

# Radio Shack®

## Creating New Frontiers in Microcomputing



TRS-80 COMPUTER CATALOG NO. RSC-4 • 1981







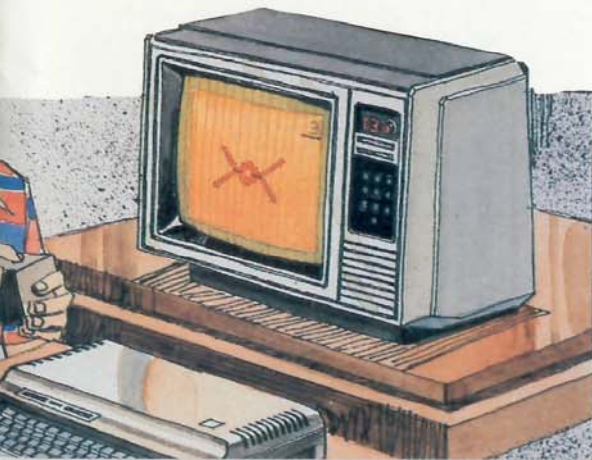
# Important Things to Know About TRS-80 Computers

## What is a computer?

A computer is a tool for managing data. It can work 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 can logically evaluate information given to it, and act on its own findings. It can store huge volumes of data for future use, reference and updating, and even "converse" with its operator. A computer is an extension of the human brain. It is to the mind what the lever is to the arm—a machine capable of multiplying effectiveness. It can free you from tedious, repetitive work which does not require judgement. It can provide facts and figures with lightning speed, giving you more time to exercise your judgement thoughtfully.

## What can a TRS-80 computer do?

Computers are used in the business world to do bookkeeping, billing, payroll, inventory control, mailing lists and fast analysis of data. Because computers work with alphanumeric information, they can sort a mailing list by name, address or other criteria, spot slow-moving inventory items, write orders based on sales trends—or simply catalog your stamp collection. Computers can become tutors, lab assistants, word processors and even entertainers that play games from chess to football to space war.



## TRS-80 is a breakthrough

TRS-80s can perform all those functions and more. And this year we've introduced three new exciting computers for a total of five great systems—each offering more power-per-dollar than anything else available today. The chart on page 4 will give you a feeling for the relative capabilities and applications of each TRS-80 system.

## Computers for Business

Although thousands of Model I systems are used commercially, some applications require more memory and speed than our lower priced TRS-80s. That's why we designed and built the TRS-80 Model II. It's a "strictly business" computer with twice the speed of Model I and a memory storage of up to 2-million characters. It compares favorably with computers like the IBM 5120—but costs about half as much! Available on our exclusive Leasing Plan too.

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

Each TRS-80 comes ready to be programmed from a prerecorded cassette tape, a disk or its own keyboard. A "program" is a set of step-by-step instructions telling your TRS-80 what you want it to do. There are over 100 ready-to-use programs in our fast-growing library—covering personal, educational, business and entertainment applications. If you'd like to learn to write your own programs, Level I is an easy-to-learn, plain English BASIC programming language. The Level I users manual includes a beginner's course in BASIC that'll have you "talking" to your computer in no time.

## What about support?

We've got you covered—with over 7,000 locations supporting TRS-80. In the USA alone, there are more than 6,000 Radio Shack stores and Dealers where you can order TRS-80 equipment. In addition, we have 85 Radio Shack Computer Centers staffed with experts

who will assist you with sales, service, advice and even classroom training. Also, 120 company-operated Service Centers service only our own TRS-80 systems. Ask for information about Carry-In and On-Site Service Agreements in your area. There's even a special "Hotline" phone number for TRS-80 owners. Owners also receive our Microcomputer Newsletter which is loaded with up-to-the-minute information. No computer is more widely supported—anywhere!

## TRS-80 expandability benefits you

This means you can enjoy the TRS-80 system you need right now, without paying for more computer than you need. Later, as your needs grow or change, you can add more capacity through plug-in accessories. Our goal: To sell you what you need, not more, not less.

## TRS-80 goes to school

More TRS-80 systems are used in classrooms than any other type of computer. And Radio Shack supports educators with teacher guides, course materials, and our exclusive Network Controller (see pages 10 and 11). Our National Bid Department will be happy to quote on bid invitations and RFO's.

## Over 200,000 TRS-80s sold

When you choose TRS-80, you are choosing the most popular computer in the world! Now, Radio Shack offers you the broadest line of personal and small-business computers anywhere, for every use, every need, every budget. You can't go wrong with a TRS-80.



# Pick the TRS-80 That Meets Your Computing Needs



## TRS-80

## Description

### Model II

- RAM-Based BASIC Interpreter & TRSDOS Included
- Memory—32 or 64K
- Storage—1 to 4 8" Disk Drives (500K each)
- Parallel Printer Port
- Two RS-232C Serial Ports
- Processor—Z80A; 4 MHz
- 80x24 Screen

Model II is our top-of-the-line small-business computer. It's powerful, has enormous storage capacity, and operates at twice the speed of Model I. It's loaded with features, yet priced lower than many similar systems. Radio Shack offers inexpensive business-related software for accounting functions, plus SCRIPSIT Word Processing, that lets you put Model II to work immediately. For your in-house programming, Model II offers languages including ASSEMBLER, COBOL, FORTRAN, a BASIC interpreter and a BASIC compiler. See pages 18-26.



### Model III

- Level I or Model III BASIC in ROM
- Memory—4 to 48K
- Cassette—1500 and 500 Baud
- Parallel Printer Port
- Expansion—RS-232, Up to 4 5 1/4" Disk Drives, (175K Each)
- Processor—Z80; 1.8 MHz
- 64x16 Screen

Model III is an exciting new personal and small business computer. It's completely self-contained in a desk-top unit. Like Model I, it's fully expandable—you can start with a 4K Level I system and let it grow with your needs. There's plenty of room inside for more memory, communications interface, and 2 double-density disk drives. And best of all, most Model I software will run on Model III, so there are already hundreds of applications you can put to use! Available with either Level I or powerful Model III BASIC. See pages 5-9.



### Model I

- Level I or Level II BASIC in ROM
- Memory—4 to 48K
- Cassette—250 or 500 Baud
- Expansion—Expansion Interface, RS-232, Printer Port, Up to 4 5 1/4" Drives (89K Ea.)
- Processor—Z80; 1.78 MHz
- 64x16 Screen

Model I is the original TRS-80 and it's still going strong. One reason is its stunning range of applications! Radio Shack offers many different types of software packages, including Inventory Control, Payroll, General Ledger, and Accounts Payable. We have programs for specialized industries as well, such as Real Estate. You can also choose from any number of personal programs and games. We even offer Word Processing, with SCRIPSIT. And don't forget the Model I's tremendous expandability! It's one of our most economical computers yet it can grow with your needs. See pages 12-14.



### Color Computer

- Color BASIC or Extended Color BASIC in ROM
- Memory—4 to 16K
- Cassette 1500 Baud
- RS-232 Serial Port
- Expansion—Joysticks, Printers, Disk
- Processor—MP 6809E
- 32x16 Screen

TRS-80 goes color! This is a complete, all-around personal computer. Instant-load Program Paks cover a wide range, from Personal Finance to fast-moving action games. The Color Computer offers vivid color graphics for exciting visual displays. Best of all, the Color Computer attaches easily to any color TV. It programs easily in Color BASIC or the very powerful Extended Color BASIC. More expansions, even disk storage, will be available soon. See pages 28-31.



### Pocket Computer

- BASIC Language in ROM
- Memory—1.9K, Continuous Memory
- Storage—Cassette
- Expansion—Cassette Interface
- Processor—Two-Chip Set
- 24-Character LCD Display

The little big breakthrough! Radio Shack announces a major advance in computer technology—a fully-programmable personal computer that fits in the palm of your hand! The Pocket Computer is battery-operated, and goes anywhere in a coat pocket or briefcase. Load programs from cassettes, or write your own, using a modified, feature-packed BASIC language more powerful than that of some desktop computers. Programs and data remain in memory even with power "off". An invaluable tool for today's professional and businessman. See pages 32-34.



# The New TRS-80 Model III



Expansion covers simulate disk drives in non-disk units

## 4K Level I

Radio Shack introduces the exciting new computer for the 80s. Designed in the great TRS-80 tradition, the Model III is beautiful, functional, expandable and affordable. Since memory can range from 4 to 48K RAM, Model III can fill a wide range of needs. Your system can be expanded so easily, it's hard to "outgrow" the Model III. You can start with the popular Level I "learner's" language, and later expand to the very powerful Model III BASIC with 16K memory. And there's room inside to add the RS-232 serial board, plus 1 or 2 disk drives. Simply bring your Model III into your local Radio Shack store, dealer, or Computer Center for fast, easy installation of upgrade kits. Of course you may also add external options, like a printer, plotter, or up to 2 more disk drives.

4K Level I BASIC is the same as Model I BASIC (see page 9), but with printing commands included. Model III BASIC has all the features of Model I Level II BASIC (see page 9) plus a lot more. 14K ROM includes upper and lower case ability plus 2-speed cassette operation, 500 baud (Model I compatible) and 1500 baud for 3 times faster tape loading. A real time clock, expanded "special" character set, printer/video routing, keyboard-controlled screen printing, repeating keys, and software for the optional RS-232 are all built in.

Virtually all our software and most non-Radio Shack software for the Model I is compatible with the Model III, giving a selection of applications. Each Model III includes a 65-key keyboard with a 12-key datapad, top-mounted recessed "reset" switch, hidden side-mounted

AC switch and monitor controls, 12" built-in high-resolution monitor, back-mounted cassette jack, printer connector and Model III bus. 12½x18⅞x20½". U.L. listed AC operation. Model III, 4K RAM, Level I. 26-1061  
Model III 16K RAM, Model III BASIC. 26-1062

## Accessories

Model III System Cover. 26-0506  
Model III BASIC and 16K RAM kit. 26-1121  
16K RAM Memory Kit. 26-1102  
CTR80A Recorder and Cable. 26-1206  
RS232 Board (includes cable). 26-1148



## Model III Desktop Business Computer



### The System That's All Business

Here is a complete business system (except for your choice of printers) in a beautifully-styled, one-piece desktop housing. It includes a high-resolution, 12-inch video display with upper and lower case characters, typewriter-style keyboard, 12-key data pad, and two high-capacity disk storage units. Also included are a parallel printer port and a RS-232C serial port. Our Desktop Business Computer is ideal for many business applications. As a management tool, our Visicalc program allows fast and accurate "What if..." calculations. With Profile, you can catalog your data and print reports the way you want them. Add a printer, and do Mailing List Management, Inventory Control, Payroll, Billing, Payables, or General Ledger—and we have the software to do it! And with our SCRIPSIT software and the proper printer you can have a time and labor-saving word processing system, too!

You'll get double-density disks, with 178,000 bytes of memory storage per disk. For added versatility, you can convert the single-density Model I disks. So

this powerful version of Model III is directly software compatible with most Model I programs. And, of course, you can add any of our Line Printers or Word Processing Printers to the parallel printer port.

Although this system includes 2 built-in disk drives, you can add 1 or 2 more, for a total of about 670,000 bytes of storage space.

The RS-232 Serial Communication Interface (optional on the Model I) comes built into the Desktop Business Computer. Just add our Telephone Interface II and you can then "talk" to other computers—anywhere! (See page 35 for Videotex software.) And various serial accessories can also be used. Just connect a cable and you're all set—no interface needed!

The system includes all of the TRS-80 Model III features and comes complete with a comprehensive programming manual and TRSDOS.

**Desktop Business Computer.** 26-1063

**Model III RS-232 Cable.** 26-1408

### Model III TRSDOS

The "TRSDOS" Disk Operating System is necessary for disk operation "housekeeping." It includes numerous commands plus utility subroutines that are necessary for disk file maintenance.

Model III TRSDOS has most of the Model I system commands plus many features that are found in our top-of-the-line Model II. A few of its highlights are: BUILD and DO that allow a series of commands to be executed automatically when you "power-up," taking you directly into your applications program. HELP will give you detailed information on the use of a specified command. SETCOM initializes the serial port for data communications. TIME and CLOCK will let you set and access the real-time clock. CONVERT makes the vast majority of single density Model I software compatible with the double density Model III. LIST makes it easy to examine any disk file on your screen or printer. Detailed error messages are at your fingertips with the ERROR command.

Model III TRSDOS comes with Disk BASIC and a comprehensive manual.



### Disk Expansion Is Easy For Your Model III

Any Model III can easily be expanded to the top-flight 32K Desktop Business Computer by adding the RAM and ROM on page 5 and Mini-Disk drives.

The Model III disk system stores and allows immediate access to the large amounts of data and programs you need for accounting, inventory control, mailing lists, and other jobs. Up to 4 drives can be attached, furnishing from 134,000 to about 670,000 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 134K of user storage space. Certain system information and a directory are required on each diskette, leaving 178,944 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.

**Disk Drive Kit 1.** Includes TRSDOS and Disk BASIC. (Requires installation.) 26-1162

**DOS Diskette.** 26-312

**Disk Drive Kit 2.** (Requires installation.) 26-1163

**Disk Drive 3 (External).** 26-1164

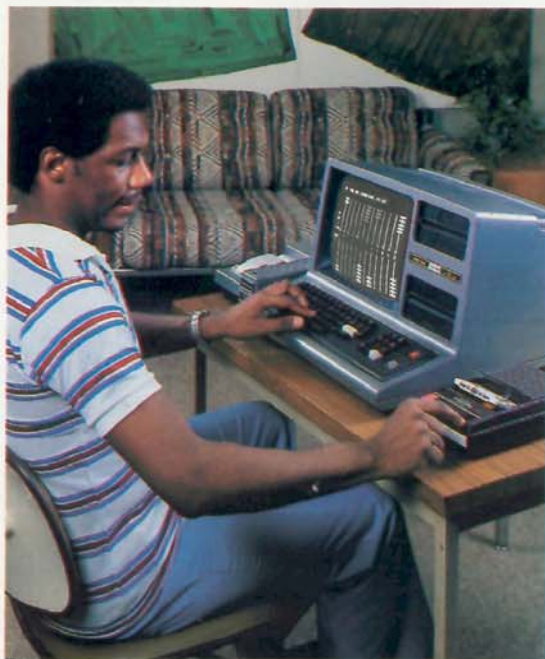
**Disk Drive 4 (External).** 26-1161



# There's a TRS-80 Model III Computer System for Every Need

## "Starter" System

Here's an ideal computer system for the beginner for which you'll find hundreds of uses—from education to learning computer programming to entertainment. We've teamed with the 4K Level I (26-1061), the Quick Printer II (26-1155) and Printer Cable (26-1406) to provide a listing of your programs, in addition to data 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.



## "Word Processing" System

Our Scriptit software (26-1563) and Desktop Business Computer system (26-1063) give you low-cost, full-feature 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 "originals" you need, error-free and to your format, with the high-quality dot-matrix Line Printer IV (26-1159) at 50 characters per second. The Printer Cable (26-1415) is included. Typing will never be the same!

Approximately 310,000 Free Bytes of Disk Storage



## "Engineer" System

For those "technical-type" applications, the 16K Model III (26-1062) with powerful Model III BASIC is for you. This system offers easy programmability, plus advanced math features you'll need to cut technical computations down to size. The Line Printer II (26-1154), and Printer Cable (26-1415), provides printed output at 100 characters per second. You can save your programs and also data on cassette tapes, then re-enter them using the CTR-80A Cassette Recorder (26-1206). Plus, you can expand to disk storage at any time.



## "Business" System

The Desktop Business Computer (26-1063), combined with our new Line Printer VI (26-1166) and Printer Cable (26-1401), make a powerful combination! You can add Model I and III software for General Ledger, Payables, Receivables, Payroll, Inventory Control, and more. With the System Desk (26-1305) and Universal Printer Stand (26-1308), it forms an ideal total system for the small business office. And doing business was never so affordable!

Approximately 310,000 Free Bytes of Disk Storage





# TRS-80 Library of Ready-to-Run Model I & III Software

## Business Management Software

**Visicalc<sup>TM</sup>.** A professional management and planning tool. Visicalc takes the place of a calculator, pencil, and sheet of paper in solving problems such as sales projections, income taxes, financial ratios, engineering changes, and many more. You are able to set up a particular application and as new data is entered it recalculates and displays the up-dated version throughout the program. Editing features let you change, insert or delete titles, numbers or formulas; and formatting commands let you set up your own charts and tables. (32K, 1 Disk). 26-1566

**Profile.** Stores information of any kind. Keep track of names and addresses, accounts, records, or even personal references. You can specify both display and printout formats. Powerful editing features make changes easy. Files can be interactive with simple BASIC programs. (32K, 1 Disk). 26-1562

**Microfiles.** Designed for maximum flexibility and speed. Any type of information can be stored, sorted, retrieved, displayed, and printed quickly and easily. Simple sentences and single-key instructions are used to direct the computer operations. The program will store different types of printing formats that you design to fit your specific requirements. (32K, 1 Disk). 26-1565

**Advanced Statistical Analysis.** User-oriented data analysis system ideally suited for applications in business, education, administration. Programs for tape and disk data files, random sample, descriptive statistics, histogram, frequency distribution, analysis of variance, T-test for matched pairs, correlation and linear regression, multiple linear regression, time series analysis, and Chi square analysis. (16K Level-II; Model-III BASIC; 32K, 1 Disk). 26-1705

**Versafile.** A filing system for almost everyone! Perfect for applications like business name and address files. Versafile responds with facts that match "keywords" in your question. If the information isn't on file, a "global search" is made to find the "most similar" information. Multiple file "kill" capability makes deletions as simple as data entry. (32K, 1 Disk). 26-1604

## Word Processing

**Scriptit/Disk.** Enter and edit text on video screen, save text on disk, output formatted copy to printer. Buffered input for high speed typing without dropouts. Tabs, horizontal and vertical centering, formatted headers and footers, automatic page numbering, block manipulation, more. (32K, 1 Disk). 26-1563

**Scriptit/Cassette.** As above, but with text storage on tape. (16K, Level II or Model III BASIC). 26-1505

**Note:** Scriptit works in upper/lower case with Model III, and in upper case only with Model I, or in upper/lower case with the 26-1104 Kit installed.

## Mailgram<sup>®</sup>

Send messages from your TRS-80 directly to a Post Office near your addressee via Western Union Electronic Mail Inc. for delivery in the next business day's mail. (RS-232, Coupler, and 16K Level II or Model III BASIC). 26-1564

<sup>®</sup> Mailgram is a registered trademark of Western Union Telegraph Co.

## Business Software (Disk)

**Disk Mailing List.** Selective printing from one of seven key fields. 600 names per data diskette or 200 names on system diskette. (32K, 1 Disk—Model I Only). 26-1551

**General Ledger I.** 240 entries per session and 1830 per month with up to 100 accounts. (32K, 2 Disk). 26-1552

**Inventory Control.** Retail inventory record keeping and control of up to 1000 items. Tracks vendors, backorders, order dates, out of stock and on-order items. (32K, 2 Disk). 26-1553

**Accounts Payable.** Prints checks, register, cash flow analysis and summary of activity for posting General Ledger. 75 vendors 1000 transactions, or 200 vendors 800 transactions per month. (32K, 2 Disk). 26-1554

**Accounts Receivable.** Prints aged reports, monthly statements, and summary for posting General Ledger. 300 customers 1000 transactions or 100 customers 2000 transactions per month. (32K, 2 Disk). 26-1555

**Disk Payroll.** Prints payroll checks and W-2 forms for any state. 100 employees and 14 user-defined earnings and deductions categories. (32K, 2 Disk). 26-1556

**Concrete Take-Off.** Foundation and structural cost estimating for contractors. Calculates material requirements, labor component, productivity, and waste. (32K, 2 Disk). 26-1557

**Business Mailing List.** Fast sort in Zip Code or any other sequence. 990 names with 32K, 2970 names with 48K, 4 disk. (32K, 2 Disk). 26-1558

**Manufacturing Inventory Control.** Raw materials inventory for 1900 items. Up to 20 finished goods per diskette. Prints bill of materials, material requirements, more. (32K, 2 Disk). 26-1559

**Fixed Asset Accounting.** Control over fixed asset depreciation. (32K, 2 Disk). 26-1560

## Business Software (Cassette)

**Level I Payroll.** Calculates paychecks, including tax and other deductions. Stores year-to-year and quarter-to-date information for 11 employees. (4K, Level I). 26-1501

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

**Level II Cassette Payroll.** Prints checks and register. Supports fixed-percentage state and city tax. 16K holds 15 employees, 32K holds 75 and 32K Disk holds 40. (16K, Level II or Model III BASIC). 26-1504

**In-Memory Information.** Computerized card filing system. (16K, Level II or Model III BASIC). 26-1508

**Real Estate I.** Stepped income analysis, compound interest, internal rate of return, resale price. (16K, Level II or Model III BASIC). 26-1571

**Real Estate II.** Mortgage analysis. (16K, Level II or Model III BASIC). 26-1572

**Real Estate III.** Detailed property income calculations, appreciation/depreciation estimates. (16K, Level II or Model III BASIC). 26-1573

**Real Estate IV.** Ellwood analysis, overall capitalization rate, graphic analysis, sensitivity analysis. (16K, Level II or Model III BASIC). 26-1574

**Surveying.** A series of 3 program tapes that quickly enable the surveyor to convert field measurements into final dimensions and coordinates. (16K, Level II or Model III BASIC). 26-1577 (Available 11/30/80)

## Languages

**Tape Editor/Assembler.** Standard Zilog Mnemonics for assembly language combined with the convenience of a text editor. For advanced programmers. Cassette only. (16K, Level II—Model I only). 26-2002

**Tiny PASCAL Tape.** Great introduction to structured programming. Fixed point, non-array version of PASCAL. (16K, Level II). 26-2009

**FORTTRAN.** Compiler, editor, linking loader, library. (32K, 2 Disk). 26-2201

**Macro Editor/Assembler.** Assembler, linking loader, editor, cross reference. (32K, 2 Disk). 26-2202

**COBOL.** Most popular business programming language. Many existing programs can be run with little modification. Subset of ANSI '74 with single-pass compiler, multi-key ISAM, and interactive DEBUG. (48K, 2 Disk). 26-2203 (Available 11/30/80)

**Compiler BASIC.** Powerful extension of BASIC cuts program execution time. Features single-pass compiler, cross reference, single-key ISAM, and easy debugging. Note: This compiler BASIC is not compatible with Level II or Model III BASIC and is intended for program development and not for conversion of existing software. (48K, 2 Disk). 26-2204 (Available 12/15/80)

## Utilities

**Double Precision Subroutines.** Obtain 15 digit accuracy with sine, cosine, arctangent, natural logarithm, exponential, and square root functions. (16K, Level II or Model III BASIC). 26-1704

**T-Bug.** Machine language monitor. For advanced programmers. (4K, Level I or 16K, Level II—Model I only). 26-2001

**Renumber.** Renumber all or part of BASIC programs. (16K, Level II Model I only). 26-2004

**Cross Reference Utility.** Build a cross reference table for any BASIC program. Listing by variable, reserved word, or line number. (16K, Level II Model I only). 26-2008

## Personal

**Cassette Portfolio.** 4 programs on 2 tapes: transactions, summary, options, and index. Gives you record keeping on 20 stocks, 10 bonds, 5 funds, and 10 options. (16K, Level II). 26-1506

**Standard & Poor's STOCKPAK<sup>TM</sup> System.** Complete stock analysis and portfolio management package. (32K, 2 Disk). 26-1507



**Personal Finance Level I.** Balance checkbook, maintain monthly budget. (4K, Level I). 26-1602

**Budget Management.** Up to 60 budgeted accounts with 25 cash expenses, 20 savings transactions, 50 checks per month. Prints various reports. (16K, Level II; Model III BASIC; or 32K, 2 Disk). 26-1603

**Statistical Analysis Level I.** Random sample, histogram, descriptive statistics, T-test, simple correlation, linear regression. (4K, Level I). 26-1703

**Trendex Stock Package.** A sophisticated statistical analysis that determines probable trends for a variety of data including stock prices. Easy-to-use, fully documented. 26-1509

## Games

**"Quick Watson" Deduction Game.** (4K, Level I; 16K, Level II; or Model III BASIC). 26-1802

**Level I Games Pack.** Checkers, Hammurabi, Draw, Star Pilot, Random Tic-Tac-Toe, Space Taxi. (4K, Level I). 26-1805

**Casino Games Pack.** Craps, Keno, Slot Machine, Roulette, Wheel of Fortune, Baccarat. (16K, Level II or Model III BASIC). 26-1806

**Microchess.** 3 levels of difficulty. For beginners or advanced players. (4K, Level I; 16K, Level II). 26-1901

**Micro Music.** Five octave range with sharps, flats, whole, half, quarter, eighth notes. (4K, Level I; 16K, Level II). 26-1902

**Micro Movie.** Draw and playback animated "movies" on TRS-80 video screen. (4K, Level I; 16K, Level II). 26-1903

**Micro Marquee.** Create 1-inch high letters that move up your TRS-80 screen. 13 characters per line. (4K, Level I; 16K, Level II; or Model III BASIC). 26-1904

**Flying Saucer.** Shoot 'em down in "real time" with your laser cannon. (4K, Level I; 16K, Level II; or Model III BASIC). 26-1905

**Invasion Force.** Destroy the aliens before they destroy you! (16K, Level II or Model III BASIC). 26-1906

**Checkers 80.** Competition "forced jump" game with two levels of skill. (16K, Level II or Model III BASIC). 26-1907

**"Eliza" Artificial Intelligence.** Discuss your problems. (16K, Level II or Model III BASIC). 26-1908

**Pyramid.** Break the seal of the pyramid and explore the unknown passages, but beware of the curse! (16K, Level II or Model III BASIC). 26-1909

**Haunted House.** Solve the mysteries and get out alive through the only escape. (16K, Level II or Model III BASIC). 26-1910

**Dancing Demon.** Tap dance to "Ain't She Sweet" with full computer accompaniment or create your own. (Audio amplifier and 16K, Level II or Model III BASIC). 26-1911

**Space Warp.** Search the galaxy to find and battle the alien craft. (4K, Level I; 16K, Level II; or Model III BASIC). 26-1912

**Astrology.** Produces personalized horoscopes. When used with a printer, it will produce a complete horoscope chart. (16K, Level II or Model III BASIC). 26-1605



## Model I and III Languages

### Level I BASIC

The Radio Shack TRS-80 Level I language is the easiest way 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 the writing of programs, our easy-to-understand teaching manual lets you quickly learn how to program the TRS-80. Level I includes most

standard BASIC commands and also several outstanding features, such as a screen display of 16 lines of 64 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 error codes. 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.

### Level II BASIC (and Model III BASIC)

If you're experienced with Level I, be prepared for some pleasant surprises with Level II. Level II is a far more advanced or "extended" version of BASIC, and offers vastly increased computing power (its execution time is 30% faster than Level I's) and additional features. You can choose a screen format of 16 lines of either 32 or 64 characters — both with automatic scrolling, and the 500-baud cassette input/output rate is twice as fast as Level I. (Model III BASIC offers 500 and 1500-baud cassette operation.) In addition, Level II offers multi-dimension arrays, comprehensive string variable handling, automatic line numbering, tracing, PEEK and POKE, call-up of

machine language routines, printer commands, and 23 specific error codes.

Versatile program editing with extensive editing commands allows easy modification of your programs. Level II offers increased numeric accuracy of up to 16 significant digits; intrinsic functions remain at 6-digit accuracy. Program lines, logical lines, and string variables may be up to 255 characters long (overflow moves to the next screen line). A compressed storage format allows some programs to be stored in fewer bytes of memory than in Level I. Level II is stored in 12K of Read-Only Memory, and comes with a comprehensive reference manual.

### TRSDOS and Disk BASIC

The TRSDOS operating system includes the software and input/output functions needed to operate the TRS-80 Disk System. TRSDOS allows vast file storage space, expanded file manipulations, and much quicker access time than you get with tape storage. Disk BASIC allows you to access files either randomly or sequentially, and programs may be stored in BASIC as ASCII or in compressed format files to save storage space.

Radio Shack's Disk BASIC is a further extension of the Level II language. A few of Disk BASIC's extension commands are DEF FN — allows user-defined functions, HEX CONSTANTS — allows you to enter

hexadecimal and octal constants by preceding them with "&H" or "&O", and TIME\$ — returns date and time as a text string.

File commands include CLOSE — closes a file which is currently open. LOAD — loads a BASIC program from disk into memory. MERGE — combines a BASIC program with another program currently in memory. OPEN — opens a file for use. This command specifies sequential/random input or output, the file number, and file name. SAVE — saves a BASIC program onto disk. (You can CLOAD a tape program, then easily put it on disk.)



# A Special Section for Educators

**Radio Shack: A Commitment to Education.** The people at Radio Shack believe that along with the development of a practically-priced microcomputer, there exists an attendant 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 expensive and difficult to develop, and has been a limiting 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 and the schools—in designing and field testing our new courseware products. The new educational programs listed in this section represent a growing commitment to the development of courseware by Radio Shack.

**The Microcomputer as a Medium of Instruction.** Computer Assisted Instruction (CAI) is based on the use of the computer as a medium of instruction—as a means of assisting the teacher in teaching subjects such as reading, mathematics, language arts, physics and chemistry. The CAI techniques that have proven effective for supplementing regular classroom instruction have centered on individualized learning sessions where the computer generates and presents exercises for a student to solve in an appropriate subject area. Listed on this page are titles in Radio Shack's new Computer Assisted Instruction Series.

## K-8 Math Program, Vol. I



This is a self-paced drill and practice program on number concepts, addition, subtraction, multiplication and division for grades K-8. Program features student placement, skill building, and test modes of operation. Automatically advances students as they master each lesson. Includes detailed reporting function and a comprehensive teacher's manual. Runs on 16K LII Model I or Model III TRS-80. Designed for classroom use, includes 10 programs on both cassette and diskette. 26-1715



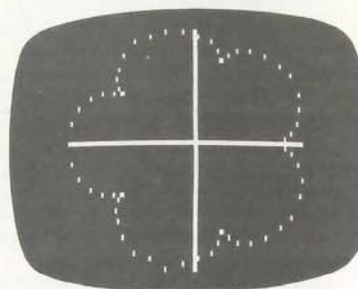
## AlphaKey™

Teach the ABCs  
by Microcomputer!

A drill and practice program for children 4 to 6 years old that teaches the alphabet using the TRS-80 keyboard. Includes both cassette and diskette. 26-1718

## Advanced Graphics

Problem-Solving  
Exercises in  
Algebra and  
Trigonometry



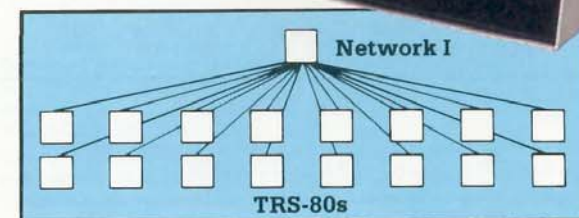
Two secondary math programs designed for use by students in solving problems, including finding points of inflection, maximums, minimums, x and y intercepts, etc. Includes problem section and programmer's guide. Includes one cassette, one diskette. 26-1714

Programs on this page are designed to run on a 16K Level II Model I or a 16K Model III with Model III BASIC. Some computer equipment may require special order.



## Network I Controller

Control Up to  
16 TRS-80s



A breakthrough in computerized classroom instruction! Network I allows teachers to upload and download programs to as many as 16 TRS-80 student stations. LED lamps indicate when a program transfer to or from a station is in progress. The system requires a Model I "host" computer equipped with at least one Mini Disk drive. Student stations should have Level II BASIC. Network I controllers can be cascaded to connect more stations. Includes cables. Maximum distance to student station is 30 feet. For Model I and Model III TRS-80s at 500 baud. U.L. listed. 26-1210



# Our New Computer Education Series

## The Microcomputer as an Object of Instruction

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. Radio Shack is addressing these needs with a new Computer Education Series 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. Additional programs will be forthcoming in this 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 access to the TRS-80. Includes teacher's manual, 143 transparencies, and 25 student workbooks. 26-2150

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



## Part 2: BASIC Programming

A complete classroom teaching package that continues the basic programming concepts introduced in Part I. Includes a teacher's manual, 164 transparencies, and 25 student workbooks. 26-2152

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



**Federal Funding Guide.** Radio Shack's Federal Funding Guide and Proposal Development Handbook is a resource guide for educators that explains how to locate external funding and how to write proposals. Features: Identification of major sources of Federal funding, outline of the essential elements of a proposal, and suggestions for continuing and increasing external funding. 26-2108

**TRS-80 Hands-On BCL (Basic Computer Literacy Package).** Includes: Student Guides, Algebra I, Program World, Level II BASIC Course, Part I, and Teacher Aide. 26-1708

**Teacher Aide.** Classroom management system assists teachers with student personal information, grade processing and averaging. For use with up to 35 students. (16K, L II). 26-1713

### Prepare Your Students for the Computer Age

Update your school library with Radio Shack books written by respected experts in the computer field. See page 27 for details.

## Personal Educational Software for TRS-80 Model I and Model III

**I.Q. Builder.** Eight tapes with 38 programs on vocabulary, antonyms, synonyms, analogies, number series. 26-1706 (4K, LI or 16K LII)

**Show & Spell.** Home spelling package designed to assist children in fundamental spelling skills. 26-1712 (16K, LII)

**Math I.** Teaches fundamentals of arithmetic. 26-1701. (4K, LI)

**Algebra I.** Six self-paced lessons on three tapes. 26-1702. (4K, LI)

**Level I BASIC Course.** Self-paced course teaches Level I BASIC for TRS-80. Four tapes. 26-2003. (4K, LI)

**Level II BASIC Course Part I.** Four cassettes introducing TRS-80 Level II BASIC language. 26-2005. (16K, LII)

**Level II BASIC Course, Part II.** Interactive self-paced course on advanced Level II BASIC programming. Four tapes. 26-2006 (16K, LII)

**Disk BASIC Instruction.** Self-paced course covers Model I DOS commands, random and sequential files, all disk additions to LII BASIC. 26-2007. (16K Disk)

## New Educational Programs Available January, 1981

**Essential Math, Volume One.** A self-paced drill and practice program on number concepts, addition, subtraction, multiplication, and division for grades 7-12. Designed for classroom use, includes programs on both cassette and diskette. Runs on 16K LII Model I or Model III TRS-80. 26-1716

**Euclid Geometry Tutor.** A drill and practice program that uses nine basic postulates of Euclidean geometry to construct proofs of theorems chosen by the student. Four levels of operation, includes a user's guide, student exercises and sample proofs. 16K Level II or Model III BASIC. 26-1724

**Vector Addition.** A secondary math and physics program containing problems for students to solve on vector concepts. Manual includes a problem section, programmer's guide and user's guide. Runs on 16K LII Model I or Model III TRS-80. 26-1720

**Interpreting Graphs in Physics: Position and Velocity Versus Time.** A secondary math and physics program containing problems for students to solve in kinematics. Manual includes a problem section, programmer's guide and user's guide. Runs on 16K LII Model I or Model III TRS-80. 26-1721

**Graphical Analysis of Experimental Data.** A secondary math and physics program that allows students to graphically analyze experimental data. Manual includes a problem section, a programmer's guide and a user's guide. Runs on 16K LII Model I or Model III TRS-80. 26-1722

**K-8 Math Worksheet Generator.** Prints work and answer sheets for addition, subtraction, multiplication, and division using selected problem sequences from K-8 Math. Runs on 32K Model I or Model III disk system. 26-2162

**TRS-80 PILOT PLUS.** A command-oriented author language that allows the user to create or adapt courseware from a curriculum suitable for computer-assisted instruction. Based on PILOT, but has extended capabilities for graphics generation and student file handling for daily student sessions. Includes a user's manual with hints for using PILOT PLUS efficiently, sample lessons and a reference section. Runs on Model I 32K disk system. 26-2205

**Color Math.** Four drill and practice programs in addition, subtraction, multiplication and division for the TRS-80 Color Computer. 26-3201

**K-8 Math Program with Student Management, Volume One.** The K-8 Math programs (see previous page) plus an easy-to-implement and effective student management system. Features automatic student "log-on" and "log-off", updating, reporting, and enrollment functions. For use with 32K Model I or Model III disk system only. 26-1725





## TRS-80 Model I Microcomputer for Business, Education, Personal Use

Over 200,000 Sold

On display at over 7000 Radio Shack locations, TRS-80 Model I is a microcomputer you can see and try before you buy. It's a proven system, used by business people, professionals and "just plain folks" everywhere for accounting, education, lab work, budget management, word processing — even games at home. Model I comes wired, tested, and ready to operate. It is supported by our growing line of software (programs for specific jobs) and accessories which are available either "off-the-shelf" or on a quick-delivery basis wherever you see the Radio Shack sign.

**4K, Level I "Starter" System.** Our lowest-priced Model I TRS-80 computer contains 4K bytes (4096 characters) of RAM (Random Access Memory). RAM is internal memory space accessible to the user for program and data storage. This system is programmed in "Level I BASIC", an easy-to-learn computer language that's ideal for beginners. To get an idea of the system's capabilities "right out of the box," see the Level I software listed on page 9. The 4K, Level I system is modular and can be upgraded



16K, Level II TRS-80 System

at any time to meet future requirements. Includes computer/keyboard unit, 12" video monitor, cassette recorder, game cassette, and a superbly written user's manual that teaches you to write your own programs. U.L. listed. 26-1051

**16K, Level II System.** Level II is an advanced version of BASIC that offers vastly increased computing power and advanced programming features for greater versatility. The 16K, Level II system is the "standard" Model I configuration and ideally suited to many small business and professional jobs. It can be equipped with a printer and other accessories shown on the facing page. Includes all Level I hardware and Level II Reference Manual. Computer/keyboard unit includes built-in 12-key numeric datapad. U.L. listed. 26-1056

**System Cover.** 26-501

## Memory Expansion



### Expansion Interface

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 card for communications. 4½ x 16½ x 8". Level II and 16K RAM required. U.L. listed AC operation.

**Expansion Interface, 0 RAM.** 26-1140

**Expansion Interface, 16K RAM.** 26-1141

**Expansion Interface, 32K RAM.** 26-1142

**16K RAM E/I Memory Kit.** 26-1102

### Specifications

**Microprocessor:** Advanced Z-80 8-bit processor. Clock speed, 1.78 MHz.

**Keyboard:** Integrated, full-size, 53-key. 16K Level II also has 12-key datapad.

**Video Display:** Memory mapped, all graphics and alphanumerics controlled by BASIC commands. Cursor control. Automatic scrolling.

**Text:** 16 lines of up to 64 characters with Level I. With Level II, you may select an optional mode of 32 characters per line.

**Graphics:** 128 horizontal by 48 vertical. Graphics and text can be combined in any manner by software.

**Memory:** Includes 4K or 12K Read-Only Memory (ROM), 4K or 16K Random Access Memory (RAM).

**Input/Output:** Computer-controlled cassette interface. Expansion port built-in.

**Power:** Power Supply; 120VAC, 60 Hz, 50 watts. Video Monitor; 120VAC 60 Hz, 50 watts. Both U.L. listed for electrical safety.

**Dimensions:** Keyboard, 16½ x 8 x 3½". Video Display, 16½ x 13½ x 12". Power Supply, 2½ x 2½ x 3¼".



# and Accessories Create a More Powerful TRS-80 Model I



Let Your Model I  
Communicate with  
the "Outside World"

## RS-232C Interface Board

Mounts inside Expansion Interface and lets you connect telephone couplers, card and tape readers, line printers and more to your system. Includes manual, cassette program for using TRS-80 as a terminal and connecting cable. 26-1145

Baud Rate: 50 to 19,200. Stop Bits: 1 or 2. Word Length: 5 to 8 bits, all software selectable.

**Communications Software.** 3 programs that put TRS-80 in "transmit," "host," and "terminal" modes. 26-1146

**RS Term.** "Dumb" Terminal program with printer support. 26-1147



"Mobilize"  
Your TRS-80  
Model I

## Model I Carrying Case Set

One case holds video monitor, the other holds keyboard, power supply, cassette, cables and tapes. Durable reinforced black molded vinyl. Hand carry only — not designed for shipping purposes. 26-500



## Model I Mini Disk Drives

Connect up to four drives through the Expansion Interface for 307,000 bytes of on-line fast-access storage! Drive number 1 includes the powerful TRSDOS operating system and disk BASIC on a 5¼" diskette. Each drive is 6½x3½x13¼". U.L. listed.

**Mini Disk Drive 1.** 26-1160

**Drives 2, 3 or 4.** 26-1161

**Disk Drive Covers.** 26-502

**TRSDOS/Disk BASIC Disk only for Model I.** 26-310

**Diskettes.** See page 12.



8 Outlets

## Power Line Filter

Limits AC power line interference to your Model I and accessories. Effective dual-section design. Outlets controlled by a single switch. U.L. listed. 26-1451



Electronic "Ears"  
for Your Model I

## TRS-80 VOXBOX™

Your chance to explore the exciting new experimental field of computer voice recognition! With VOXBOX you can speak into the included mike and program your Level II TRS-80 to respond to simple words. 26-1181



Add Lower  
Case to Your  
Model I

## Model I Expansion Options

Bring your Keyboard Unit and we'll do the rest! Parts prices only. Required installation is extra.

**Lower Case Kit.** Quality lower case for your Model I display and compatible printer. "Driver" tape included. NOTE: Some non-Radio Shack software will not work with this kit installed. Not intended for use with programs written in upper case format. 26-1104

**Level I to II ROM Upgrade.** 26-1120

**16K RAM and Keypad.** 26-1101

**Keypad Only.** 26-1103



Program Your  
TRS-80 to Talk!

## TRS-80 Voice Synthesizer

Adds the capability of simulated speech, under program control, to your Level I or II system. (16K RAM preferred.) Features built-in speaker, volume control and indicator light. Ideal for computer-assisted instruction. Includes demo cassette, manual and cable. 26-1180

**Need Hard Copy? See Our Complete Line of Printers, Pages 15-17**



# TRS-80 Accessories



## Universal Printer Stand

This heavy-duty all-purpose printer stand is especially designed to match all TRS-80 systems. Sturdy, easily assembled. 26-1308

## A TRS-80 System Desks

**Model III System Desk.** 27x48x27". Unassembled. 26-1305

**Model III Expansion Bay.** Attaches underneath Model III System Desk and holds two external disk drives. 26-1306

**Model I System Desk.** Keyboard and Expansion Interface fit into cutouts on desk's surface. Unassembled. 27x48x27". (Not shown.) 26-1301

**Auxiliary Fan Kit for Model I Disk Bay.** U.L. listed for 120VAC operation. (Not shown.) 26-1303

## B Space Saver Desk

The low-cost answer for home and educational uses. Model I Space Saver includes a shelf for Expansion Interface or Video Monitor to conceal cables. The 26-1307 Space Saver works with Model III, and it includes a removable shelf for use with the Color Computer.

**Model I Space Saver Desk.** Unassembled. 26-1304,

27x37<sup>3</sup>/<sub>4</sub>x23<sup>3</sup>/<sub>4</sub>"

**Space Saver Desk.**

Unassembled. 26-1307,

27x32<sup>3</sup>/<sub>4</sub>x23<sup>3</sup>/<sub>4</sub>"

## Blank Diskettes

Radio Shack's 5<sup>1</sup>/<sub>4</sub>" diskettes for Model I and III are individually-tested to ensure reliability. 26-305

**Package of 3.** 26-405

## TRS-80 Certified Cassettes

These C-20 leaderless cassettes are individually-tested and certified free of drop-outs or defects. 26-301



## TRS-80 Reference Manuals



Expand Your Knowledge & Capability

**Level I BASIC.** 62-2016

**Level II Reference.** 26-2102

**Model I Technical Reference.** 26-2103

**Model I TRSDOS/Disk BASIC.** 26-2104

**Getting Started with BASIC.** 26-2107

**Model III Reference Manual — BASIC.** 26-2112

**Model III DOS Manual.** 26-2111

**Video/Program Worksheets.** 26-2105

## TRS-80 Telephone Interface II

Phone Handset Fits in Cradle



A full "originate/answer" acoustic coupler that allows a TRS-80 to talk to other computers by telephone. You can pass all types of data and programs between computers, or operate another computer via telephone lines. Requires RS-232 Serial Interface (included in TRS-80 Color Computer). 26-1171

### Specifications

**Baud Rate:** up to 300. **Mode:** Originate and answer, half or full duplex. **Receive Sensitivity:** -45 dBm. **Power Requirement:** 120VAC. U.L. listed AC adapter.

## Mini-Disk Storage Case

Rugged molded case holds 10 disks. 26-1452

## Disk Storage Box

Durable, attractive box holds up to 50 mini-diskettes. 26-1450

**3-Ring Binder Diskette Holders.** 10-pack. 26-510





# TRS-80 Line Printers for Professional-Quality Results

Line Printer III

Line Printer VI

Line Printer II

Printers do not include stands

## Line Printer III

Our best dot-matrix printer, designed for heavy business use. The bidirectional, logic-seeking dot-matrix head prints quality 7x9 upper and lower case characters 132 columns wide. Adjustable fine-line increments for using preprinted forms, such as checks. The tractor mechanism will handle any fanfold computer paper up to 15" wide, up to 5 sheets. Indicators for on-line, power, and alert (paper out). Seven pushbutton controls, including self-test. U.L. listed. 26-1156

**Replacement Ribbon.** 26-1414

**LP III Dust Cover.** 26-505

### Specifications

**Print Density:** 10 or 5 characters per inch, software selectable.  
**Print Speed:** 120 characters per second, 48 lines per minute.  
**Dimensions:** 7-2/5x24-2/5x15-9/10". **Weight:** 42 lbs. **Power:** 120VAC, 60 Hz, 85W.

## Line Printer II

Here's 80/132-column printing at low cost! The dot-matrix head prints 7x7 upper and lower case characters. Also prints expanded (wide) letters under software control. Non-adjustable platen pins keep forms in perfect alignment. Uses 9 1/4" fanfold, roll or single sheet paper. Pin or pressure feed, 2 carbons. Inexpensive roll paper fits in a detachable rear bail. U.L. listed. 26-1154

**Ribbon 3-Pack.** 26-1413

**LP II Dust Cover.** 26-504

### Specifications

**Print Density:** 10 or 5 characters per inch, 5 characters per inch optional. **Print Speed:** 100 characters per second, 31 lines per minute. **Dimensions:** 15x11x5". **Weight:** 10 lbs. **Power:** 115VAC, 50/60 Hz, 100W.

## New Line Printer VI

A price breakthrough! Full 132-column printer at an unheard of low price. Low-profile styling and small size make this an ideal printer for Model III. Prints Nx9 upper and lower case characters in 4 print sizes, as well as many graphic characters and special symbols. Bidirectional logic-seeking printhead. Uses 4" to 14 7/8" fanfold or single-sheet paper of up to 3 sheets. Built-in self-test. Removable, adjustable forms tractor included. U.L. listed. Available September 30, 1980. 26-1166

**Ribbon Cartridge.** 26-1418

**LP VI Dust Cover.** 26-507

### 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:** 24-1/5x6-3/10x13-3/10". **Weight:** 28 lbs. **Power:** 120VAC, 60 Hz, 85W.

See page 17 for cables and paper



# TRS-80 Printers for Word Processing

## New Daisy-Wheel II for Superb Quality

High-speed interchangeable character wheel and carbon ribbon give you the electric typewriter quality you need for your important word-processing jobs! A friction-feed roller takes paper up to 16-1/2" wide and up to 6 copies. 124 characters including underline plus reverse tab/line feed. Built-in self test. U.L. listed. 26-1158

### D.W. II Dust Cover. 26-508

Accessories	Cat. No.
Ribbon Cartridge, Pack of 3	26-1419
Courier Print Wheel, 10 char/inch	26-1420
Prestige Elite Wheel, 12 char/inch	26-1421
Madeleine Proportional Space Print Wheel	26-1422
Tractor Assembly; Snaps into Place, Allows Use of Fan-Fold Forms	26-1446

### Specifications

**Print Density:** 10 characters per inch, 136 columns with supplied Courier print wheel. **Print Speed:** 43 characters per second, 19.5 lines per minute. **Interface:** Parallel. **Ribbon Life:** 200,000 characters. **Print Wheel Life:** 40 million characters. **Dimensions:** 8x24-3/5x15-1/2". **Weight:** 28 lbs. **Power:** 120VAC, 50/60 Hz, 141 W, U.L. listed.

## New Line Printer IV — Quality Printing at Low Cost

Produces upper/lower case characters approaching "letter quality." Prints 80 or 132 columns on 8" lines, or high-density proportionally-spaced Nx9 dot matrix characters under software control. Handles roll paper 9-1/2" fan-fold or single sheets with two carbons! Detachable roll paper holder. U.L. listed. 26-1159

### L.P. IV Dust Cover. 26-504

### Ribbons. 26-1413

### Specifications

**Print Density:** 10 or 16.7 characters per inch — proportional 8.2 to 24.6 characters per inch. **Print Speed:** 50 characters per second, 22 lines per minute. **Dimensions:** 15x11x5". **Weight:** 12 lbs. **Power:** 120VAC, 60 Hz, 100 W, U.L. listed.



Daisy-Wheel II

Line Printer IV





# Specialty Printers

## New TRS-80 Plotter/Printer

This intelligent plotter responds to simple BASIC commands to produce complex graphic plots up to 7-1/2" wide and any length. Character printing allows plotter to be used as a standard printer plus characters can be printed enlarged and/or rotated. Standard parallel interface. No ribbon, uses replaceable pen. U.L. listed. 26-1190

### Specifications

*Print Density:* 9 characters per inch, 75-column line in standard mode. *Print Speed:* 5 lines per minute nominal. Bidirectional feed under software control with stepper drive. *Dimensions:* 18-3/4x14-4/5x7-1/2". *Weight:* 26 lbs. *Power:* 115VAC, 50/60 Hz, 100 W, U.L. listed.

## Inexpensive Quick Printer II

A budget-priced "mini" printer that can be used with almost any computer. It includes interfaces for RS-232 and parallel, plus one for direct connection to the Model I bus. Software selectable 16 to 32-character lines. Prints upper and lower case and features automatic "wrap-around" when text exceeds line length. A built-in microprocessor controls the printer and communications with other units. Includes cable to connect to Model I bus.

### Specifications

*Print Density:* 18 or 9 characters per inch, software selectable (32 or 16 cpl). *Print Speed:* 120 lines per minute. *Paper:* Aluminum coated, 2-3/8" wide (available through Radio Shack stores). *Dimensions:* 3-5/16x6-3/4x9-1/4". *Power:* 120VAC, 60 Hz. U.L. listed.

### Printer/Computer Cable Chart

	Quick Printer II	Line Printer II	Line Printer III	Line Printer IV	Line Printer VI	Daisy Wheel II	Plotter/Printer
Color Computer	26-3009	N/A	N/A	N/A	N/A	N/A	N/A
Model I, Level II	Included	26-1416	26-1411	26-1416	26-1411	26-1411	26-1411
Model I, Expansion Interface	26-1406	26-1415	26-1401	26-1415	26-1401	26-1401	26-1401
Model III	26-1406	26-1415	26-1401	26-1415	26-1401	26-1401	26-1401
Model II	N/A	26-4402	26-4401	26-4402	26-4401	26-4401	26-4401

### Printer/Paper Chart

Printer Cat. No.	26-1402 8-1/2" Roll 2-Pack White	26-1403 9-1/2" Fan Fold 3100 Sheets Green Bar	26-1423 9-1/2" Fan Fold 500 Sheets	26-1417 14-7/8" Fan Fold 3200 Sheets Green Bar	26-1412 2-3/8" Electro Static 2-Pack	26-1405 4.75" Electro Static 3-Pack	26-1404 4-1/2" Tractor Mailing Labels 5000	26-1407 9" Plotter Pin Feed 1 Roll
26-1150	X							
26-1152		X	X				X	
26-1153						X		
26-1154	X	X	X					
26-1155					X			
26-1156		X	X	X			X	
26-1158		X	X	X			X	
26-1159	X	X	X					
26-1166		X	X	X			X	
26-1190								X



# TRS-80 Model II — Our Best Business Microcomputer





# Features for Today's Needs ... and Tomorrow's Challenges

TRS-80 Model II is Radio Shack's fastest and most powerful microcomputer. It is an extremely efficient business tool that can speed through routine tasks, store vast amounts of data, provide timely information for decision-making, and much more—at costs significantly below the industry's "going price" for comparable computers. All this, yet it is easy to use!

Since introduction in mid 1979, Model II systems have brought the benefits of affordable data processing to businesses and professional people everywhere. Its remarkable combination of high power and low cost make it "just right" for countless applications. Even if you own a "maxi" computer, Model II can do many jobs that are "too hot" to wait for shared computer time and those too small for cost-effective handling by your mainframe.

Radio Shack supports the Model II with a growing line of software and total before-and-after-the-sale service. Our inexpensive user-oriented, well-documented software includes programs for payroll, accounting, inventory control, mailing lists, with more to come. This allows your Model II to go to work quickly with no formal operator training. Model II features easy expandability, compatibility with external equipment, communications and multi-language programming abilities, as well as low start-up and operating costs. We invite you to investigate the advantages of owning or leasing a TRS-80 Model II system. Why not arrange for a TRS-80 demonstration soon?

## The Model II Hardware

The basic Model II is contained in one compact, desktop cabinet including a built-in 8" disk drive for storing programs and data, a high-resolution 12" video display, and a detachable keyboard designed to be similar to the familiar electric typewriter keyboard. It is simple to use. There are as few "special" keys as necessary to do the job. For faster and more accurate numeric input, a calculator-type keypad with its own ENTER key is provided. Model II's high-resolution video screen will display 24 lines of 80 upper and lower case characters. Optionally, double-width characters—40 per line—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.

The 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 (next page) 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. To fill this amount of memory would require something like 96 hours of non-stop typing at 70 words per minute! Of course, a 32K Model II can be expanded to the full 64K of internal memory at any time, via our 32K RAM Add-On option.

## Tomorrow's Microcomputer ... Today

TRS-80 Model II is easily expanded to cope with growing or changing requirements. It won't become obsolete in a few years. Connectors allow you to add printers, plotters, digitizers, communications with data-bases and other computers and a host of options. Internal plug-in card slots are also provided for later options. 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 programming languages are also available. With them, a large number of specialized pre-written software packages in these languages can be used with your Model II, often with little or no modifications. These programs include COBOL, FORTRAN, Compiler BASIC and Editor Assembler. Like all TRS-80 computers, Model II is U.L. listed. For value, versatility, ease of use, and support, you can't beat the Model II. It's all business!

**32K, 1 Disk TRS-80 Model II.** 26-4001

**64K, 1 Disk TRS-80 Model II.** 26-4002

**32K Memory Add-On.** 26-4102

**Model II RS-232 Cable.** 26-4403

**Model II System Cover.** 26-4051

## TRS-80 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 Centronics parallel port, two RS-232C serial ports. *Disk Drive:* Built-in dual-density 8" floppy, three more available in external unit. *Power Requirement:* Built-in filtered power supply for 120VAC, 60 Hz. *Keyboard:* 76-key professional-type including data 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:* 32 or 64K RAM. "Bootstrap" ROM is bankswitched out after Boot. Includes power-up diagnostics. *Internal Expansion:* Four plug-in card slots for future expansion or converting 32K RAM to 64K. *Overall Dimensions:* 14x21¼x23½."







## Model II "Starter System"

An affordable Model II business system for small business applications such as general ledger or accounts receivable. You get 486K bytes of disk storage, including operating system software, and a 64K internal memory (26-4002). The versatile pin-feed 9½-inch wide Line Printer II (26-1154) prints upper and lower case letters. Also includes Printer Cable (26-4402). This complete system is ideal for many businesses, and is ready to be expanded as your company grows and your needs increase.

Approximately 416,000 Free Bytes of Disk Storage



## Model II "Basic Business"

Here's the perfect answer to small business inventory control, payroll, and more. Built around the Model II (26-4002) and the Line Printer VI (26-1166) that prints 100 characters per second, upper and lower case letters and special symbols, plus the Printer Cable (26-4401), and the matching System Desk (26-4301) holds the entire system. You can easily expand the memory capacity by adding an optional external disk system when you need it.

Approximately 416,000 Free Bytes of Disk Storage



## Model II "Word Processing"

You'll never want to use a typewriter again! Our SCRIPSIT software (26-4530) and 64K Model II (26-4002) allow you to compose and edit letters and documents on your video screen, store the text on disk for use or revision at any time, and then print the copy in the format you desire. You can specify automatic page numbering, centering, justification, and more. The Daisy Wheel II Printer (26-1158) gives the finest electric typewriter quality at 43 characters per second. Includes Printer Cable (26-4401). Quality word processing is now available and affordable.

Approximately 416,000 Free Bytes of Disk Storage



## **Model II 1.5-Megabyte "Deluxe Business System"**

Compare this versatile, high-capacity system (1.5-million bytes of disk storage and a 64K internal memory) with systems costing twice as much. We've added to the Model II (26-4002), a 2-drive external disk system (26-4161) that gives about 1-million more bytes of on-line storage. The Tractor-Feed Line Printer III (26-1156) is designed for heavy business use. It handles 15-inch wide paper and prints upper and lower case letters at a speedy 120 characters per second, and adjustable line space increments give accurate printing on pre-lined forms such as checks. Also included is the Printer Cable (26-4401). And to conveniently hold each item, we've included the matching Model II Desk (26-4301). This is a combination just ideal for larger, integrated accounting systems.

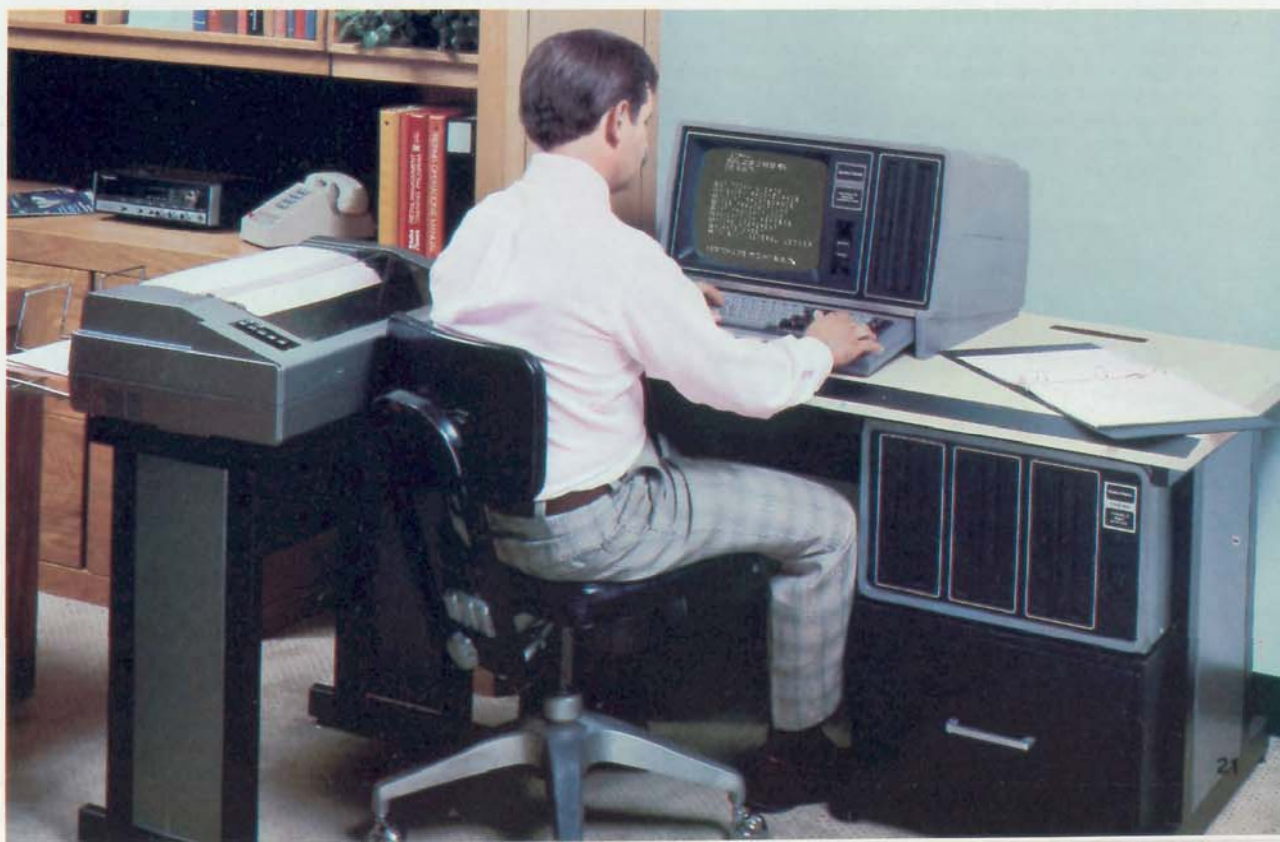
Approximately 1,388,000 Free Bytes of Disk Storage



## **Model II 2-Megabyte "Business Management System"**

This could easily be *the* business system! It's our most powerful Model II combination, and gives you approximately 2-million bytes of disk storage. Just look at what we've teamed with the 64K Model II (26-4002)! A 3-drive external disk system (26-4162) for maximum memory storage. The Line Printer III (26-1156) — an excellent business printer. Its bidirectional head prints 9x7 dot-matrix upper and lower case letters at 120 characters per second. And the Printer Stand (26-4302) puts the printer right at your fingertips and frees desk space. Connection is simple with the Printer Cable (26-4401). Plus there's plenty of workroom on the System Desk (26-4301). Here's the system with the versatility, computing power, and speed that you can start with or expand to — whatever your needs.

Approximately 1,874,000 Free Bytes of Disk Storage







# Disk Expansion Units for More Information Storage

Expanding the disk storage of your TRS-80 Model II system is as easy as plugging in one of our external Disk Expansion Units—available with one, two, or three drives. Each individual drive adds about 486,000 bytes of on-line storage. And, if you buy a one or two-drive system now, you can add Disk Drive Kits at any time to expand to a two or three-drive system.

**Expand Model II Storage Up to 2 Megabytes**

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

## Specifications

*No. 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:* Standard 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."

## Quality 8-Inch Diskettes

Radio Shack's blank 8" diskettes are perfect for use with the Model II Disk System. These diskettes have been custom-manufactured to assure 100% compatibility and to meet our high quality control standards. Each is individually tested to insure reliability and certified against defects.

**Blank 8" Diskette.** 26-4905

**10-Pack of Diskettes** 26-4906

**Envelopes.** Package of 10 clear plastic sleeves that protect 8" Diskettes. Punched for standard 3-ring binders. 26-4907

**Blank Disk Labels.** Package of 50. 26-4908

## Model II Owner's Manual

A comprehensive, illustrated reference guide in a heavy-duty 3-ring binder for Model II owners and users. (Included with all Model II systems.) 26-4920

## Model II Technical Manual

Includes theory of operation for the CPU module, FDC, video/keyboard, video display, disk drives, and the power supplies. General checkout procedures aid in tracing problems to a specific sub-assembly. 26-4921

## Model II Accessories



## Model II System Desk

Matches the TRS-80 Model II. Large drawer with center divider stores diskettes, and mounts on the right or left. Mount drawer low and place Disk Expansion Unit above it. Heavy-duty metal construction with wiring cut-outs. 28x48x29" 26-4301

## Model II Printer Stand

An ideal match to the System Desk. Slotted top allows use with just about any line printer, and permits bottom paper feed. 27x23½x19" 26-4302



## 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 makes it especially easy to use for program development and debugging.

Model II BASIC is an enhanced version of our Level II language. So if you can program in

Level II, you'll find Model II BASIC very familiar, and a bit more versatile and powerful.

A few of its outstanding features are —

- Advanced string handling
- Multidimensional arrays
- Error trapping
- Full editing capability for easy program corrections and changes
- Program line renumbering
- Hex and octal conversion
- Direct and sequential access to data in disk files
- Ability to execute a TRSDOS command and return to BASIC with program and variables intact

- Special functions to allow BASIC programs to call machine language subroutines
- Recovery from operator errors — the System won't stop if you attempt output to a device which is not ready (such as Printer or Disk Drive)

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 its language does offer quite an improvement for the machine language programmer.

Model II BASIC is designed to run under our TRSDOS Disk Operating System, and both are included with every new Model II.

## TRSDOS—The Disk Operating System for Model II

TRSDOS ("Triss-Doss") is a powerful and easy-to-use Disk Operating System that manages Model II's disk operations. It's a very comprehensive and powerful operating system for the programmer, yet it is virtually transparent to the non-programmer using pre-written software.

TRSDOS occupies space on the System diskette. It's automatically loaded and ready for use after system power-on. However, only a small portion is actually in memory at any one time. The Supervisor Program, input/output drivers, and other essentials are always in memory. Auxiliary code is loaded as needed into an "overlay area."

Model II TRSDOS provides a full set of library commands and utility programs; and, in addition, many useful system routines can be called directly by user programs.

Some of the 37 Library Commands include: ATTRIB — changes a file's password. CREATE — preallocates data file space for added execution speed. COPY and MOVE — allow files to be transferred. DEBUG — lets you program, test, and isolate errors in machine language programs. DO — automatic power-up execution of a sequence of commands. FORMS — sets printer page length and width, line width, top of

forms, and lets you toggle parallel or serial printer drivers. HELP — assists in clarifying TRSDOS command syntax. PATCH — modifies the code in our system's software so you can implement updates we provide. RENAME — changes the name of a file. SPOOL — saves printer output in a disk file for later printing, and also allows printing at the same time other operations are being entered.

The Utility Programs are: BACKUP — copies a diskette. FORMAT — organizes a diskette. MEMTEST — checks out RAM.

In addition, you have a complete set of communications commands. ECHO — begins echo of keyboard input to display. HOST — allows keyboard input from and video output to a remote terminal. RECEIVE — inputs data into RAM from serial interface. SETCOM — sets RS-232 port parameters. TERMINAL — comprehensive and versatile menu-driven 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 also allows keyaheads of up to 80 characters. This means that through buffered storage, you can type in the next command while previous ones are being executed.

Model II TRSDOS responds to your commands with positive feedback. If you say "KILL 'file-name,'" TRSDOS will respond with "'file-name' KILLED," or "'file-name' NOT FOUND," so you'll always know what was or was not accomplished by your command. And duplicating of a diskette requires knowledge of a master password, which gives you additional program and data security.

Plus, when an Operating System error occurs, a message appears on the video screen with a numbered error code. And if you don't remember the particular error, simply type "Error 66," for example, and Model II will respond with a detailed explanation.

TRSDOS comes complete with your Model II. It includes a System Diskette in a deluxe binder, along with a comprehensive user's guide that documents everything you'll need to know.

**Replacement Diskette Only. 26-4910**



# Ready-to-Use Model II Business Software



## Business Packages for 64K Model II

Listed here are our six top Model II business and accounting programs. Each one can add a new dimension of speed and accuracy to any small business operation. These programs keep thousands of bits of valuable information accessible at a moment's notice. They produce quality reports, statements, checks and other important documents, and greatly simplify accounting and secretarial operations. These programs are easy to use, so you don't need to hire a computer expert to get the results you want. Each program comes complete with a very thorough instruction manual that will guide the user step-by-step through every important function and describe day-to-day operation. Anyone in your office can easily learn to operate these systems. All come on 8" diskettes with loose leaf manual and binder. All programs require a 1-Disk 64K Model II and a 132-column tractor-feed printer (Line Printer III is recommended).

## Inventory Management

Inventory Management System (IMS) handles up to 3000 inventory line items, 200 vendors, on-hand quantities up to 999,999, with a maximum selling price of any item at \$9999.99. IMS goes beyond most "traditional" inventory systems by projecting your reorder needs based on analysis of past performance and sales trends. Reports generated include: Master Inventory List, Vendor Listing, Transaction Posting Report, Suggested Order List, ABC Code Analysis, Physical Inventory Worksheets, Physical Inventory Error Report, and an Inventory Performance Report which includes a Total Inventory Performance Summary, ABC Code Performance Summary, and ABC Code History Summary. Of course you receive all necessary information to enter into your General Ledger. 26-4502

## Payroll

A complete small-business payroll system that calculates and prints checks automatically. Calculates state tax in any state or the District of Columbia and one city withholding tax as a percent of gross wages or federal tax. Calculates earned income credit payments. Prints W-2 forms at the end of the year. Nine user-defined earnings categories, nine user-defined deduction categories, and seven user-defined workman's compensation classifications. Handles up to 200 employees. Provision for automatic voluntary deductions, such as Savings, Christmas Clubs, etc. Prints check register before or after printing. 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. Main menu shows four categories for selection, with a summary of each. 26-4503

## General Ledger

The Model II General Ledger program can produce professional Balance Sheets and Profit and Loss Statements at a moment's notice. User-defined chart of up to 504 accounts, user-defined 4-digit account numbers. Automatic "out-of-balance" detection, entry totaling and document balancing. Seven optional expense categories. Prints totals up to \$99,999,999.99 with 16 digit accuracy. Up to 50 entries per document (up to 3072 documents per month). Up to 11,420 entries per month. Automatic well-defined audit trails. Controlled inputs for error prevention and rapid entries. Visually-oriented editing. Easy document correction and error recovery. Reports generated include: Chart of Accounts, Trial Balance, Document List, Posting Summaries, Ledger Detail Report, Income Statement, and Balance Sheet. 26-4501

\* Available 11/30/80.

## Accounts Payable

The APS will print checks, cash requirements, aging reports and totals for posting to your company's General Ledger. The APS will help you decide when to write your checks for maximum discount, and how those checks affect your cash position. Compatible with either Cash or Accrual Accounting methods. Up to 500 vendor accounts and 3000 invoices on file on any one time. Easy maintenance of accounts. Invoice Selection function gives broad flexibility of operation. 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. 26-4505

## Accounts Receivable

The Radio Shack Accounts Receivable package is designed as a complete invoicing and monthly statement generating system which keeps track of current and aged accounts receivable. Interactive, menu-driven programs. Self-instructing user documentation. Allows "open item" and "balance forward" accounts. Special consolidation feature for greater capacity. Prints statements and invoices. Automatic customer billing option. Both Summary Aging and Detail Aging reports. Sample data in manual for training. Flexible open credit reconciliation procedures. Selectable record capacities. Add additional drives for increased quantities and automatic update of General Ledger. 26-4504

**Accounts Receivable, Series I.** A smaller, yet reliable system that features customer file maintenance, customer activity query, invoice generation, transaction editing and open credit reconciliation. Reports generated include Aging, Transaction, Customer Account, and of course statements. End-of-Period processing. File verification. 1700 entries (accounts plus transaction). 26-4554

## Mailing List System

Designed to make the secretary's life much easier. This program stores names and addresses, available for update at any time. Each name may also be assigned up to eight special categories. Any number of names may be selected through the computer and printed for future use. Finally, the program will print the selected address labels. Automatically puts records in alphabetical and Zip Code order. Rapid access to any name on the list. Easy error correction. Prints listings and address labels. Revise or update any information at any time. Expanded or Compressed files: with compressed format you can store up to 3000 names, with expanded format you can store up to 2000 names with an additional "comment line." 5 different label sizes with as many as 5 labels across a page. 26-4506



# More of Model II's Powerful Applications Software

## 3-Disk Business Packages

Each of these systems requires 64K Model II and 132-column tractor-feed printer, and 2-drive Disk Expansion Unit. Other 3-disk packages will be announced later to go with these systems.

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 are approximate.

## 3-Disk General Ledger

A General Ledger system that holds up to 500 accounts and 5000 year-to-date detail entries. An easily maintainable control file allows you to use multiple profit centers. Reports include: Chart of Accounts, Financial Statements, Transmittal Letters, General Journal Transaction Register, General Ledger Trial Balance for any specified period, General Ledger Work Sheet, 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. Interfaces with 3-Disk Accounts Payable and Accounts Receivable. 26-4601 (Avail. 12/30/80)

## 3-Disk Accounts Payable

An accrual Accounts Payable system that holds up to 1000 vendors, 2000 open payable items, 2000 General Ledger distributions, and 1000 checks. Interfaces with 3-Disk General Ledger. Reports include: Vendor File, Alphabetical Vendor List, New 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. 26-4605 (Avail. 11/30/80)

## 3-Disk Accounts Receivable

An open item and/or balance forward Accounts Receivable system that stores up to 1500 accounts, 2500 transactions. Reports include: Salesman List, Customer File, Alphabetical Customer List, Sales Journal, Cash Receipts Journal, Accounts Receivable Aging, Finance Charge, Statements, and Commissions Due. Easy Salesman, Customer File maintenance. Allows interactive entry and editing of sales and credit/debit memos. Allows customer account inquiry. Automatically keeps track of commissions due by salesmen. Interfaces with 3-Disk General Ledger system. 26-4604 (Avail. 10/30/80)

## Profile II

Profile II is a filing system that is designed to make the largest amount of information available at the touch of a key (word or number). It is a fast, accurate system that allows up to 20,000 individual records to be stored, reviewed or updated at the touch of the keyboard. Profile II can keep track of names and addresses, accounts, bills owed and paid, personnel records and countless other files and records. Unlike a conventional file, which can be searched in order only (such as alphabetically or by account number, but not both) Profile II files can be searched by up to 36 user-defined criteria. Quick and easy access to individual records, or groups of records. Information field types include alpha numeric, numeric, decimal, protected, add, and subtract. Up to 99 categories in a single record. Up to five screen formats for each file. Prints up to five different user-defined reports for each file. Reports can include automatic page numbering and use of the current date. Prints up to five user-defined labels for each file. Multiple search keys allow numerous label and report selections within each format. Each format contains user-defined fields that can be selectively protected. Multi-parameter sort, multi-key search. Stores up to 3000 single segment records on a single drive, up to 20,000 with extra drives. 1800 multi-segment records when using extra drives. Easy access to files by Model II SCRIPSIT for letters and reports (must have more than one drive). Full Print Formatting featuring a movable 132-column window that lets you design the form you want for your printouts. Limited Menu capability gives access to files without allowing file structure manipulation. 26-4512

## Versafile

Versafile is a program that lets you create your own computerized filing system. It can be used for any purpose, business or private. You decide what goes in your files and how. The computer does the rest. The easy methods used by the system let you store and retrieve almost anything, from a used car inventory to an insurance agent's client information. The computer picks "key words" out of typed statements and stores them in corresponding files, ready for easy retrieval. All you have to do is type a question containing the same key words. Versafile will then retrieve any statement containing the combination of words you request. Global search function locates any word or phrase. Prints selected or complete files. Will expand to use 1 drive. 26-4510

## Model II SCRIPSIT

One of the finest word processing systems available at any price. This program offers the best features of Model I SCRIPSIT, and much, much more. The entire system utilizes oriented menus and prompts for easy operation. Floating format and reverse indentation make it easy to design tables and special formats. Automatic block moving and duplication. Global search locates the occurrence of any word for selective editing. Easy page numbering and renumbering. Pages can even be re-ordered! Stores documents in which other words can be "merged" — ideal for form letters. Model II SCRIPSIT even lets you define keys for individualized use — for words, phrases, even special functions! And of course, SCRIPSIT II offers full headers and footers, underlining, subscripts, superscripts, boldface, as well as easy editing features. Stores up to 320,000 characters on Drive #0 — all other drives up to 400,000. Up to 11 user-defined format lines. Automatic pagination by user-defined specifications. Dynamically-updated information line keeps track of row, column, page number. "Spooling" feature lets you print while you type (more than one disk required). Interfaces with Profile II. Comes with a complete eight-lesson audio instruction course (on cassette tape). Recommended printers for SCRIPSIT are on page 16. (Available November 30, 1980) 26-4530

## Important Notice

**All Radio Shack Computer Programs Are Licensed on an "As Is" Basis Without Warranty**

Radio Shack shall have no liability or responsibility to customer or any other person or entity with respect to any liability, 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.

**NOTE:** Good data processing procedure dictates that the user test the program, run and test sample sets of data, and run the system in parallel with the system previously in use for a period of time adequate to insure that results of operation of the computer or program are satisfactory.



# Optional Model II Programming Languages

Language versatility. That's what you get with TRS-80 Model II. And Radio Shack has developed several languages — each with a particular need in mind — for your Model II computer system. Our 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!

Model II adapts easily to your choice of languages because the system is Random-Access Memory based, and 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, we have Model II COBOL. For those scientific or technical applications, there's TRS-80 FORTRAN. For general purpose use and ease of programming, we have an enhanced Compiler BASIC. It offers faster execution time than our interpreter BASIC for new program development (not compatible with Model II interpreter). For the more advanced programmer, the Editor/Assembler lets you program in Assembly Language. And our Program Editor offers many advanced editing features, and can be used with any of our languages.

Complete program documentation is included with each of our language packages.

## COBOL Development System

Model II COBOL (COmmon Business Oriented Language) is designed primarily for business applications. It gives you access to a high-level implementation of the ANSI-74 COBOL Standard for minicomputers. Features include a single-pass compiler which generates an object code that can be executed directly by the run-time package; multi-keyed ISAM; full level-2 I/O Commands; interactive DEBUG with address stop, single step, and variable display; and CRT control with extended ACCEPT/DISPLAY commands for attractive screen formatting. The program is supplied on a single diskette with deluxe binder, and includes User's Guide, COBOL Language Manual, Run-Time and Print packages. Requires 64K Single Disk TRS-80 Model II. 26-4703

\*COBOL Run-Time Package. 26-4704

## FORTRAN

TRS-80 FORTRAN (FOrmula TRANslator) is a universal, problem-oriented programming language designed to simplify the preparation and check-out of computer programs. It's primarily for problems expressible in algebraic notation, and requires the programmer to define fully the characteristics of a problem in a series of precise statements. Radio Shack's FORTRAN is based on the ANSI-66 language and features complete error documentation in compiler, and hex and octal addresses for compiler listing. The package includes four modules consisting of the Editor, Compiler, Linking Loader, and the FORTRAN subroutine library. The FORTRAN package is supplied on a single diskette with deluxe binder and these manuals: FORTRAN User's Manual, FORTRAN-80 Reference Manual, LINK-80 Reference Manual, and the EDIT-80 User's Manual, plus a sample program. Requires 64K Single Disk TRS-80 Model II. 26-4701

## Editor/Assembler

The advanced programmer now can quickly write, edit, test, assemble, and execute programs written in Assembly Language. An utility program will provide a source listing, plus list to the printer or display any text file. Features include the use of either 8080 or Z-80 mnemonics, and constants can be specified in octal, hex decimal, or binary. Five modules are included: Editor, Macro-Assembler, Linking Loader, Cross Reference Facility, and FORTRAN Subroutine Library. Assembly Language programs and subroutines are 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 text editor allows extensive and sophisticated editing techniques. It's both line-oriented and character-oriented. Commands are simple and straightforward, yet powerful enough to accommodate the most demanding user. The Editor/Assembler package is provided on a single program diskette in a deluxe binder with these manuals: TRS-80 Editor/Assembler User's Manual, EDIT-80 User's Manual, MACRO-80 User's Manual, LINK-80 Reference Manual, and the Z-80 Instruction Set, plus a sample program. Requires 64K Single Disk TRS-80 Model II. 26-4702



## Compiler BASIC

TRS-80 Model II Compiler BASIC lets you develop applications programs which execute several times faster than an interpreter, like our Model II BASIC. Features include: an interactive debugging mode, full error control, indexed file access with single key ISAM, 14-digit floating point decimal format, complete CRT control, and single-pass compiler that generates object programs for fast, efficient execution by the run-time program. If you're developing programs to sell, compiled programs protect your code against modifications. Requires 64K Single Disk TRS-80 Model II. (Note: This BASIC is not directly compatible with Model II BASIC, and cannot be used to compile existing Model II programs.) 26-4705 (Avail. 10/30/80)

\*Compiler BASIC Run-Time Package.  
26-4706 (Avail. 10/30/80)

## Program Editor

Ideal for program editing, and can be used with any of our Model II languages. Editing commands allow you to easily delete, modify, and insert characters or lines. "Global search" makes changes automatically throughout program. Tabs are set automatically for the requirements of each language and line numbers are optional. The Program Editor package is provided on a single program diskette in a deluxe binder with User's Manual. Requires 64K Single Disk TRS-80 Model II. 26-4710 (Avail. 10/30/80)

\*Run-Time Diskettes are available separately for those who intend to sell software developed on our compilers. You don't need to buy them for your own use if you buy a compiler.





# Keep in Touch with Computer Technology

## Radio Shack Reference Books for TRS-80

**Beginning Computers.** For the novice. Subtitles, diagrams, photos. 49 pages. 62-2003

**BASIC Computer Games.** 84 games for solo and group play. 192 pages. 62-2004

**TRS-80 Assembly Language Programming.** Computer hardware, software, microcomputers. 304 pages. 62-2006

**The BASIC Cookbook.** Teaches BASIC so you can program a microcomputer. 116 pages. 62-2007

**Understanding Digital Electronics.** Explains digital electronic devices, circuits and systems. 240 pages. 62-2010

**BASIC Computer Programming.** Intro to computers, writing programs. 156 pages. 62-2015

**BASIC Computer Language.** Includes both programmed instruction and user programs. 232 pages. 62-2016

**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

**Level II Programming.** Examples of Level II BASIC routines for the TRS-80 Model I. 351 pages. 62-2061

**Level II Programming Techniques.** Supplement to Level II Programming. Common BASIC operations. 142 pages. 62-2062

**TRS-80 Graphics.** How to create graphic displays with TRS-80. From line drawings to geometrics to moving-figure animation. 142 pages. 62-2063

**TRS-80 Programs.** 32 fully-documented programs ready-to-run on a TRS-80. Suggested program changes, too. 267 pages. 62-2064

**How to Program the Z80.** Educational text and self-contained reference. From basic concepts to advanced data structures manipulations, with comprehensive description of all Z80 instructions. 626 pages. 62-2066

**Getting Started with BASIC.** Exciting introductory book covers all aspects of Level II and Model III BASIC. 26-2107

**Level II/Disk BASIC Quick Reference Card.** 26-2106

## TRS-80 Applications Sourcebook

Over 1000  
Program  
Listings for



We've compiled a listing of TRS-80 applications for sale by a variety of vendors. Program categories include — Business, Education, Specific Industry/Profession, Statistics/Math, Home and Games. Each listing includes a description, hardware required, prices and how you can order direct from the vendor. We haven't seen or tested the programs that are listed so we cannot be responsible for any problems or misrepresentations. However, we're sure you'll find the Sourcebook is the place to look for the software you need! 26-2113





AUTO  
1 ADD/WAG  
C CLOTHING  
J JOURNATION  
E ENTERTAIN  
F FOOD  
G GAS/FUEL  
H HOME IMP  
I INTEREST  
J INVESTMENT  
K RETIREMENT  
L FURN/MPL  
M MEDICAL  
N INSURANCE  
O SCHOOLING  
P PRESCRIPT  
Q GIFTS  
R RENT/MRT  
S SAVINGS  
T TAXES  
U UTILITY  
V VACATION  
W EMERGENCY  
X BUS. EXP  
Y ALIMONY  
Z MISC.  
SELECT (A-Z)  
OR PRESS ENTER



# The New TRS-80 Color Computer

## Exciting Features at an Incredibly Low Price!

The all new TRS-80 Color Computer features vivid color graphics, instant-load Program Paks™, expandability and sound at a low price you won't believe. Since it attaches to any color television set, it can easily be used anywhere for home, personal or educational uses. Easy-to-use Program Paks program your Color Computer instantly for a variety of games and personal uses. Just pop one into the computer, and you're ready to go!

Compare the TRS-80 Color Computer to others selling for over twice our price. We offer a deluxe, full 53-key keyboard that will please the touch typist. Plus, an advanced BASIC—similar to Model I BASIC—that includes machine language programming, and a built-in serial interface—all exclusive to the TRS-80 Color Computer.

## Or, Program it Yourself...

Your TRS-80 Color Computer comes with an introductory manual that helps you take advantage of the new Color BASIC language. You'll learn to use the simple commands to create graphics displays and control color and sound. You can write your own programs and record them at high speed on cassette tape (recorder not included).

## TRS-80 Expandability!

Like all TRS-80s, the Color Computer is easy to expand. (See next page for accessories.) You can start with 4K RAM and convert to 16K RAM any time you want it. You can move up to our powerful Extended Color BASIC that will give you a versatile set of commands for higher resolution graphics capabilities, intrinsic functions, EDIT, TRACE and other advanced programming features. The Color Computer has a built-in RS232 for easy communications ability by adding a telephone communications modem. It can even be used as a terminal in

conjunction with VIDEOTEX Software (see page 35). Expansion doesn't have to stop there either—you can also add a printer. And soon, you'll be able to add disk storage! Of course, the selection of quality Color Computer software will keep growing all the time.

## Exciting Color Action Games!

The Color Computer is great fun family entertainment, too. Radio Shack offers many action-packed games that bring the excitement of an arcade into your home. (Don't tell the kids, but some will be educational.) Travel into outer space for high-speed combat, or challenge the "mind" of a thinking machine in chess. Remember, all games are in handy instant-loading Program Paks—it couldn't be easier to use. Dual Joysticks are also available for even faster and more realistic action in some games. U.L. listed AC operation.

**4K TRS-80 Color Computer.**

26-3001

**16K Memory Conversion.**

26-3015

**Extended BASIC Add-On.** (Available 11/30/80.)

26-3018

**Color Computer with Extended BASIC and 16K Memory.** (Available 11/30/80.)

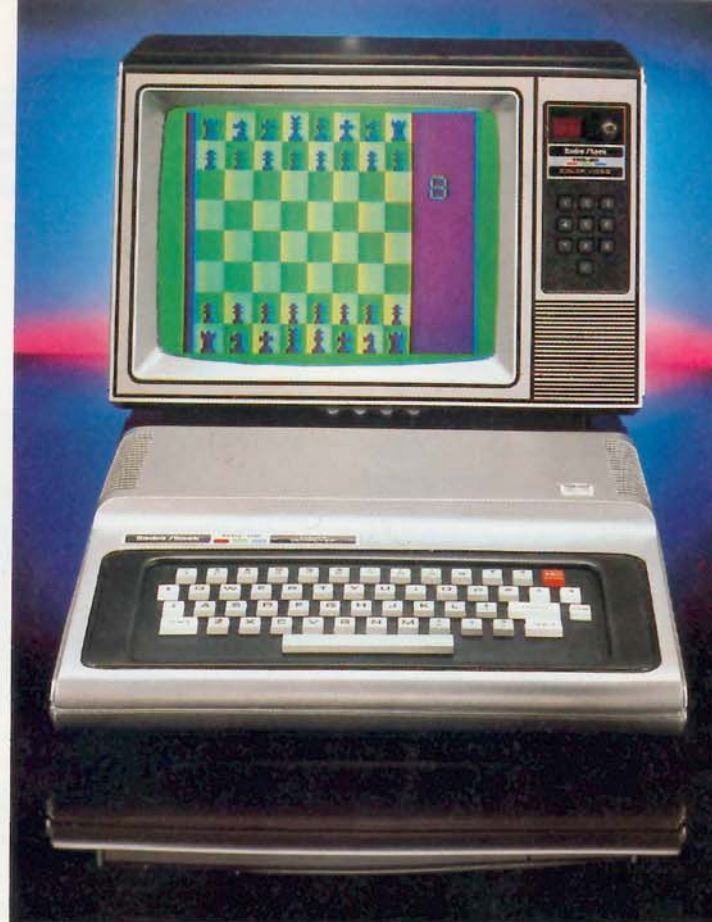
26-3002

## Specifications

**Microprocessor:** 6809E 8-bit processor. Clock speed 0.894 MHz.

**Keyboard:** 53 key including up, down, right and left arrows, BREAK and CLEAR Keys. **Video Display:** 16 lines of 32 upper case characters. Color graphics capabilities range from 32x64, 8 colors to 196x256, 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 or 16K internal dynamic RAM. Color BASIC is in 8K ROM, or 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). RS232 serial I/O port. **Real Time Clock:** Accessible from Extended Color BASIC or machine language only. **Power:** 120VAC, 60 Hz., less than 50 Watts. **Dimensions:** 3½x13¾x14¾."

\*TRS-80 Color Video Receiver not included — see page 30 for details





# Accessories That Enhance Your TRS-80 Color Computer

Build a Color Computer System Around Your Specific Interests

TRS-80 Color Video Receiver

CTR-80A Cassette Recorder



Joysticks

Telephone Interface II

We'll be bringing you a family of accessories to increase the capabilities of your TRS-80 Color Computer. Right now you can add a printer for hard copy and program listings, or joysticks for more exciting computer games, or even a telephone interface that lets you "call-in" to time-share or data networks. Later we'll add other printers, and even disk storage. But look at what's available now.

**TRS-80 Color Video Receiver.** This 13-inch diagonal color television set is an ideal match for your TRS-80 Color Computer, and it also receives TV signals off-the-air. Its quality and high resolution result in beautiful, sharp color graphics and easy-to-read text. 13x18x15 $\frac{1}{8}$ ". U.L. listed AC operation. 26-3010

**Quick Printer II.** A "mini" line printer priced to fit everyone's budget. And it connects directly to your Color Computer with the cable listed below. It prints 32 characters per line (the same as your screen) on a 2 $\frac{3}{8}$ -inch wide roll of aluminum-coated paper. Prints upper and lower case and features automatic

"wrap-around" when text exceeds line length, so there's no data lost to overflow. Software selectable wide characters too, 16 per line. Quick Printer II prints at a fast 120 lines per minute! U.L. listed AC operation. 26-1155

**Printer Cable.** 26-3009

**CTR-80A Cassette Recorder.** Here's the way to save data or programs you've written yourself—record them on cassette tape. Then, whenever the program is needed again, you can play it back. You can also save data, such as the running totals in your Personal Finance budget accounts. Features automatic level control to insure accurate data recording. Connecting cable included. Requires batteries or U.L. listed AC operation. 26-1206

**TRS-80 Telephone Interface II.** Transfer data and programs from one location to another the fast way with this full "originate/answer" acoustic coupler. It allows two TRS-80s to "talk" to each other by telephone. You can easily access time-share or informa-

tion networks like CompuServe (see page 35), and get the latest on weather, sports, airline schedules, stocks, and much more. No direct connection to the phone line is required. Simply dial the phone number for the network you desire to communicate with; after the connection is made, place the telephone handset on the interface and you're ready to receive and transmit data. U.L. listed AC operation. 26-1171

**RS-232 Connecting Cable.** 26-3014

**Joysticks.** Make your Color Computer even more versatile with this set of 2 "joystick" controls. They add excitement to computer games, and you can even incorporate joystick position instructions into your own programs! On-screen objects can be maneuvered to simulate lifelike 360-degree movement. And each joystick has a "single-shot" button. 26-3008

**Color Computer Dust Cover.** (Not shown). 26-3006



## Color Computer Programs for Instant Operation

### Just Plug In a TRS-80 Program Pak™ and Turn the Computer On!



#### Personal Finance

"How many dollars can I spend?" "How much should I save?" "Where does all my money go?" Here's a program designed to help you answer these and other important questions about your finances, and to assist you in setting up a budget. Overcome bad money habits you didn't even know you had! You can choose from 26 major expense categories: such as auto, gas, clothing, food, retirement, and utilities; or make up a list to fit your own needs. This is just a guide to assist in planning for today and tomorrow—the final decision is yours.

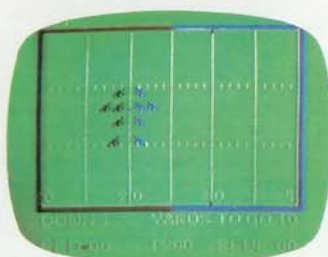
26-3101



#### Quasar Commander

You're at the controls of a starship! As you maneuver through space, try to destroy as many of the enemy ships as you can without colliding with them! Game variations and skill levels will give you or your family hours of fun. You can play against time, against a limited number of shots, or have no restrictions on either. Joysticks control your ship's movement and speed. Deploy your radar for precise aiming, and use the autopilot to help track down the enemy ships. But watch out for the battle-cruisers behind the disguised forcefields! (Requires Joysticks.)

26-3051



#### Football

Join the pros in the NFL. You quarterback the offense, your opponent calls the defense. In the huddle, the "quarterback" has his choice of five plays. He can try the run up the middle, an end sweep, short pass, bomb, or punt. The defense is positioned against the run or pass, or set to blitz the QB. Plays are controlled by joysticks. Cross the end zone and score seven points, but watch out if your offense gets backed up against its own goal line, the defense can score a two-point safety. Prepare for real-life action when the teams line up! (Req. Joysticks.) Avail. 10/30/80. 26-3053



#### Checkers

This classic old game will never be the same again because now there's a new twist—it's you vs. the computer! You'll be able to play countless games at eight different levels—from beginner to expert. Or test problems can be set up for you to solve to sharpen your skill. The "beginner" level is the fastest and least challenging. But the computer is at its best in "expert" and practically impossible to beat. It requires concentration because the computer is searching three moves ahead to determine the best move. So beware of treacherous strategies and maneuvers! 26-3055

#### Chess

Here's a worthy opponent! The computer is always ready for a quick blitz or a slow, thoughtful game. Helps you learn to play or sharpen your skills. 26-3050

#### Music

You'll be composing your own music in minutes! Base and treble clefs in a five octave range with sharps and flats; plus whole, half, quarter, and eighth notes. 26-3151

#### Bingo Math

Teaches addition, subtraction, multiplication, and division; number recognition; and helps to increase response time. For 1 or 2 players. (Requires Joysticks.) 26-3150

#### Pinball

Play the built-in arcade game or custom-design your own! Hours of fun for 1 to 4 players. (Requires Joysticks.) 26-3052

**Diagnostic ROM.** Test memory and functions. 26-3019

## TRS-80 Color BASIC

With TRS-80 Color BASIC you can write your own programs using simple BASIC commands. When you buy a Color Computer, you get a language that is stronger than the TRS-80 Level I and compares favorably to Level II, plus it has several commands that are unique. For example, its special graphics capability lets you position the joystick controller (JOYSTK). And you can add a choice of 8 colors (SET) or even musical notes (SOUND) to your programs. This well-rounded BASIC is capable of handling everything from word strings to math functions. The computer hobbyist will appreciate its PEEK, POKE and USR() commands for accessing machine language subroutines. The technical buff will find its 9-digit numeric accuracy and mathematics functions very useful. They include: ABS—absolute value, INT—greatest integer, RND—random number, SGN—sign, SIN—sine, and SQR—square root. Advanced programmers will like its string handling capability. And you have data handling commands, dimensioned arrays, and printer output commands. Each Color Computer comes with Color BASIC, plus manual. And you can expand to the extended BASIC at any time.

**Color BASIC Manual.** Available separately. 26-3191

## TRS-80 Extended Color BASIC\*

All the features of standard Color BASIC, plus advanced graphic capabilities. Screen resolution of up to 256x192 (16K RAM required), produces dazzling graphic simulations. Generate complex sounds using more than one musical note. Just look at the variety of graphic commands available. You can save an image from the screen, display a predefined image, "zoom" the graphic image "in" or "out," choose from 8 colors, draw a line between two points, rotate the image, move the image from one area of the screen to another, draw a circle, and draw a rectangle or box. Plus there are two very useful commands: TIMES\$—returns the time, and PRINT\$—prints in dollars and cents format. Extended Color BASIC also gives you program editing capabilities, specific error messages, user-definable keys, string arrays up to 255 characters, floating point decimal, and machine language routines.

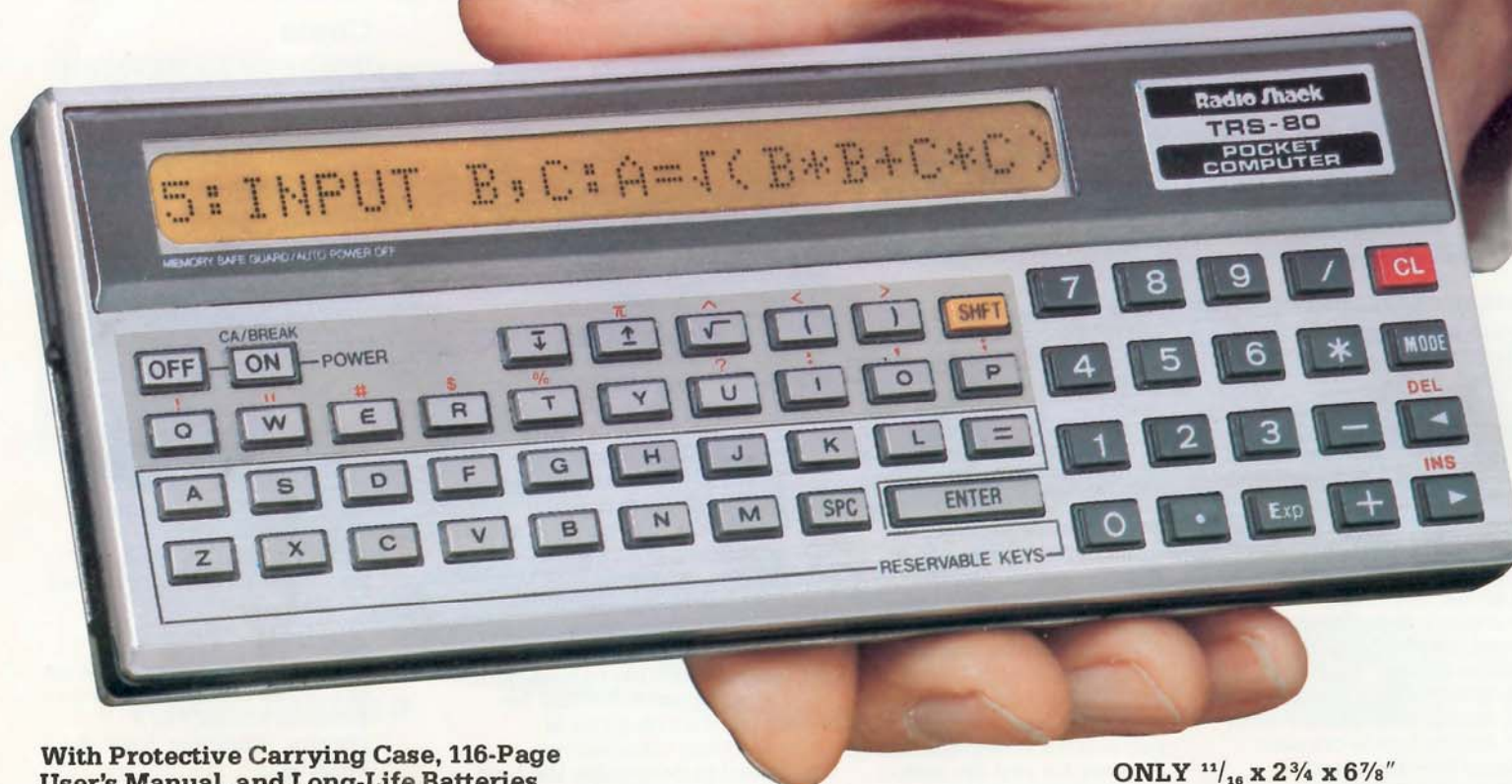
**Extended Color Computer BASIC ROM.** Requires installation, extra. Includes manual. 26-3018

**Extended BASIC Manual.** Available separately. 26-3192

\*Available 11/30/80



# Introducing the TRS-80 That Fits in Your Pocket



## New TRS-80 Pocket Computer

- Programs in BASIC
- Easy-to-Read 24-Character Liquid Crystal Display
- 1424-Step Memory Holds Multiple Programs
- Retains Programs and Data When Power is Off
- Standard Typewriter-Format Alphabetic Keyboard
- 10-Digit Numeric Accuracy
- 15 Arithmetic Functions

With Protective Carrying Case, 116-Page User's Manual, and Long-Life Batteries

ONLY  $11\frac{1}{16} \times 2\frac{3}{4} \times 6\frac{7}{8}$ "  
ONLY 6 OZ. LIGHT

## Another Computer Breakthrough from Radio Shack

Radio Shack puts big computing power in the palm of your hand with the amazing new TRS-80 Pocket Computer, the first complete, portable computing

system you can program in BASIC. The Pocket Computer can solve problems, process data, assist with decision-making, teach, and even entertain—at a low price that seems all the more incredible once you've explored its exciting features.

### 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 calculator—or you can use our cassette software that's ready to run. The Pocket Computer has built-in arithmetic functions you can put to work immediately, simply by pressing the **ON** key. You can work with large numbers—up to 10 digits (mantissa) and 2-digit exponents. And using trig and angular functions is just as easy because they are also built in.



Some computer equipment may require special order.



# A Portable, Programmable Computer You Can Afford!

## The Advantages of BASIC Programming

The real power of the TRS-80 Pocket Computer comes from its ability to run programs, either yours or ours. It accepts your instructions on "how to do the job" in BASIC—an English-based 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, with the addition of 15 arithmetic functions.

You can program the Pocket Computer to do almost any of the smaller jobs that the TRS-80 microcomputer can do, except those requiring graphics capability. 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.

Each program 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.

You simply switch to the RUN mode to run your program or programs from memory—several can be stored at the same time. Your programs can display

prompts in plain English for inputs and display answers with explanations.

Both an Edit and Debug mode are provided so the TRS-80 Pocket Computer is much easier to program and use than any programmable calculators. If you own a programmable calculator compare it to our Pocket Computer. You may never use your calculator again!

The keyboard arrangement includes 37 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. The big 24-character alphanumeric LCD has easily readable  $\frac{3}{8}$ " high characters plus eight smaller mode indicators.

For scientific and engineering uses the Pocket Computer is accurate to 10 digits and can handle numbers with exponents of  $10^{99}$  to  $10^{-99}$ . Built-in arithmetic functions include trigonometric and inverse trig with readout in degrees, radians or gradients, log, exponent, square root, angular conversions, integers and absolute values.

Power for your TRS-80 Pocket Computer comes from 4 easy-to-replace, long-life mercury batteries (available at Radio Shack). An automatic power-off feature saves battery life if no entry is made after 7 minutes. Programs and data are saved in permanent memory for instant recall.

The optional cassette interface holds the Pocket Computer and allows you to store or enter multiple programs and data. There are already eight Radio Shack program packages available (see page 34) and many more on the way. 26-3501

## Specifications

**Microprocessors:** Two 4-bit CMOS (one for arithmetic operation, one for BASIC interpreter and key-in).

**Keyboard:** 57 keys alphanumeric.

**Display:** LCD 24-character 7x5 dot matrix plus 8 symbols (SHIFT, DEG, RAD, GRAD, DEF, RUN, PRO, RESERVE). Automatic scrolling plus manual playback of lines longer than 24 characters. 80-character 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.

**Size:** 11/16x2 1/4x6 1/8" (HxWxD).

## Make Your Pocket Computer a Complete System

The TRS-80 Pocket Computer Cassette Interface and Minisette®-9 Recorder allow you to save and load your own programs, or use Radio Shack's pre-recorded Pocket Computer software (see page 34). Designed for portability and ideal for use at home, office, school or anywhere you travel.

**Cassette Interface.** Connects your Pocket Computer to a cassette recorder. Includes cable and plugs to fit the Minisette-9 and most other compatible recorders. The Cassette Interface enables you to store and save your programs while changing batteries. Requires three "AA" batteries. 3 1/2 x 8 1/4 x 7/8". 26-3503

**Minisette-9.** Ultra-slim, compact design makes it perfect for use with the Pocket Computer. Features end-of-tape Auto-Stop, 3-digit tape counter, LED record mode/battery condition indicator, built-in mike. 1-5/16 x 7-3/16 x 4-9/16". Requires four "AA" batteries. 14-1812

### Pocket Computer Fits into the Recessed Port on the Interface





# Software for TRS-80 Pocket Computer

Each software package includes a comprehensive, easy-to-understand manual. All require the Cassette Interface (shown on page 33) and compatible cassette recorder.

**Business Financial.** With this package of seven programs, the TRS-80 Pocket Computer becomes a powerful decision-making tool for professionals in the field of finance. The *Days and Dates* program will calculate the number of days between a reference date and a second date, or will find the resulting date when any number of days are added to, or subtracted from the reference date. The *Loans and Annuities* program uses four primary variables: amount of loan, payment, number of payments and annual interest rate. Given any three of the variables, it calculates the fourth. A fifth variable, periods/year, permits the user to specify any number of payments per year. Other programs in the package are *Future Value*, *Bond Price and Yield*, *Internal Rate of Return*, *Compound Interest and Depreciation*. 26-3517

**Statistics for Business, Marketing and Sales.** Consists of seven programs for analyzing data, and one program containing eight formulas useful in making business decisions. The *Forecasting* program is useful in making predictions from measurements taken over a specific period of time (months, weeks, years, etc.). The *Seasonal Variation* program calculates adjusted monthly or quarterly seasonal indices using the ratio-to-centered-moving average method.

**Moving Average.** A data set of up to 60 values can be averaged. The number of data points comprising the moving average can be changed without having to re-enter the original data. **Normal/T/F Distributions.** Given a mean, a standard deviation, and a value for X, this program returns the corresponding Z score, the value of the normal density function  $f(X)$ , the cumulative percentile  $P(X)$ , and the area under the normal curve between X and the mean. Calculates one-tail or two-tail probabilities for the t distribution, given a t value and the degrees of freedom. Package also includes programs for *Descriptive Statistics*, *Multiple Regression*, and *Gompertz Curve Analysis*. The *Management Decisions* program provides ready-to-use formulas for break-even analysis, optimum order quantity, make vs. buy, profit margin, markup, price elasticity, manufacturing cost curve, and random sample. 26-3516

**Real Estate.** Especially created for the real estate investor and agent. This package includes: annuities, compound interest, depreciation calculations, cash flow analysis, and residential purchase analysis. Depreciation calculations include straight line, declining balance, and sum of the year's digits. A "must" for anyone involved in real estate—time saver! 26-3510

**Aviation.** A complete flight management system which provides the basic equations and conversions used by the pilot. Converts: Temperatures from °C to °F and °F to °C; Distances in statute miles, nautical miles and kilometers; Liquid measures in U.S. gallons, Imperial gallons and liters. Calculates: True Altitude based on pressure altitude, temperature, and reference altitude; True Airspeed based on pressure altitude, temperature and indicated airspeed; Mach Number based on true airspeed and temperature; True Airspeed based on Mach number and temperature; Off-Course Correction and drift angles; True Headings and ground speed with winds; and Enroute winds. Ideal as replacement, backup or double-check of conventional slide-rule flight computers. 26-3513



**Civil Engineering.** Makes the TRS-80 Pocket Computer a valuable "on-site assistant." Programs include *Simple Beam Computations*, *Column Buckling and ASIC Column Formulas*, *Stress in Cylinders and Bolt Torque*, *Cantilevered Beams*, *Vector Computations*, *Fixed Beam Computations*, *Section Physical Characteristics*. 26-3511

**Personal Finance.** A real timesaver that helps you manage the financial details of your household. Programs include *Budget Management*, which provides up to 15 expense categories; *Electronic Checkbook*, for recording checks and deposits and balancing your checkbook; *Interest/Annuities*, for compound interest/annuities calculations. A stock portfolio program tracks the value of your investments, and *Metric/English Converter* for easy and exact conversions between the two measurement systems. 26-3518

**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*, *Biorhythm Computer*, *Star Buster*, *Quick Watson!* and *Craps*. 26-3515

**Math Drill.** Designed for children in the primary grades. Teaches basic math skills through examples and repetition. The package provides random problems at four levels of difficulty, a math table display and test, a program that allows the parent or teacher to enter problems. For fun, there's a Hi/Lo game that allows a child to guess a random number selected by the computer. 26-3514





# TRS-80 VIDEOTEX Introduces Instant Information



## A Truly-Affordable 2-Way Information Retrieval System

**TRS-80 VIDEOTEX Hardware.** The TRS-80 VIDEOTEX terminal works with any telephone to turn any TV set into a 2-way information retrieval system. It features an alpha-numeric keyboard and 4K memory that allows you to store information for later viewing — cutting "on-line" time to a minimum. The VIDEOTEX terminal provides fully interactive communication, so you can answer questions and exchange ideas, or even play computer games with other VIDEOTEX users. VIDEOTEX software is built-in, and we include one free hour on the

CompuServe information service with purchase. The TRS-80 VIDEOTEX terminal is designed by Radio Shack and manufactured in our Fort Worth TRS-80 factory. It's easy to install — simply plug in a telephone cord, plug into an AC power outlet, and connect to the antenna terminals of your TV set. (Takes just minutes, and maybe a screwdriver!) 3½x13¾x14¾" U.L. listed. Available November 30 at over 6000 Radio Shack stores and dealers nationwide.

**TRS-80 VIDEOTEX Terminal.** 26-5000

**The TRS-80 VIDEOTEX Concept.** Imagine having a public library, that never closes, right in your home or office! Or volumes of stock market data at your fingertips! Picture a continuously updated newspaper you don't have to fetch from your doorstep! Or a low-cost electronic mail service!

Now you can get quick, affordable access to many kinds of information and data services. Radio Shack's TRS-80 VIDEOTEX format — consisting of sixteen 32-character lines *plus* color graphics — makes it all possible. VIDEOTEX makes interactive information retrieval a reality *anyone* can take advantage of — today! You simply dial a phone number, press a few keys, and watch the desired data appear on your TV or personal computer screen!

Before long, you'll no doubt see many information suppliers offering data you can access with your TRS-80 VIDEOTEX system. You might even see electronic shopping, banking, car rental, classified ads, travel and theater reservations! But...

**CompuServe® Information Service.** Through an exclusive agreement with CompuServe, TRS-80 VIDEOTEX users in most areas can access a wealth of information on an inexpensive "local-call" basis right now. CompuServe offers local, national and international news, weather and sports from a major newswire service and major regional newspapers; historical information and daily updates on 3200 stocks, bonds and commodities; a home and educational reference service; entertainment news and reviews; and more! Plus, Radio Shack's own Bulletin service for TRS-80 owners.

VIDEOTEX is a two-way service, so CompuServe subscribers can also play computer games or communicate nationwide via an Electronic Mail service. And CompuServe is continually adding to its list of available services.

**TRS-80 VIDEOTEX Software.** Turn your computer or terminal into a VIDEOTEX information retrieval system with our exclusive software packages. You can access any VIDEOTEX information supplier with your computer or terminal and a 300-baud telephone interface. TRS-80 VIDEOTEX software comes with one free hour of access to the CompuServe information service plus your operators manual, identification number and password.

**TRS-80 Color Computer Pkg.** 26-2222\*

**TRS-80 Model I/III Pkg.** 26-2220

**TRS-80 Model II Pkg.** 26-2221\*

**Dumb Terminal Pkg.** 26-2224

**Apple® II Microcomputer Pkg.** 26-2223\*

\*Available Nov. 30, 1980

®Apple is a trademark of Apple Computer.

®CompuServe is a trademark of CompuServe Inc.



# Radio Shack COMPUTER CENTER



## Radio Shack has what it takes to be your computer company

**AVAILABILITY!** Come in and try out a TRS-80 before you buy. You'll find the business-oriented Model II and larger peripherals on display at Radio Shack Computer Centers and in special Radio Shack computer departments. See the rest of the TRS-80 line at the Radio Shack store or Dealer nearest you. There are over 7000 Radio Shack outlets worldwide where you can place your order.

**COMPUTER CENTERS!** There are 85 Radio Shack Computer Centers nationwide, with more to come! All are staffed with professionals who know TRS-80s inside and out. They will help you select the TRS-80 and accessories to match your needs. Ask them about the TRS-80 business systems on display. In addition, all centers offer classes for everyone from beginners to advanced programmers.

**QUANTITY PRICES!** Quantity buyers can take advantage of special prices! Radio Shack's National Bid Department will be happy to quote on computer equipment to government, educational, industrial or other quantity purchasers.

**TOR JAN MICHAELSEN**

S&C SERVICE

HENRIK WERGELANDSGT. 52

TEL. 042-267 51

4600 KRISTIANSAND

**SOFTWARE!** You can put your TRS-80 to work immediately! Radio Shack has over 100 pre-recorded microcomputer programs, ready-to-run. Plus, our TRS-80 Applications Sourcebook lists over a thousand programs for sale by other vendors. More programs have been written for TRS-80s than any other personal computer. And the number keeps on growing.

**EXPANDABILITY!** From the original TRS-80 Model I to the new members of the TRS-80 family, Radio Shack personal computers are expandable. Add additional memory, broaden the range of applications — each TRS-80 microcomputer is a powerful system that can be easily expanded as your needs change or grow. When you're ready to expand, choose from our wide selection of accessories available right now.

**SERVICE!** Your TRS-80 is in good hands with our technicians. Over 130 company-operated repair centers nationwide service only our computers. There's repair service in most Computer Centers. Radio Shack also offers "Carry-In" and, in some areas, "On-Site" and "Limited On-Site" service agreements.

**TRS-80 NEWSLETTER!** Available to all TRS-80 users and owners, the TRS-80 Newsletter offers a wealth of computing information! You'll find a programming "Classroom" designed for the beginner, up-to-the-minute news, invaluable operating hints, new-product information and tips on how to fix software "bugs."

**TOLL-FREE HOTLINE!** Help is just a phone-call away! Qualified personnel in our Computer Services Department stand by to handle any TRS-80 related questions you might have.

Why do we go to such lengths? Because Radio Shack wants to be your computer company!

# Radio Shack®

The biggest name in little computers™

A DIVISION OF TANDY CORPORATION  
FORT WORTH, TEXAS 76102  
OVER 7000 LOCATIONS IN 40 COUNTRIES