26-3517 19.95



#### Surveying



#### Games II



#### Personal Finance



#### **Business Statistics**

Ideal for business, marketing, and sales decisions. Includes seasonal variation, normal T/F distributions, descriptive statistics, forecasting, multiple regression, more. 19.95



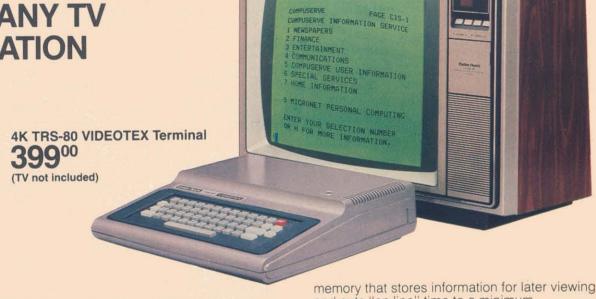


#### Math Drill

# **NOW YOU CAN TURN ANY TV** INTO A 2-WAY INFORMATION RETRIEVAL SYSTEM

Radio Shack's exclusive TRS-80 VIDEOTEX Terminal works with your telephone and TV set to give you instant access to national information networks like Dow Jones and CompuServe (see next page). In fact, we include a free hour on each of these networks - manuals and your own password are included for immediate use. TRS-80 VIDEOTEX Terminals may also be used with the growing number of information networks set up specifically for farmers, employees, and other special interest groups

To use your TRS-80 VIDEOTEX Terminal, simply plug in a telephone cord and connect to the antenna terminals of your TV. Now the information you want is just a phone call (usually local) away. In many cases, you'll see important headlines displayed on your TV screen before you'll read them in your newspaper! In fact, many top newspapers already have special "electronic editions" that you can access on your TRS-80 VIDEOTEX Terminal.



A 53-key alphanumeric keyboard allows for fully interactive communications. You "talk" to the information service's computer, or "data base," using simple, plain-English commands. To save time you can often request information using abbreviated codes.

TRS-80 VIDEOTEX Terminals feature an internal

and cuts "on line" time to a minimum.

TRS-80 VIDEOTEX Terminal with 4K Memory. Stores up to 8 pages of information in memory. 31/2×133/4×143/4" U.L. listed, 26-5000 ... 399.00

TRS-80 VIDEOTEX Terminal with 16K Memory. 

### TRS-80 VIDEOTEX Network System Lets Any Organization Establish an Information Network

A Radio Shack breakthrough! The TRS-80 VIDEO-TEX Network System is a complete, low-cost data communications network designed for commercial, corporate and private-interest applications. Now any organization can provide newsletters, industry news, medical or agricultural reports virtually any information that requires up-to-theminute status — to any member (or customer) equipped with our inexpensive TRS-80 VIDEOTEX Terminal. The System includes a Data Base to input and update information, a Store and Forward System to retrieve and forward desired information, and a Multiplexor that allows the System to handle up to 16 phone calls simultaneously. For complete information, contact our Director of Special Marketing, Radio Shack, 1600 One Tandy Center. Fort Worth, Texas 76102.



# GET "INSTANT INFORMATION" IN YOUR HOME OR OFFICE



- Up to the Minute News
- · AP Wire Service
- Financial Information
- Electronic
- TRS-80 News Bulletin

#### CompuServe® Information Service

Your TRS-80 VIDEOTEX Terminal or software package puts you immediately "on-line" to this exciting information service for one FREE hour. Through our exclusive agreement with Compuserve, you can access a continually growing library of information.

#### Read "Electronic Newspapers"

CompuServe offers local, national and international news (read the headlines before they've gone to press!), plus weather and sports from The New York Times, The Washington Post, The San Francisco Chronicle, The Virginian Pilot/Ledger Star, The Columbus Dispatch, The Minneapolis Star Tribune and the Associated Press newswire service. Five more newspapers will soon be available.

#### **Enjoy Innovative Services**

Access historical information and updates on over 32,000 stocks, bonds and securities. Or take advantage of the home and educational reference services. Just for fun, you can also play exciting computer games! Radio Shack's own Bulletin is continually updated with news and information of interest to any TRS-80 owner. And thanks to the two-way capability of TRS-80 VIDEOTEX, you can even communicate with other subscribers nationwide via an "electronic mail" service! You'll even get 128K words of disk storage and 16K of RAM workspace for your own use. All this is available at Compu-Serve's low hourly rate. (Additional charges for some special services.)



### Low Cost TRS-80 VIDEOTEX Packages for Computers

TRS-80 software allows access to VIDEOTEX information using your computer and an optional-extra telephone interface. Simply dial a phone number (usually local), press a few keys and the desired information will appear on your screen. Each package includes a TRS-80 VIDEOTEX software manual, CompuServe manual, ID number and password, and a Dow Jones manual and ID number. All CompuServe ID numbers and passwords are separate and different from those of Dow Jones. You also get one free hour on both the Dow Jones and CompuServe networks. After that, you'll be billed at their low hourly rates.

billed at their low flourly fates.
TRS-80 Model I/III Package. 26-2220 29.95
TRS-80 Model II Package. 26-2221 29.95
TRS-80 Color Computer Package.
26-2222
Apple® II Package. Includes VIDEOTEX soft-
ware for Apple II and Apple II + .
26-2223
"Dumb" Terminal Package. No software
included. Intended for use with existing std. ter-

minal software, 26-2224 ...... 19.95

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- Detailed
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#### Dow Jones® News/Retrieval

TRS-80 VIDEOTEX provides your "direct line" to Wall Street . . . including one FREE hour on this outstanding financial service!

#### Brings You Up-to-Date Market Quotes

Dow Jones brings you current market quotes (with the minimum 15-minute delay required by the exchanges) on over 6,000 common and preferred stocks and warrants, corporate bonds, and options traded on the four major U.S. stock exchanges. Nasdaq Over-The-Counter stocks are updated hourly, and selected U.S. Treasury notes, bonds and mutual funds are updated daily.

#### **Complete Historical Information**

Detailed financial statistics compiled by Media General Financial Services — including stock price, volume, and fundamental financial indicators — are available for all New York and American Stock Exchange traded companies plus 800 Over-The-Counter traded Companies. You can go back as far as 1978 for quotes, with quarterly, high, low, close and volume summaries. You can also get summaries by month from 1979 and for the most recent 24 trading days.

#### Keep Up With Current Events

You also get the news, as recent as 90 seconds and as far back as 90 days, plus the Dow Jones Averages updated every half hour, from the Dow Jones News Service, or "Broadtape," and special "Electronic Editions" of The Wall Street Journal and Barron's.

# Radio Shack Has What It Takes to be Your Computer Company

**AVAILABILITY!** The complete line of TRS-80 business computers and accessories is available at over 400 Computer Centers and selected Radio Shack stores. In addition, over 8000 Radio Shack stores and dealers worldwide stock our "popular priced" TRS-80 products.

**COMPUTER CENTERS!** Over 180 nationwide, staffed by professionals who can help you select the products you need.

**LEASING!** Available for the TRS-80 Model II or any system valued over \$1500 (excluding software). We offer a 39-month lease plan, with a 90-day warranty period you can use to evaluate your system.

**SOFTWARE!** Radio Shack has a library of ready-to-run programs that let you put your TRS-80 to work immediately — even if you've never operated a computer before. More programs are available for TRS-80s than any other personal computer in the world!

**EXPANDABILITY!** TRS-80 computers have been designed with the future in mind. You can expand your system as your requirements change and grow—and you never have to buy "more computer than you need."

**VOLUME PURCHASES!** We have two departments to handle RFQ's and bid invitations. Send your requests to Director of Special Marketing, 400 Atrium, One Tandy Center, Fort Worth, Texas 76102.

**SERVICE!** Over 160 company-operated repair centers nationwide service only *our* computers. Radio Shack also offers "In Shop," and "On-Site" service agreements in most areas.

**TRAINING!** Computer Centers offer a variety of classes for everyone from beginners to advanced programmers.

**TRS-80 NEWSLETTER!** This monthly publication is packed with operating tips, product news and tutorials, plus programs and ideas from TRS-80 users.

**TOLL-FREE HOTLINE!** Help is just a phone call away. The experts in our Computer Services Department will assist you with any TRS-80 related question you might have.

Make Radio Shack your computer company!

There's a Radio Shack Store, Computer Center or Authorized Dealer Near You!

Radio Shack

The biggest name in little computers [13]

A DIVISION OF TANDY CORPORATION • FORT WORTH, TEXAS 76102
OVER 8100 LOCATIONS WORLDWIDE

Prices shown in this catalog may vary at individual stores and dealer

