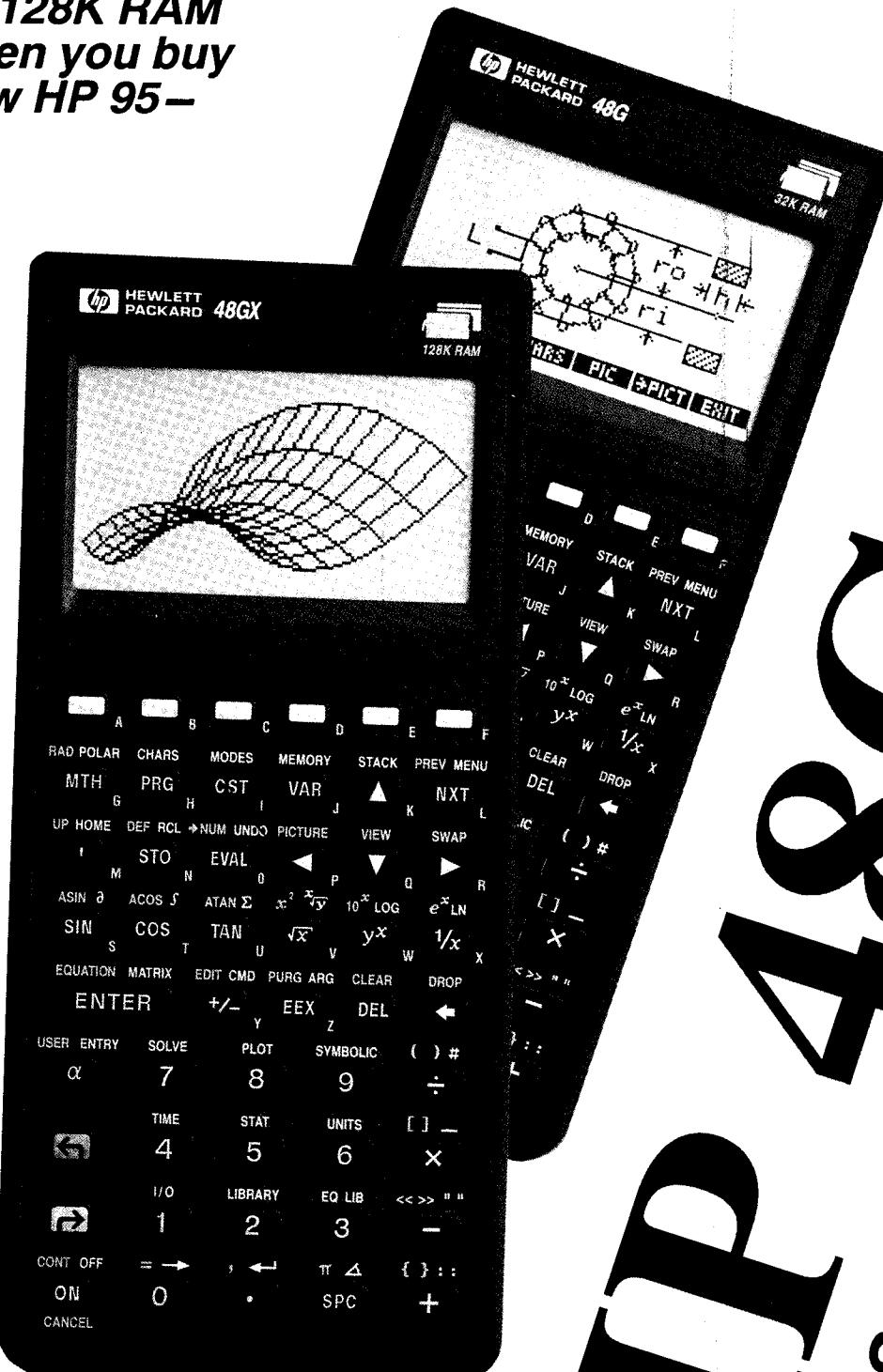


# EduCATC

Catalog #60

**Free—128K RAM  
card when you buy  
your new HP 95—  
see page 13**



Save \$75—see page 47

HP 48G



HEWLETT  
PACKARD

## Calculators & Informators™

### Hewlett-Packard

HP 10B.....	30
HP 12C .....	31
HP 17BII.....	33
HP 19BII.....	35
HP 20S.....	37
HP 28S.....	41
HP 32SII.....	37
HP 42S.....	42
HP 48G/GX .....	46
HP 71B.....	45
HP 95LX/LX1MB .....	10
HP 100LX.....	13

### Texas Instruments

TI School Calculators.....	36
TI OH Display Calcs.....	38
TI-30 Stat .....	38
TI-68 Adv Scientific .....	38
TI-81 Graphics Calc .....	39
TI-81/85 View Screen.....	38
TI-85.....	39

### Calculated Industries

Construction Master III.....	6
Digital PLAN Measure.....	8
ElectriCalc Plus.....	8

### Casio

fx-115D Turbo Scientific....	38
fx-6300G .....	39
fx-7000GA/7700G/ 7700GB.....	39

### Digitool

Inch-Mate .....	7
-----------------	---

### Franklin

Digital Book System.....	7
Language Master 3000 .....	7

### Psion

Series 3.....	9
---------------	---

### Sharp

EL-9200C/9300C .....	39
Wizard 9600.....	8
OZ 9600II .....	8
OZ-7420 .....	8

80 x 25 full CGA screen!!  
DOS 5.0

runs all your  
PC software

## HP 100LX

*see page 13*

**Everything**—all the functions and features of other graphics calculators.

**More**—more memory, more functions, more graphics.

**New**—input forms, dialog boxes, plotting enhancements, 3-D graphics, built-in equations.

# HP 48G/GX

*see pages 46 & 47*

### Laser Pointer Pen

**ALPEC**

- Scientists
- Doctors
- Speakers
- Realtors
- Lawyers
- Teachers
- Trainers
- Architects
- Engineers
- Executives
- Coaches
- Administrators

*Brand  
New*

audacious orange Protective Case for your HP 48

**TDS**

Thick nylon cloth with heavy stitching (sheds water) has clear plastic front cover membrane (you can key right through it), velcro seal, and cable port on lid; hand strap on back doubles as belt loop.

*Brand New*

The surveyor's orange color is so bright that, if you drop it in the field, it may start a fire!

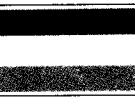
Stock #2865 [Orange 48 Case].....\$29.95

Power your point home with a round red laser punch!  
Put new life in your presentation—focus their attention where you want it with this light-pen. Always with you in your shirt pocket.  
Range 55 yards, 3 hr continuous operation on 2 AAA batteries (incl) silver; pen-sized 7/16 x 5 3/8 inches. 1 yr "no B.S." warranty.  
Stock #2888 [Laser Pointer] .....

\$69.95



AmEx & OPTIMA

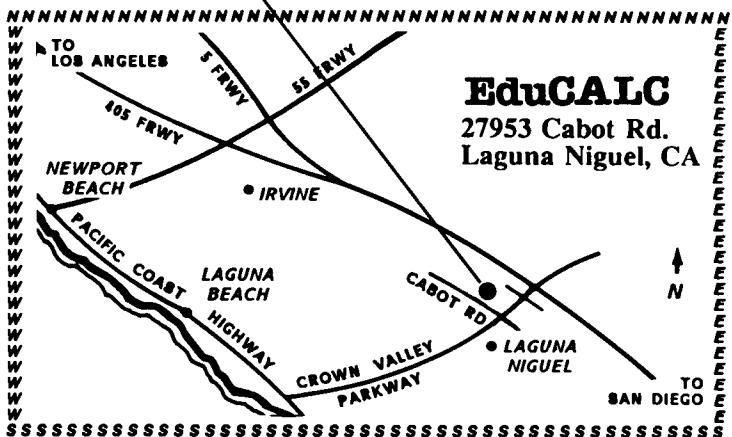


Prices effective  
June 6, 1993

### Visit Our Store

We're located right here in Orange County, California, near the intersection of Interstate 5 and Crown Valley Parkway (across the freeway from Mission Viejo Mall).

**HOURS:**  
8 am - 5 pm  
Monday - Friday



### EduCALC

27953 Cabot Rd.  
Laguna Niguel, CA

## Here's who you'll talk to at EduCALC:



Liz



Ellen



Brent



Matt



Kelli



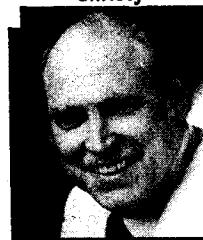
Richard



Christy



Deanna



Jim



Chris



Marta

EduCALC's official greeter



Kaycee,

## EduCALC

27953 Cabot Road  
Laguna Niguel, CA 92677

Summer, '93

Dear Reader,

You may already be one of the lucky HP owners who has seen his calculator survive a disaster and continue to perform for years.

Or you may still be using a 10 or even 20-year old HP machine. I was pleased when many more of you took the time to write or phone me after I told you about some of these survivors in my last catalog.

You'll read in this issue about the new HP 48G/GX, the Graphics/Expandable Calculator, and the HP 100LX Palmtop PC, a DOS 5.0 and CGA-compatible computer. Each of these is a "2nd edition", a revised and strengthened version of an original, break-through design.

Lots of us are prudent and cautious. We're "from Missouri" and we want to see things work first. If you are in this crowd you may want to consider getting yourself one of these two new "2nd editions".

**Here's my message:** these new HP handhelds are not just prudent buys. They are **SAFE BUYS**. The HP machine you get will have world-class reliability and longevity built into it.

Perhaps you will be proud to let me know, sometime in the 21st century, that the HP 48 or HP 100 that you bought back in '93 is still working fine for you.

Sincerely,

*Jim*  
Jim Carter  
Manager

P. S. I've hidden a coupon somewhere in this issue—find it now and enter my contest for a **FREE** calculator.



Index .....	4	Scientific Calculators .....	37
For Your Information .....	5	Projectable Calculators .....	38
Informators™ .....	6	Graphics Calculators .....	39
HP 95LX Palmtop .....	10	HP 28S Scientific .....	41
HP 100LX .....	13	HP 42S Scientific .....	42
Business Books & Software .....	27	HP IL Surplus Gear .....	44
Stands, Cases, Batteries .....	28	HP 48G/GX .....	48
Business Calculators .....	30	Math Software & Bookware .....	62
School Calculators .....	36	HP Supplies .....	67

# Index

1-2-3 for Scientists/Engineers ..... 27  
 1-2-3 users: Financial Formulas ..... 27  
 4 x 4 Cable ..... 17  
 Accessories, older calculators ..... 66  
 ACT! ..... 20  
 Adapter, AC ..... 14  
 Cigarette-lighter ..... 14  
 A/D Converter ..... 51  
 Advanced Circuit Analysis ..... 41, 44  
 Advanced Graphing for HP 28S ..... 41  
 Alignments/Offsets, HP 42S ..... 43  
 Answers You Need for HP 95 ..... 26  
 Antibiotia PC ..... 22  
 Arithmetic and Calculators ..... 36  
 ASTRO\*CARD, HP 48SX/GX ..... 55  
 Astronomical Formulae for Calcs ..... 64  
 Astronomy, Practical, w/ Calc ..... 64  
 Bag, Protective ..... 48  
 Batteries ..... 30  
 BATTman ..... 24  
 Business Pac, HP 48SX/GX ..... 53  
 C++ for Scientists/Engineers ..... 66  
 Cables ..... 16, 50  
 Calculator Bulletin Board ..... 56  
 Calculator Enhancements ..... 41  
 Calculator Index ..... 2  
 Calculator Supplies ..... 68  
 Calculus, Discovering w/ 28 & 48 ..... 61  
 Calculus Explorer ..... 63  
 Calculus and Derive Program ..... 65  
 Calculus Pac, HP 48SX/GX ..... 53  
 Calculus Refresher ..... 62  
 Calculus with HP 48 ..... 61  
 Cases ..... 14, 16, 29, 49  
 Card Drives, Solid State ..... 18  
 Chem. Application Card, HP 48 ..... 42  
 Cleaner, Glass & Plastic ..... 67  
 Computer Supplies ..... 67  
 Connectivity Kits & Software ..... 16, 17  
 Construction Master III ..... 6  
 Construction Master III Trig + ..... 6  
 Customize your HP 28S ..... 41  
 Curve Fit ..... 22  
 Data Converter:  
     95 to parallel printer ..... 16  
 Database, HP 48 ..... 55  
 Derive ..... 65  
 Diconix 180si Printer ..... 18, 50  
 Dictionary of Science & Tech ..... 62  
 Dictionary/Thesaurus ROM Card ..... 22  
 Dictionary, New Hacker's ..... 5  
 Differential Eqns, Lab Manual ..... 65  
 Digital Book System ..... 7  
 Digital PLAN Measure ..... 8  
 Disk Drives ..... 18, 19  
 Docking Station ..... 16  
 DOS, Easy Course in ..... 27  
 Drive95 ..... 18, 51  
 E.E. Application Card, HP 48 ..... 42  
 E.Z. Software for Math, Algebra & Arithmetic, HP 48SX/GX ..... 55  
 Easy Course books—  
     see specific calculators  
     for HP 22S ..... 37  
     for HP 27S ..... 34  
 EduCALC News Line ..... 18, 51  
 EL-9200/9300 Graphing Calcs ..... 39  
 ElectriCalc Plus ..... 8  
 Emulator Card, 41CV ..... 58  
 Encyclopedia, VNR Math ..... 62  
 Engineering  
     Application Cards for M.E.  
         E.E. & Chemical, HP 48SX/GX ..... 52  
         in History ..... 5  
         Math Library ..... 52  
         & Mind's Eye ..... 6  
         Struc Apl Crd, HP 48SX/GX ..... 51  
         Struc Pgm Crd, HP 48SX/GX ..... 51  
     Engineer's Interface Box ..... 17  
     Equation Library Apl Card, HP 48 ..... 51  
     Explorer's Guide to HP 95 ..... 26  
     External Card Drives ..... 18  
     f(g) Scholar ..... 64  
     Fax Machines, Plain Paper ..... 71  
     File Manager, HP 48 ..... 58  
     Financial Math Handbook ..... 27  
     Financial Functions Library, HP 48 ..... 54  
     Flash Cards ..... 15  
     Flashdrive 25 ..... 19  
     Flight Navigation Sys HP 48SX/GX ..... 57  
     Flight Pak, FX-7 ..... 21  
     Foreign Lang. Owner's Manuals ..... 67  
     Forth Programming Sys (UTIL) ..... 26  
     Fractals on HP 28 & 48 ..... 61  
     fx-115D Sci/Solar Calc ..... 38  
     fx-6300G ..... 39  
     fx-7000GA/7700G/  
         7700GB Graphic Calculator ..... 39  
     Games ..... 18, 23, 57  
     General Application Pgms, HP 48 ..... 52  
     Golfer's EDGE ..... 21  
     Global Navigation on HP 42S ..... 44  
     Go Figure! ..... 6  
     Goodies Disks, HP 48 ..... 56  
     Graphics, 48 ..... 59  
     Graphing Calculator Bookware ..... 40  
     HP 10B ..... 30  
     HP 12C ..... 31  
     HP 15C Adv Functions Handbk ..... 38  
     HP-16C Emulator Library ..... 58  
     HP 17BII ..... 33  
     HP 19BII Business Consultant II ..... 35  
     HP 20S ..... 37  
     HP 28S (used) ..... 41  
     HP 32SII ..... 37  
     HP 42S ..... 42  
     HP 48G Ten-Pack ..... 48  
     HP 48G/GX ..... 46  
     HP 95LX ..... 10  
     HP 100LX ..... 13  
     HP 71B Surplus ..... 45  
     HP Applications Books – HP 12C ..... 32  
     HP Palmtop Paper ..... 26  
     HP Pocket Guides—  
         see specific topics  
     HP Gear, Surplus ..... 44  
     HS/College Math Pac, HP 48S ..... 53  
     Hacker's Dictionary, New ..... 5  
     Home Buyer Qualifier Manual ..... 34  
     HYDRAtools – HP 48 ..... 57  
     HYDROmate – HP 48 ..... 57  
     Inchmate ..... 7  
     InfraRed Printer ..... 34, 50  
     Insider's Guide to ACT! ..... 21  
     Insights (48) ..... 58  
     Internal ThinCard Drive ..... 18  
     Investment Securities Guide,  
         HP 12C ..... 32  
     Keep in View ..... 25  
     Kermit ..... 60  
 Kermit, Using MS-DOS ..... 60  
 Language Master 3000 ..... 7  
 Laser Pointer ..... 2  
 Linear Algebra, Introduction to ..... 62  
 Lotus in Minutes ..... 26  
 M.E. Application Card, HP 48 ..... 42  
 MLDL ROM Card, HP 48SX/GX ..... 58  
 Maclean Mailer ..... 25  
 MacLinkPlus ..... 17  
 Magic of Numbers ..... 5  
 Mastering HP 48 ..... 60  
 Match Up ..... 24  
 Math Application Card, HP 48 ..... 52  
 MathEdit ..... 66  
 Mathematical,  
     Functions, Handbook of ..... 63  
     Methods in Physics & Engnr ..... 64  
 Mathematics,  
     Beginning Technical ..... 62  
     Conquering ..... 5  
     Exploring with Derive ..... 65  
     Financial Handbook ..... 27  
     Handbook of Applied ..... 62  
     Intro thru Science Applications ..... 64  
     VNR Encyclopedia ..... 62  
 Mechanical Engineering:  
     Equation Library for HP 95 ..... 21  
     Equation Library for spreadsheet ..... 21  
 Medical Software ..... 22  
 Mobile Data Link ..... 19  
 Modems ..... 19  
 Modern Difference Engine ..... 5  
 Money Manager ..... 21  
 MuLISP ..... 25  
 NAVCOM 48 ..... 56  
 Navigation Pac, Celestial ..... 57  
 Navigation Pac w/ Ship Loading ..... 53  
 Navigation, Global, on HP 42S ..... 44  
 NavPlan-95 ..... 25  
 Numerical Methods, Engineers ..... 63  
 Numerical Meths That Work ..... 63  
 Option Trader, HP 48SX/GX ..... 55  
 Organizers, leather ..... 14, 49  
 Overhead Projectors, Magnifiers ..... 38  
 Overlay Kit, HP 48 ..... 48  
 Owner's Manuals ..... 66  
 PC Macsyma ..... 64  
 PalmModem 2400/PalmFax ..... 19  
 Personal Food Analyst ..... 22  
 Personal Info Manager, HP 48 ..... 55  
 Pi in the Sky ..... 5  
 Plotter Supplies ..... 68  
 Pocket Professional Software ..... 54  
 PodiumPal ..... 24  
 Precalculus Activities – HP 28S ..... 42  
 Printers:  
     Diconix 180si portable ..... 18, 50  
     InfraRed ..... 34, 50  
 Printer Interface: JetEye ..... 16  
 Printer Supplies ..... 69  
 Productivity Pack, 95 ..... 24  
 Professional Ext. Math Pac ..... 53  
 Professional RE Using 12C ..... 32  
 Program  
     Development Link, HP 48 ..... 50  
     Examples, HP 48 ..... 60  
     Examples & Techniques, HP 42S ..... 42  
 Programmer's Ref. Manual, HP 48 ..... 59  
 Programming Services ..... 58, 59  
 Programmer's Toolkit, HP 48 ..... 59  
 Projectable Calculators ..... 38  
 Protective Bags & Cases ..... 14, 48  
 QaPALM ..... 24  
 QC-Link/HP ..... 23  
 Quick Guide to 48 Super Calc ..... 61  
 Quick Reference Guides—  
     see specific topics  
 RAM Cards ..... 15, 48  
 Regression Analysis Pkg ..... 58  
 Road Whiz Plus ..... 6  
 RPL, Introduction to ..... 61  
 Save These Telephone #'s ..... 7  
 Scientific Word ..... 66  
 Serendipity ..... 6  
 Serial I/F Cables  
     & Kits ..... 16, 17, 50  
 Series 3, Psion ..... 9  
 Skystream Receiver ..... 19  
 Slope-Staking Pgms – HP 42S ..... 43  
 SmartDock ..... 16  
 SmartROM ..... 59  
 Smart Rounds ..... 23  
 Software Power Tools, 28S ..... 42  
 Solution Books—  
     see specific topics  
 Stands ..... 28  
 Statistics at Your Fingertips ..... 63  
 Step-by-Step Books—  
     see specific topics  
 Structural Analysis Card, HP 48 ..... 54  
 Surplus Gear, HP ..... 44  
 Surveying Soft/Hardware, HP 48 ..... 54-57  
 Surveying Solutions, HP 42S ..... 43  
 Surveying Software: System 95 ..... 25  
 Survival Case, HP 48 ..... 49  
 Swift!BASIC ..... 25  
 Switch 2.0 ..... 23  
 Switch Developer's Kit ..... 24  
 Switchable Programs ..... 23  
 Text-Sort/Browse ..... 25  
 ThinCard drives ..... 18  
 TI School Calculators ..... 36  
 TI 30 Stat ..... 38  
 TI 68 Adv Scientific ..... 38  
 TI 81 Graphics Calculator ..... 39  
 TI 81/TI 85 ViewScreen ..... 38  
 TI 85 ..... 39  
 Technical Notes ..... 63  
 Telecoupler II ..... 19  
 Tips/Programs, HP 32 ..... 37  
 Topography – HP 42S ..... 43  
 Trade-In Programs:  
     HP 19BII ..... 13  
     HP 41CV/CX ..... 48  
 Transitions, HP 41/48 ..... 59  
 Travelware ..... 21  
 Triangle Solutions Booklet –  
     HP 42S ..... 44  
 University Math Pac, HP 48SX/GX ..... 53  
 Using Your HP 95LX ..... 26  
 Utility Pack, 95 ..... 24  
 Verbb, HP 48SX/GX ..... 51  
 Vertical Curves – HP 42S ..... 43  
 Video Guide, HP 48 ..... 60  
 Video Training Program, HP 12C ..... 32  
 Wallet ..... 14, 49  
 What to Solve? ..... 6  
 Wizard OZ-7420 ..... 8  
 Wizard OZ9600 ..... 8  
 Wizard OZ9600II ..... 8

## Pi in the Sky by John Barrow

*Brand  
New*

*is math larger than life?  
part of the mind of God?*

What exactly is mathematics? And why does it work? Astronomer Barrow really delivers some answers here—about origins . . . meaning . . . mystery.

Hobnob with a host of peculiar individuals who have thought as deep and as strange thoughts as humans can. Consider how the math of the future may be radically different, and what that implies for artificial intelligence.

This is full of off-beat quotations too, from Lao-Tse, Pirsig, Darwin, Leacock, Godel, Eco. It is profound fun!  
Stock #2877, *Pi in the Sky*, 317p hardbound.....\$24.95

## A Modern Difference Engine

**James Donnelly**

Ever wonder what Charles Babbage really did? Now you can create his dream for yourself on your HP 48, HP 95 or PC!

This software simulates Babbage's *Difference Engine No. 2* as the Science Museum of London recently constructed it—finally realizing the most important piece of vaporware in the history of computing.

Now you can turn the crank yourself—comes complete with book describing the Engine's genesis and design, illustrated with engravings, drawings, photos and examples. Excellent for classroom use.

Stock #2811 (*Difference Engine, 3½"*).....\$19.95

## Conquering Mathematics from Arithmetic to Calculus by Motz/Weaver

"a feast for the intellect" — *Publishers Weekly*

"a must for those who want to find what Mathematics is about" — *Marcelo Alonso* (*Prof., Florida Inst. of Technology*)

"allows us to arrive painlessly at Higher Math" — *Hugh Downs* (*Host of ABC's 20/20*)

After two wonderful books explaining physics, Motz and Weaver return to demystify math. Straightforward and accessible, they lead even fearful readers through the fundamentals of practical arithmetic—even to transfinite and imaginary numbers.

Always practical, they explain the derivative with Newtonian physics, algebra with continued fractions.

Stock #2543, *Conquering Mathematics*, 305p hardbound .....\$23.50



## The New Hacker's Dictionary ed. by Eric Raymond

*Brand  
New*

Know your enemy—in-jokes, taboos, myths

Span continents with your vocabulary—*gunx, crusty, frobnitz*

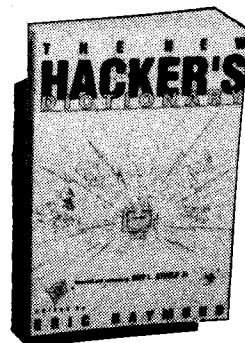
Talk funny and influence people—just say *flarp*

Find out what "*split-p soup?*" means

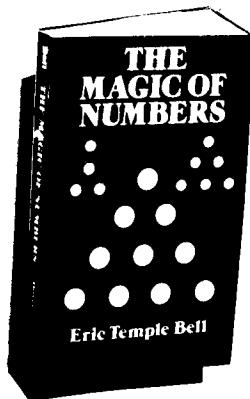
Make new words out of old—*disgustitude, hackingification*.

In short, learn how to come on gifted—be an instant brilliant weirdo by saying "*Pi equals 3 for large values of 3.*"

Stock #2878, *Hacker's Dictionary*, 433p softbound .....\$10.95



## The Magic of Numbers by Eric Bell



Explore the profound and curious way in which 'number magic' has influenced religion, philosophy, science and mathematics—beginning with Pythagoras, who founded our scientific, technical culture and also the mystic doctrine that 'Everything is Number'.

Dr. Bell will show you how this doctrine supported reasoning by pure mathematics and grew to a dazzling reemergence in modern physics.

You'll need only the simplest arithmetic to enjoy this history of ideas and its many engaging life stories of brilliant thinkers.

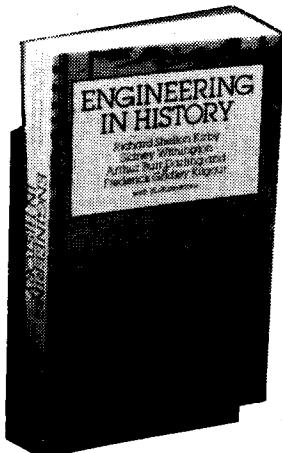
Stock #2659, *Magic of Numbers*, 418p softbound .....\$8.95



as featured in  
*Scientific American*  
for February, '93

## Engineering in History

by Kirby/Withington/  
Darling/Kilgour



"Highly readable . . . the only comprehensive, one-volume survey currently in print . . .

"The joint effort of practicing engineers, engineering professors, and professional historians . . . (its) principal strength is its attention to detail . . . The sheer number of remarkable accomplishments included in its pages is inspiring and reminds us of the tremendous impact engineering has had—and continues to have—on human civilization.

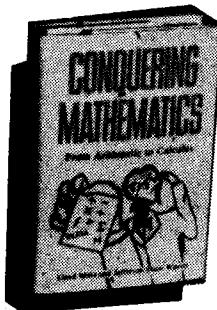
"Gives the professional a breadth of vision." — *IEEE Spectrum*.

Stock #2581, *Engineering in History*, 530p softbound .....\$13.95

## Read our mail from Switzerland —

"Both deliveries were just perfect and I am very satisfied with these products. I would like specially to thank you for your prompt execution of my order and I will of course place in future further orders with your company and will also recommend your company for its splendid service."

Dr. S. Pugatsch, Zuerich

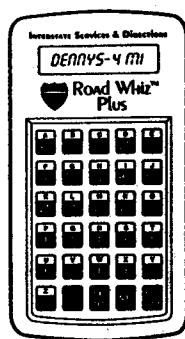


# FYI

## Road Whiz Plus Highway data at your fingertips

Laser Data  
Technology

*Brand New*



Have peace of mind, and a more enjoyable trip—you'll save money, too, because this investment pays real dividends month after month for years!

- finds 24-hour gas stations—distance, exit no., direction & distance
- locates motels—all chains and some locals are in the data base
- guides you to restaurants—all fast food chains plus locals, 24-hours
- displays rest-stops—distance, rest-room facilities
- major brand gas stations—closest first, for up to 1000 miles
- interstate routes—gives directions and mileages
- motel-chain 800 numbers, Highway Patrol numbers, distances to borders, diesel fuel locations, points of interest

Stock #2889 [Road Whiz Plus] List \$70.....\$59.95

## What to Solve? problems and suggestions for young mathematicians

by Judita Cofman

*New*



Your how-to book for creative thinking in math — generated during international camps for young mathematicians, 13 to 19.

Anyone from junior high school student to professional can learn and grow from this book—it's that easy to pick and choose at your own level. Cofman skilfully leads you in by first encouraging independent investigation, then showing you some power-methods, discussing solutions to famous problems, and finally describing questions the pros are working on right now.

She avoids past Olympiad questions, but gives many new ones from Russian, Hungarian and German sources.

Stock #2850, What to Solve?, 250p softbound.....\$19.95

## Serendipity

by Royston Roberts

### Accidental Discoveries in Science

Trust me—if you enjoy science, this will be your best read of the year!

The trouble with putting this book by your bedside is that these stories are like potato chips—you'll want to read just one more.

36 stories of discovery—by Archimedes, Nobel, Pasteur—about pulsars, indigo, penicillin—from chemistry, archaeology, medicine—through dreams, accidents, bombs—including Nylon, Velcro, Post-its, Ethyl gasoline, safety glass, X-rays, Pompeii—plus more and more.

Stock #2402, Serendipity, 270p softbound.....\$19.95



# Informators™

## Engineering and the Mind's Eye

by Eugene Ferguson

*Brand  
New*

"... overflowing with ideas and insights... a book that will reward many rereadings."—

Henry Petroski Duke University



This probing look at engineering design argues that, despite modern technical advances, good engineering is still as much intuition and nonverbal thinking as it is equations and computation.

Broad and deep, Ferguson (an ME and a historian) traces the strategies of technologists since the Renaissance with fascinating examples and many, many pictorial illustrations of visual thinking.

Stock #2887, Engineering & Mind's Eye, 241p hardbound.....\$24.95

## Go Figure!

by Hopkins/Mayne/Hudson



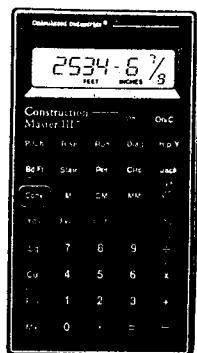
How to calculate all the numbers you need in everyday life—finally every formula, definition, explanation and example, so you can figure your own answers.

Consumer math, including credit card costs and currency exchange. Monthly payment calculations including IRA benefits and life insurance. Bank interest. Health including blood pressure measures, exercise program design, sun protection factors (SPF), spreads of diseases such as AIDS, social security. Weather with global warming and population growth. Gambling odds.

Stock #2671, Go Figure!, 349p softbound.....\$16.95

## Construction Master III feet-inch pocket calculator with BIG keys, BIG display

Calculated Industries



Figures with fractions! Just punch in dimensions—including fractions—and get accurate results immediately.

Accurate! Solve building problems directly in feet, inches and fractions up to 1/64". Enter dimensions right off the tape—or off plans, diagrams and prints.

Save valuable time. Solve complicated calculations such as rise, run, slope, and pitch problems in seconds! Built-in program solves right angle problems with 100% accuracy.

Get lengths instantly for custom stairs and rafters (common, hip and valley, jack).

Eliminate costly errors caused by inaccurate decimal conversions. Instantly converts between all dimension formats: feet-inch-fraction, decimal, yards, and meters—and determines square and cubic dimensions.

Make fast, accurate lumber estimates in board feet and dollars—for single boards, multiple pieces or the entire project. Wallet included.

Stock #CMIII [Construction Master III] List \$90.....\$74.95

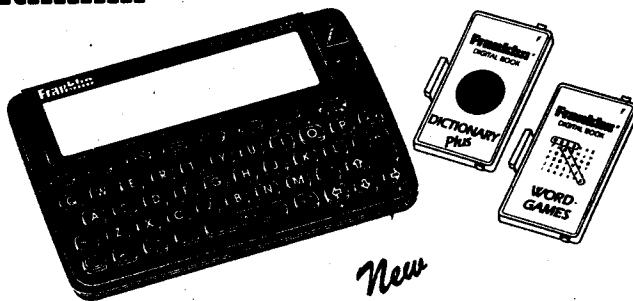
## Construction Master III Trig Plus

Most of the functions of CMIII plus full trig functions, including precise angles down to minutes and seconds.

Stock #CMIIITP [CMIII Trig Plus] List \$110.....\$94.95

## The Digital Book System

**Franklin**



*New*

Now you can enjoy the next information-revolution—the shirt-pocket library!

The system comes to you with 2 plug-in books. One is the *Merriam-Webster Dictionary Plus*, with a quarter-million definitions, a half-million synonyms and nearly a hundred thousand spelling-checks. The other plug-in book is *Word Games*, ten games such as Hangman, Anagrams and Jumble, Letter Poker, Cryptomania, Letris and Word Dozer.

The read-out is 5 lines, and it's so good it guides your eye with regular, bold face and italic fonts. You'll quickly access, search and retrieve information by the bucketfuls.

System accepts 2 plug-in Digital Books at a time and gives instant communication between them. The growing library will include—*Video Companion* (6700 movies with synopsis, cast, ratings), *Baseball Encyclopedia* (a million stats since 1876) and *Baseball Manager* (you manage games between 6 all-time great teams), *Bartlett's Familiar Quotations*, *Nutrition and Diet*, *Concise Columbia Encyclopedia*, *French & Spanish & German Bilingual Dictionaries*, *Bibles*, *Organizer*, *Betty Crocker's Cookbook*, *Pocket Stock Guide* (financial data on public equities), and medical titles like *Pocket PDR* and *Medical Letter Handbook of Adverse Drug Interaction*.

Stock #DBS11 [Digital Book System] List \$250 .....\$199

## The Language Master 3000

**Franklin**

This is the *Top-of-the-Line*, a giant dictionary (a quarter million definitions) and thesaurus (a half million synonyms)—yet extremely compact and easy-to-use.

Extra large 4-line LCD display is super-legible. Many useful features, including an SAT Tutor and a wide array of built-in word and logic games. Includes carrying-case.

Stock #LM3000 [Language Master] List \$150 .....\$119.95

## INCH-MATE

The affordable  
Foot/Inch/Fraction Calculator



Indispensable if you use a tape-measure! Instant and accurate.

+, -, x, ÷, square or square root, in Ft/In/Fraction to 1/16", or Decimal Feet or meters—convert back and forth! Finds diagonal or total rise with Pythagorean theorem. Memory.

USA-engineered with tough ABS case in high visibility yellow. Dust-resistant membrane under color-coded keypad. 1 year warranty.

Stock #DCINCH [Inch-Mate Calculator] List \$40 .....\$33.95

**Calculator batteries, stands & cases—p 28-30**

## SAVE THESE NUMBERS

<b>CASIO</b> Tech Support	(800)634-1895
<b>CALCULATED INDUSTRIES</b> Telephone	(800)854-8075
<b>CONTACT SOFTWARE</b> Telephone	(214)484-4349
<b>CORVALLIS MICRO TECHNOLOGY</b> Telephone	(503)752-5456
<b>D'ZIGN</b> Telephone	(209)297-8025
<b>EduCALC NEWS LINE</b> <i>New</i> Telephone	(714)582-3976
<b>E.Z. SOFTWARE</b> Telephone	(718)434-1766
<b>FIRMWARE</b>	(503)753-3617
<b>HEWLETT-PACKARD</b> Technical Support Repair Service Thinkjet Hotline Customer Information Center	(503)757-2004 (503)757-2002 (208)323-2551 (800)752-0900
<b>HP 12C, 17B &amp; 19B SEMINARS</b> Edric Cane	(818)957-3026
<b>HP 95LX SEMINARS</b> Computer Instructors Company Craig A. Levine (CALNET)	(800)487-5040 (310)374-6167
<b>KERMIT TECHNICAL SUPPORT</b>	(212)854-5126
<b>PSION</b> Tech Support	(508)371-0310
<b>SHARP</b> Technical Support Wizard Information	(800)732-8221 (800)321-8877
<b>SPARCOM</b>	(503)757-8416
<b>SUNDISK</b>	(408)562-0500
<b>SURVEY MODULE INCORPORATED</b> Technical Support	(615)357-8931
<b>TEXAS INSTRUMENTS</b> Consumer Relations Technical Support Literature Warranty	(800)842-2737 (806)741-2663 (800)847-2787 (800)847-5757
<b>TRIPOD DATA SYSTEMS</b>	(503)753-9322 (800)426-8026
<b>U. S. ROBOTICS</b> Technical Support	(800)982-5151

**HPCC**—Handheld and Portable Computer Club. The independent group for the users of Hewlett-Packard handheld and portable computers; publishes *DATAFILE* 8 times a year. Direct inquiries to Membership Secretary, Geegs Lodge, Hempton Road, Deddington, Oxfordshire, OX5 4QG, Great Britain.

# Informators™

## Wizard OZ-9600II

the successor to the OZ-9600,  
with 3 major technological  
improvements

**SHARP.**  
FROM SHARP MINDS  
COME SHARP PRODUCTS™

*Brand New*

■ huge 512K bytes of memory—

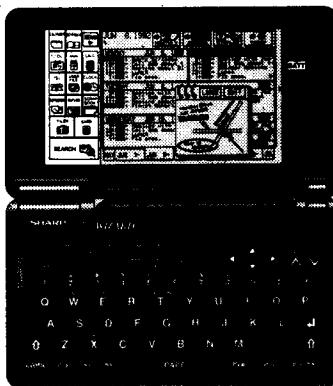
Sharp's largest to date

■ twice as fast as the OZ-9600

■ improved screen contrast for overall better viewing

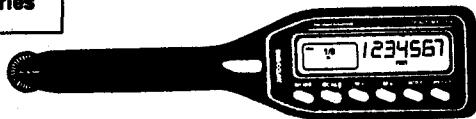
Stock #OZ9600II [Wizard] List \$650.....\$499

Stock #2763A [Deluxe Leather Case].....\$57.95



## Digital PLAN Measure

Calculated  
Industries



42 different scales built-in: 10 Architectural, 7 Engineering, 11 Metric, 14 Engineering/Map — plus, you can create your own custom scales, for unscaled plans or reduced prints.

Clicking sound confirms roller entry (user-selectable), balanced for left or right hand use, rolls dimensions Forward or Backward (or subtract with Back-Off Key). Rectangular Areas and Volumes automatically calculated. Push-button counter totals joists, electrical outlets, etc. Comes with User's Guide, Case, long-life Batteries; 1 yr warranty.

Stock #CISM [Digital PLAN Measure] List \$100.....\$89.95

## ElectriCalc Plus Electrical Code Calculator

Calculated  
Industries

*New*

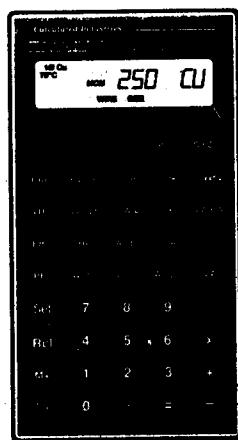
■ avoid code violations  
■ prevent material waste  
■ cut look-up and calculation time

You'll have Wire-Sizing and Voltage Drop, plus NEC 1990/93 tables 310-16/17, 3B, 250-94/95, built in—it's like having that 800-page Codebook at your fingertips!

You'll work directly in Volts, Amps, Watts, Volt-Amps, HP, Efficiency and Power Factor. Calculates Wire and Conduit Sizes accounting for CU and AL Wire, 75°/90° Insulation, Ambient Temperature, and 16 and 30 systems. Finds Voltage Drop Wire Size, Actual Volts Dropped and Percentage of Volts Dropped. Solves Grounding calculations, finds Derated Wire Sizes.

Includes User's Guide, case, batteries and 1-yr warranty.

Stock #ECP [ElectriCalc Plus] List \$100.....\$89.95



## Wizard OZ-9600

**SHARP.**  
FROM SHARP MINDS  
COME SHARP PRODUCTS™



■ touch-screen—quick and simple for you to use

■ 320 x 240 dots graphic display—  
you can draw a map on it

■ true word processing—type a letter comfortably, print with multiple fonts

■ a quarter-million bytes of memory—now you can keep it all

Magic from Sharp, the world leader — a new standard for your time management and business productivity!

Touch-screen technology makes it a snap to use—you just touch an icon on the screen . . . no need to remember any key commands. You'll draw or write on the screen and save it as though it were a yellow sticky note (reduce or enlarge it if you like). If you're on the run, jot down a quick note or phone number by hand, and later attach it to a User File or telephone entry.

Keyboard is 75% the size of a standard PC, so you can type plenty, anytime and anywhere—print in bold, italic, underlined or plain fonts, set margins & indents and tabs. Print on any printer using new infrared technology or even print any screen (interface optional). Use OUTLINE to take notes or create lists with subtopics, so you can organize giant amounts of information to copy, collapse or expand and retrieve exactly what you want.

Your new FILER is your assistant, that will collect related info and put it all into a folder automatically. All incoming transfers go directly to your 'In-folder', where they wait for your review & filing, like the in-box on your desk.

Everything else you need is here — CALENDAR, SCHEDULE, TO-DO, ANNIVERSARY, SCRAPBOOK, TELEPHONE, CLOCK, CALCULATOR, SEARCH, the works. And all or any part can be SECRET. Back up everything onto a card in 5 seconds.

Built-in communication protocols let you use on-line data services like CompuServe to send/receive e-mail, or XMODEM a folder to another Wizard over the phone (modem optional). Infrared links (optional) connect your 9600 to a PC or a Mac, or to a printer.

*If you can touch a button, you are already a 9600 expert!*

Stock #OZ9600 [Wizard] List \$650 .....	\$439
Stock #OZ701 [Time/Expense Management] List \$120 .....	\$89.95
Stock #OZ703 [Language Translator] List \$100 .....	\$79.95
Stock #OZ705 [Money-Planner] List \$100 .....	\$84.95
Stock #OZ707 [Scientific Computer, BASIC] List \$130 .....	\$99.95
Stock #OZ715 [Spanish-English Dictionary] List \$110 .....	\$84.95
Stock #OZ717 [Box Jockey, game] List \$50 .....	\$37.95
Stock #OZ783 [RAM Card, 256K] .....	\$199.95
Stock #OZ8B01 [3-D Worksheet Manager] List \$200 .....	\$154.95
Stock #OZ8B03 [Scientific Calculator] List \$130 .....	\$99.95
Stock #OZ8C01 [Organizer Bible, card] List \$150 .....	\$109.95
Stock #CEIR1 [Infrared to printer] .....	\$124.95
Stock #CE315L [Dubbing Cable].....	\$69.95

## Wizard OZ-7420 the smallest software-expandable organizer

**SHARP.**  
FROM SHARP MINDS  
COME SHARP PRODUCTS™



Takes all the software cards, has 64K memory and does all your organizer jobs, even has a calculator-style keyboard, and links to a PC—yet it fits in your shirt pocket!

Stock #OZ7420 [Wizard] List \$270 .....

EduCALC #60

## Series 3

*the pocket computer for word processing and programming*

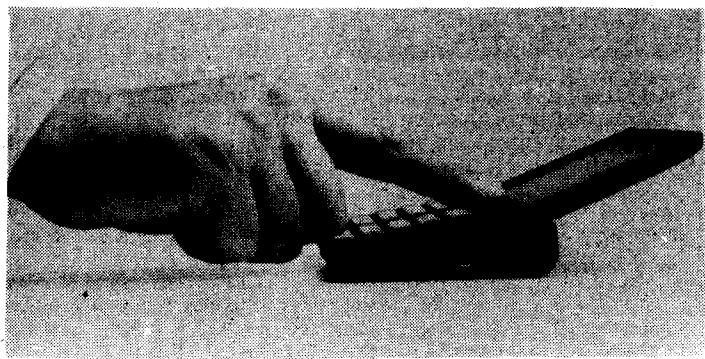
**InfoWorld's #1 palmtop**

**Best of Comdex, Fall '91**

**1991 Byte award of distinction**

**Psion**

*Now comes with  
spreadsheet built in  
(a \$150 value)!*



■ **built-in Word Processor/Outliner** is *MS WORD* compatible and can format complete, complex documents—bold, italic, flush left or right or justified, headers and footers, auto-numbering of pages, margins and tab settings, line spacings, widow and orphan control, font selection, and more—all with easy-to-use pull-down menus and *style sheets*.

■ **built-in Graphic Programming Language**—OPL/w is BASIC-like and structured, has more than 200 statements, commands and functions, plus it handles graphics, windows and menu control. Programs are compiled and run from the program editor and can be added to the main display system with their own icons, just like other the applications.

■ **built-in Personal Info Management applications**—Database for name/address/phone records (or whatever; it's flexible) by the thousands—Agenda with day-view appointments and alarms, week-view and calendar to 2049, plus things-to-do manager. Time and Alarm with 12 or 24 hour clock, snooze or cancel—World Information with dialing codes for 400 cities in 150 countries (plus edit or add); displays map with distance between home and target city; sunrise/sunset and 4 zones of Daylight Savings.

■ **built-in Calculator with Scientific Functions and Math Operators**—10 memories, unlimited parentheses, general and fix point, exponential and hexadecimal formats—complete calculations can be edited for what-if recalculations—or you can run your own OPL procedures.

■ **built-in Connectivity and Communications**—loudspeaker with DTMF autodialing, piezzo buzzer; Epson and IBM Proprietary printer drivers (and compatibles)

■ **optional Connectivity**—Serial Link gives RS232 interface to computers, modems and printers, including communications software; Parallel Link interfaces to printers.

### Specifications

16 bit V30H, 80C86 compatible, 3.84 MHz.

384K ROM includes multitasking windowing operating system

256K RAM plus 2 slot-drives for up to 4 Megs of storage that's MS-DOS compatible with PCs. Flash memory cards up to 2 M require no battery backup and are super-safe. RAM memory cards have lithium batteries, hold up to 1M.

Display is a high-contrast Hitachi double retardation film LCD, 40 characters by 8 lines. Overall folded it is 6.5 x 3.3 x 0.9 inches; 240 grams without its 2 AA batteries (a bit over a half pound, 2-4 months typical life).

The Series 3 got *BYTE Magazine's* Award of Distinction—their Dick Pountain said the graphics interface was "brilliant", "the multitasking operating system is far more suitable than DOS is for a pocket machine", "the phone dialer is cleverly integrated with the World application so that it can prefix the proper international code for an overseas call but omit it for domestic ones; you set 'Home City' in World to tell the Series 3 which country you are currently in", "the World application is the best of its kind I've seen", ... WOW!

Stock #2751 [Series 3, 256K RAM]	List \$545	\$399
Stock #2626 [128K Flash Memory Card]	List \$80	\$59.95
Stock #2627 [256K Flash Memory Card]	List \$140	\$105.95
Stock #2628 [512K Flash Memory Card]	List \$240	\$179.95
Stock #2629 [1M Flash Memory Card]	List \$400	\$299.95
Stock #2630 [128K RAM Memory Card]	List \$140	\$105.95
Stock #2631 [512K RAM Memory Card]	List \$400	\$299.95
Stock #2632 [Serial Link, IBM PC]	List \$140	\$105.95
Stock #2633 [Parallel Link]	List \$60	\$49.95
Stock #2634 [AC Adapter]	List \$20	\$15.95
Stock #2715 [Mac Link]	List \$199	\$124.95
Stock #2740 [Games Card]	List \$100	\$84.95

### Plug-in ROM-card Software

Spreadsheet—with full graphics display (Lotus 1-2-3 & Microsoft Excel compatible). Built into current model.

Stock #2800 (Spreadsheet, card) List \$150

\$134.95

Professional Finance—advanced financial routines for business: cash flow, % breakdown, interest, statistics, forecasting (emulates HP financial calculator).

Stock #2801 (Professional Finance, card) List \$100

\$89.95

Chess—worldwide award-winning chess game with full 3D graphics.

Stock #2802 (Chess, card) List \$100

\$89.95

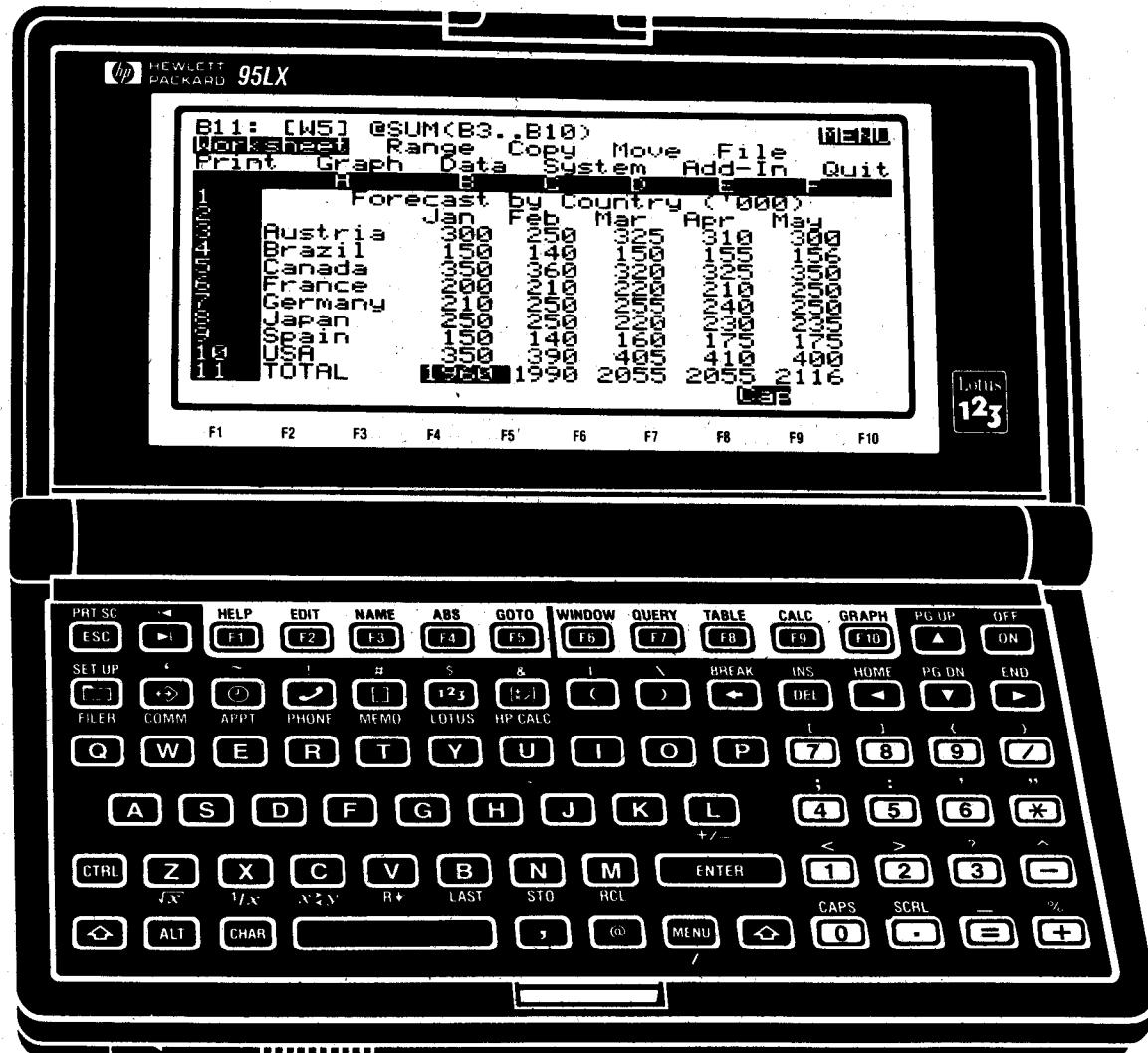
### PC Software for MS Windows

Intellilink—makes it easy for you to transfer your Series 3 files to the most popular PC software packages.

Stock #2699 (Intellilink, 3½") List \$100

\$89.95

Be sure to check out our surplus HP 71B offer on page 45



life-size picture — blue keys are the first 7 in the second row

# HP 95LX

## the 7 wonderful keys —

those extra blue keys that will turn the HP 95LX into your favorite computer at any size! at any weight! at any price!



**123**

Don't leave the office without it! Now you can *download* spreadsheets from the big PC to your HP 95LX. Because this is real Lotus 1•2•3.

*Take* that sales report, budget or investment portfolio right along with you in your pocket. *Update* as you talk. *See* the results instantly. *Zoom* them. *Show* them around. *Transfer* them back to your PC when you're in the office again.

If you need to leave Lotus, perhaps to check your appointments or to find a phone number, just press another blue key. When you're ready to use Lotus again, touch the blue 1•2•3 key and you'll be back in your spreadsheet, exactly where you left off. You can also copy part of a worksheet and move it to where ever you want it, maybe into a memo.

Here are some other things you can do with this powerful

version 2.2 of Lotus:

- Use, edit, or create large worksheets—up to 256 columns and 8,192 rows of data
- Create and view 1•2•3 graphs
- Zoom in for a close-up look at a portion of a graph
- Manipulate databases using 1•2•3 data commands including Sort, Query, and Regression
- Execute macros to speed up repetitive tasks and keystroke sequences
- Link files
- Use Worksheet, Range, Copy, Move, File, and Add-in commands
- Print to a text file or printer
- Use 1•2•3 @ functions from @ABS to @Year
- Perform cash flow analysis or statistical analysis using built-in 1•2•3 templates

Note: *Allways™*, *PrintGraph*, and *Translate* are not included in the HP 95LX. To use them, transfer your 1•2•3 file from your HP 95LX to your IBM-compatible PC, and run them from your PC version of Lotus 1•2•3.

Sure, your HP 95LX will do the same timely chores that a Wizard or a BOSS will... to help you with appointments, schedules and priorities.

But the HP 95LX is itself a PC, so it has a big Appointment Book program, with all the trills of an office machine—plus the big memory to match.

You can *set your alarms* to go off, say, 15 minutes in advance. You can highlight your appointment and press **FG** to get the *background information* (including a 1-2-3 spreadsheet, if that's what you need).

Set repeating apointments once and they'll show up as specified, weekly, monthly, or yearly.

Can't remember details from a note you saved? No problem. Enter a word or short phrase and *search* for the note in your appointment book.

What time is it in Dallas? In Geneva? In Melbourne? Access the *city list*, highlight a city, and read the *time* at the top of the screen.

Here's what you can do with your appointment book:

- See your daily schedule
- Repeat appointments on a weekly, monthly, or yearly basis
- Set alarms for appointments
- Check your daily to-do list
- Mark to-do items as completed and carry over past-due items automatically
- Attach extra information as a note to an appointment or to-do item
- Search for a word or phrase in the appointment book
- Create multiple appointment books
- Print your appointments or to-do items, for one day or a series of days, to a text file or printer
- Consult a monthly calendar
- Check the time locally or in any one of over 250 worldwide cities, including towns or locations that you have added to the city list
- Use the HP 95LX as a timer or stopwatch

Your HP 95LX will have *all the goodies* that go with a big PC Phone Book program done by Lotus, plus *its giant*

**RAM memory capacity.** Here's what you can do with it:

- Access an alphabetical list of names and phone numbers
- Find a name and number quickly by scrolling, searching for the name directly, or searching for the first letter or letters of the name
- Keep, for each name, a card of information—such as an address, job title, birthday, or whatever you want
- Search for a word or phrase in the phone book cards
- Create a smaller phone book from an existing phone book
- Print one or more names and numbers, with or without their information cards, to a text file or printer
- Use the phone book's database capability to create additional useful lists, for example, a price list or inventory list



You won't want to type a book into your HP 95LX—that's what desk PC's and secretaries are for. But you could *edit* a book on your 95, by using its Memo Editor, which is a small word-processor. Or *store reference information*. Or *take a quick note* on the spot. Here's how:

- Create a memo, note or letter
- Edit ASCII-format documents or reports transferred from your PC to the HP 95LX—the display's right margin is adjustable and can accommodate a line width up to 240 characters
- Use standard word processing features including: word wrap, cut and paste, copy and paste, insert and overwrite, tab and margin setting, insertion of text from another file, page break
- Search for a word or phrase in your memo or document
- Print all, or a portion, of your memo or document to a printer



*Do simple arithmetic simply* — either Algebraic or RPN style — you decide.

But your HP 95LX will have the latest, most sophisticated Financial Calculator, one that only HP could give you. *Time Value of Money* answers and "what-if" recalculations. *Backsolving* for any variable in your equation—and you can use this feature to compute values in worksheet cells, automatically!

Note the *currency conversions* and the quick *plotting* and *root-finding* in this list of powerful features:

- Do arithmetic and use general math functions including percent, square root, reciprocal
- Use an automatic constant
- Store numbers directly to, or recall them from, a Lotus 1-2-3 worksheet with the STO@ and RCL@ functions
- Keep a running total of a list of up to 100 numbers, with list review and editing capability
- Perform these time-value-of-money calculations: compound interest, amortization, interest rate conversion
- Send an amortization schedule directly to a Lotus 1-2-3 worksheet
- Compute business percentages: percent change, percent of total, markup, margin
- Perform currency and other unit conversions: nine standard currencies or others of your own choosing, length, area, volume, mass
- View the elements and progress of each calculation on the large HP 95LX display; see labeled variables, the contents of 10 storage registers, or the history stack
- Use the HP Solve application to customize the calculator with often-used equations—solve for one variable in terms of the others without rewriting the equation
- Store HP Solve equations to the Solve Catalog
- Use Solve 1-2-3 to backsolve to a desired result in a Lotus 1-2-3 worksheet—calculate the value of one cell to achieve a desired value for another cell
- Plot an equation or mathematical expression,

zoom in on chosen areas of the graph and calculate roots

- Use technical math functions including: trigonometric functions, polar/rectangular coordinate conversions, exponential and logarithmic functions, integer part, fractional part, and absolute value, rounding a number, random number generation, permutations, combinations, and factorials
- Choose your preferred form of data entry, either algebraic or RPN
- Print to a printer any of the following: contents of the calc line, contents of the history stack, contents of the storage registers, all data in current calculator screen, an amortization table



*Stay in touch* — with your electronic mail, stock markets, news, weather and sports.

*Download* new charts or tables from the home office. *Upload* new field data, orders, specifications or instructions.

Here's what you can do with Data Communications:

- Access information networks such as your company's electronic mail system
- Access electronic information services such as CompuServe
- Save information you receive in a capture file
- Set data transmission speed to 300, 1200, 2400, 4800, 9600, or 19200 bps
- Use the 40-column HP 95LX display as a window into an 80-column screen to communicate with systems that require a full 80-column screen
- Wrap incoming data to 40 columns when communicating with a system that does not require use of all 80 columns
- Transfer files using Kermit or XMODEM protocols, or as straight ASCII text
- Emulate a VT-100, ANSI, or tty terminal
- Automate logon using a script file
- Choose among built-in configuration files, including ones to connect to CompuServe, Dow Jones News/Retrieval, or MCI Mail; or create and save your own

Note: Datacomm requires either the HP F1015 serial interface cable to connect directly to a remote computer; or the cable, a modem, and a modem adapter to connect by phone to the remote computer. Direct connection may also require an optional cable adapter. The filer, described below, includes additional file transfer capability.



The Filer is a "DOS shell", an easy-to-use labor-saver. Lotus has programmed for the HP 95LX so you can simply

and quickly create, move, view, copy, delete, print and generally *manage your files*.

There's also a game here, TigerFox, where you chase the fox while the tiger chases you. The complete list is:

- Create, rename, and move among directories
- View a listing of files in your directories
- View the contents of a specific file
- Copy, move, or delete one file or several files at once
- Rename a file
- Sort files by date, by extension, by size, or alphabetically by file name
- Run a program from electronic RAM disk, from a plug-in RAM card, or from ROM

# HP 95LX

- Execute MS-DOS commands available in the HP 95LX
- Transfer files between one HP 95LX and another via infrared interface
- Transfer files between an HP 95LX and an IBM-compatible PC, either through direct serial connection or via an optional modem, using the optional HP F1001A Connectivity Pack
- Simplify file management tasks, especially file transfer, using the split-screen feature; lets you see two directories at once, making it easy to copy a file from one to the other
- Print a file, set of files, or directory listing to a printer
- Play TigerFox, a chase game with 45 different mazes

## Setup Utility

- Adjust display contrast, memory allocation, and beeper volume
- View battery level
- Set date and time formats
- Specify punctuation, language, keyboard, and currency settings
- Select or modify printer configuration
- Create customized user keys that let you quickly recall a string of text or automatically execute a series of keystrokes to perform a specific task
- Format a plug-in RAM card
- Personalize the HP 95LX by filling in a business card display or adding your own customized graphics image

That's what the 7 wonderful keys do, each by itself. But that's not all — *these applications fit together*. This means that you can *jump* from one to another at will, and even *take data along* with you. It means that you won't have to learn different schemes of commands for each piece of software, because these are *consistent*, as alike as Lotus programming could make them.

### Look at these consistency features:

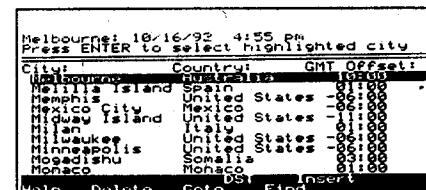
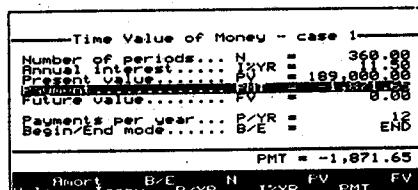
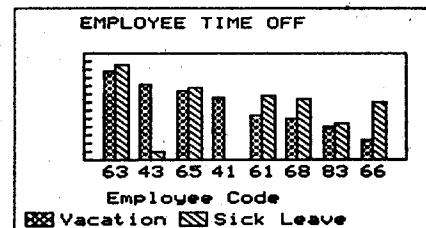
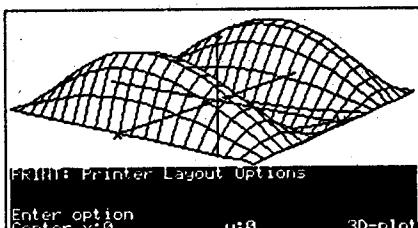
- Press a single key to access any of the 7 built-in applications
- Press a single key to switch to another application without having to close the first one
- Find your way around an application easily, guided by menu keys and softkeys
- Access [ ] from any application by pressing [ ]
- Move information among applications by copying it to a clipboard and pasting it where you need it
- Save time by creating custom user keys to recall specific sequences of keystrokes that you use often

"This handheld hybrid may change financial organization as we know it."

Portable Office

"HP's 95LX is an engineering triumph, incorporating amazing advances in miniaturization and connectivity."

BYTE



## the specs

### HP 95LX and HP 95 LX1MB Palmtop PCs Include

- Owner's Manual
- Quick Start Guide
- Two AA and one CR2032 batteries
- Engravable personal nameplate

### Physical Specifications

- Dimensions: 16 x 8.64 x 2.54 cm (6.3 x 3.4 x 1 in) closed
- 16 x 16 cm (6.3 x 6.3 in) open
- Weight (with batteries): 312g (11. oz)

### Memory

- Built-in ROM size: 1 Megabyte
- Software built into ROM:
 

MS-DOS 3.22	Lotus 1-2-3 2.2
HP financial calculator	Memo editor
Appointment book	Phone book
Data communications	Filer
- Built-in RAM size: 512K or 1M bytes with adjustable partitioning between system RAM and electronic RAM disk
- Built-in RAM availability: Because the built-in software executes from ROM and uses minimal RAM, most of the RAM is available for file creation and file storage
- Expansion capability: PCMCIA 1.0 Industry-standard plug-in card slot lets you increase electronic RAM disk, for file storage, or add ROM-based software applications.

### Industry-standard PC Architecture and Central Processing Unit (CPU)

- IBM PC-XT architecture
- NEC V20H CPU (80C88-compatible) running at 5.37 MHz

### Display

- Type: Supertwist liquid crystal
- Size: 40 columns x 16 rows
- Graphics resolution: 240 x 128 dots
- MDA compatible
- Character size: 5 x 7 dots

### Beeper

- Alarm feature in appointment book
- Adjustable volume
- Audible warning of operator error

### Keyboard Layout

- Familiar typewriter-like QWERTY layout
- Separate numeric keypad
- 10 function keys (softkeys)
- 7 application keys providing one-key access to built-in software applications

### Input/Output

- Built-in 3-wire serial interface for connection to RS-232 devices
- Built-in infrared transmitter/receiver for wireless HP 95LX to HP 95LX communication at 2400 bps with a separation distance up to 20.3 cm (8 in)
- Built-in data communication software: VT-100, ANSI and vt terminal emulation, Kermit and XMODEM protocol
- Built-in printer driver sets supporting: HP LaserJet, Epson FX-80, IBM Proprinter
- Plug-in card slot

### Power

- Two 1.5 v AA main batteries
- One 3 v CR2032 coin cell backup battery
- Battery life for main batteries is 1 to 2 months of typical use, depending upon type.
- Optional ac adapter

### Operating Requirements

- Operating temperature: 0° to 45° C (32° to 113° F)
- Storage temperature: -20° to 60° (-4° to 140° F)
- Data retention temperature (operating or storage): 0° to 45° C (32° to 113° F)
- Humidity: 90% relative humidity at 40° C (104° F) maximum

### Free Technical Support

Week days, 5AM to 5PM Pacific time call (503)757-2004. Limited automated support services are available 24 hours a day, 7 days a week toll-free at (800)443-1254

**hp** HEWLETT PACKARD

## still undecided?

Let's recap the facts—this little gem has Hewlett-Packard design excellence in its logical architecture and in its calculations. It has Microsoft's MS-DOS, so it's fully PC-compatible. And it has Lotus 1-2-3 and Lotus Development's programming of its applications, so they all have similar, consistent command structures, and so you can transfer data and results back and forth between them.

123 Lotus 1-2-3	Datacomm
Appointment book	Filer
Phone book	• 512K bytes or 1 Megabyte of RAM
Memo editor	• MS-DOS 3.22
HP financial calculator	• 2.5 times as fast as an XT

Is that reason enough to buy it now?

You can see the excellence of its HP machine design in its keyboard, its Input/Output capabilities, and its case (not to mention its robust reliability).

- Crisp 40 column x 16-row display
- Familiar QWERTY keyboard
- Separate numeric keypad
- One-key access to applications
- Serial and infrared interfaces
- Industry-standard card slot
- Protective clamshell design
- Easy-to-carry size, weight

Is that why you have decided to get yourself an HP 95LX, now? This is exactly the way you've always known computers should be. So it's no wonder that the HP 95LX will be your favorite computer, at any size, at any weight, at any price!

It's an always-with-you extension of your desk-bound computers, so anywhere, anytime, you can

- find important phone numbers
- convert currencies
- edit your letters and reports
- explore "what-ifs" with your spreadsheets
- track your appointments and assignments
- calculate loan payments
- check the time around the globe
- dial up information services

This computer is personal and exciting—your power tool for the '90s. Best of all, it weights just 11 ounces, fits into a pocket and costs only a fraction of what a laptop or desktop PC does.

## which model fits your needs?

You get your choice of two models, the HP 95LX or the HP 95LX1MB. There's just one difference, but it's a big one—one has 512K RAM memory, while the other has a full 1 Megabyte of internal RAM. Having the extra memory built in is like having a second card slot with a 512K RAM card permanently installed in it.

You'll have EduCALC's 30-day warranty, for a no-questions credit or refund. You can try out your HP 95 for a month, put it through its paces and make sure it is exactly what you need—there is no risk, because we want you to be delighted. (Note: we have a lease plan for our commercial customers—call for details.)

**Free** — 128K RAM card with your HP 95 — \$150 value (#F102A) included free with your order for a limited time.

Stock #HP95LX [Palmtop Computer] List \$550..... \$399  
Stock #HP95LX1MB [Palmtop Cmptr] List \$799 .. \$589

### free — your name engraved — free

We will personalize your name or initials free on a small plate that you can neatly adhere in a countersunk space on the back of your new 95. Just include Stock #95CNP and we will include everything you need to get your FREE engraved name plate. You'll be limited to 16 characters and your imagination.

Stock #95CNP [HP 95 Custom Nameplate]..... Free

**We guarantee everything we sell. You may return it to us in new condition within 30 days for a full refund, no questions asked.**

### Trade In Program

TRADE IN your used HP 19BII. Just send it to us, insured, in working order, with all its Manuals. Take CREDIT on your Order—  
\$55 CREDIT for a 19BII—and put the order and your check right in the box.

If you prefer to keep your old instrument until your new HP 95 arrives, just send it to us later, along with its Owner's Manual and a copy of the sales receipt for your new machine—we'll send you your refund right away.

### Save even more—

TRADE IN your used HP 19BII. Just send it to us, insured, in working order, with all its Manuals. Take CREDIT on your Order—

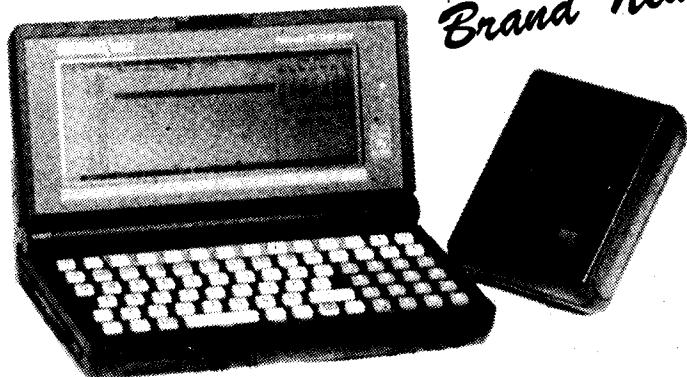
\$55 CREDIT for a 19BII—and put the order and your check right in the box.

## HP 100LX— one hand-y PC!

**HP HEWLETT  
PACKARD**

*Special EduCalc Offer -  
for Scientists and Engineers*

*Brand New*



■ **PC compatible**—so it runs your off-the-shelf DOS-based software. Imagine having Quicken, Harvard Project Manager or your favorite software, right in your pocket (must be DOS-based, CGA-compatible).

■ **1 MB RAM, DOS 5.0 and expandable memory**—add up to 32MB with optional plug-in memory cards (one slot—PCMCIA ver 2.0).

■ **80 x 25 full CGA screen**—with two ZOOM options. Finally we have a palmtop screen that's easy-to-read.

■ **cc:Mail Remote is built in**—you can attach a modem to access e-mail plus a wide range of communication networks.

■ **Lotus 1-2-3 rel 2.4, HP Financial Calculator, and complete Organizer software**—all built into 2MB of ROM, so you launch any of these programs with a single keystroke.

■ **Fast IBM XT Architecture**—Intel 80C186 CPU running at 7.91 MHz.

### It will be your favorite PC— at any size, at any price!

Scientist and Engineers—EduCALC makes you this special offer that includes our Interface Box (#2688), so you can add your own modem, hard drive, GPS receiver, or whatever.

Offer includes HP 100LX, Quick Start Guide, User's Guide, nameplate, batteries and Interface Box; 1 yr warranty.

Stock #VAR100 [Palmtop Computer] ..... \$729

The following accessories are for the HP 100LX only. For AC adaptors, serial cables only (#F1015A & #F1016A) and other accessories see the following pages.

Stock #F1021A [Connectivity Pack, 100 to PC]..... \$109.95

Stock #F1027A [Accessory Cradle for 100]..... \$69.95

Stock #F1012A [5MB/10MB comp. FlashCard for 100] ..... \$479

Stock #F1013A [10MB/20MB comp. FlashCard for 100] ..... \$849

# HP 95/100LX

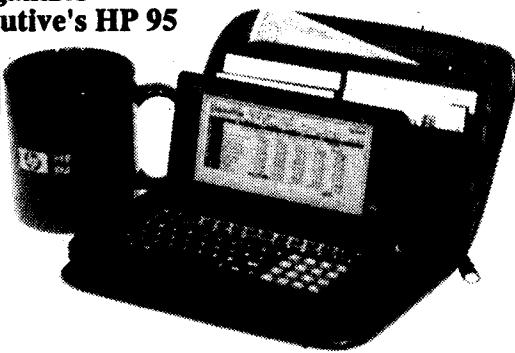
Here's where you find...

Accessories	14
Cables/Interfaces	16
Peripherals	17
Software	20
Programming Aids	25
Bookware	26

## Accessories

**the Leather Desk**  
our best organizer  
for the executive's HP 95

EduCALC



*Brand New*

Sumptuous black napa leather coddles your 95, with extra padding for instrument protection. Software and memory cards fit into 6 slots, 2 pockets hold notes and diary. There's a zippered compartment for important documents and a loop for your pen.

It feels soft and rich in your hand, but there's a detachable carry strap, too. Plastic tray grips your computer; 8 1/4 x 5 x 1 3/4 inches outside.

Stock #2764 [HP 95 Leather Desk] ..... \$64.95

**black leather  
Wallet  
for your HP 95**

*Best Buy*

EduCALC

- impress softly—with premium wallet leather
- hold it all—a pen, cards, notes and checks as well as your 95
- protect and cushion—you'll even have shiny brass corner guards

Half the fun of having a palmtop! Pocket for notes or checkbook. 6 slots organize your software or memory cards and business or credit cards. Velcro strap adjusts to hold the load snug.

Stock #2638 [Leather Wallet, black] List \$70 ..... \$43.95

**The Pouch  
for your HP 48 or HP 95**

**The Pouch**

*New*

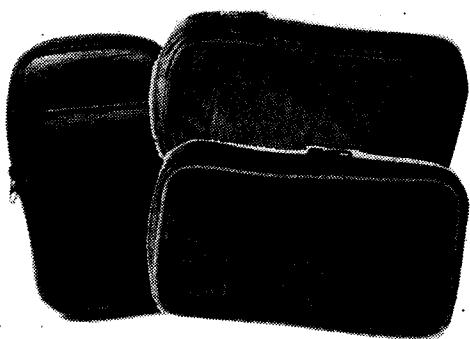


Are you a utilitarian? Here's a no-frills pouch for the simple life—made of bouncy neoprene foam and nylon, with belt-loop and velcro closure.

Stock #2736 [Instrument Pouch] ..... \$19.95

## Carrying Cases for the HP 95

Palmtree

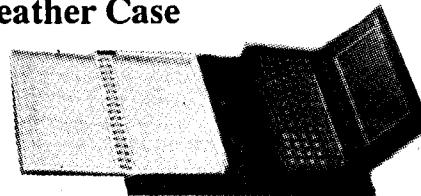


Look good being safe! This handsome zippered pouch will protect your 95 from dust, dirt and spills as well as knocks, scratches and bruises—just what's needed for a go-everywhere computer.

Handy outside pocket plus inside pocket for IC cards, etc. Naugahyde model is tough-skinned, has belt loop. Nylon model is made of washable, waterproof fabric. Leather model is soft and elegant. Stock #2665 [Naugahyde 95 Carry Case, black] List \$30 ..... \$23.95 Stock #2519 [Nylon 95 Carry Case, black] List \$25 ..... \$19.95 Stock #2520 [Leather 95 Carry Case, black] List \$40 ..... \$27.95

**TimeBoss Leather Case  
from Europe**

TimeBoss



Top-grain leather surrounds your HP 95LX, giving you all the confidence of a contemporary paper organizer. You'll have monthly/yearly calendars, note pad and pencil, plus pockets for additional computer cards, money and credit cards.

It's convenient, too—use your HP 95LX right in the case. Your sense of organization will thank you.

Stock #2750 (Leather Organizer) List \$100 ..... \$89.95

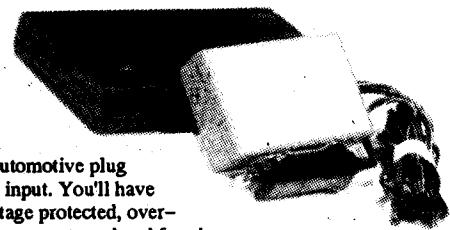
**AC Adapter  
for your HP 95/100**

 **HEWLETT  
PACKARD**

Input 100-240 VAC; output 12VDC, 0.75A. Power for HP 95, HP 100 or HP 82240B Printer.  
Stock #F1011A [AC Adapter for USA, Canada] List \$40 ..... \$34.95  
Stock #F1011ABB [AC Adapter for Europe] ..... \$34.95  
Stock #F1011ABG [AC Adapter for Australia] ..... \$34.95  
Stock #F1011ABU [AC Adapter for the U.K.] ..... \$34.95  
Stock #F1011ACQ [CA Adapter for So. Africa] ..... \$34.95

**Cigarette-lighter Adapters  
for the HP 95 and portable printers**

EduCALC



Just plug it in—standard automotive plug accepts varying 11-15 VDC input. You'll have an output that is reverse-voltage protected, over-voltage protected, surge-voltage protected and fused.

Our #2569 powers the HP 95 or the HP InfraRed printer. #2862 powers HP 95, IR printer, or the Canon Bubble Jet/HP DeskJet printers. #2863 powers HP 95, IR printer or the Kodak Diconix printer.

Stock #2569 [Cigarette-lighter Adapter] List \$40 ..... \$34.95

Stock #2862 [Cigarette-lighter Adapter] List \$45 ..... \$39.95

Stock #2863 [Cigarette-lighter Adapter] List \$45 ..... \$39.95

# HP 95/100LX

## Accessories continued

### Plug-in RAM Cards

#### ■ store giant spreadsheets ■ run huge programs

Each card has its own long-lasting battery—it can be stored or mailed without losing the data or programs you've filed on it.

These cards satisfy PCMCIA specifications—they fit in the HP 95 or HP 100, the Poqet PC, the Sharp PC-3000 and the NEC Ultralite.

Some RAM cards come with built-in data-comprehension routines (Stacker L2S technology). These cards are marked for 2:1 compression ratios in our descriptions, but spreadsheet files may compress at a more than 3:1 ratio while some DOS files may have only a 1:1 ratio. This data compression is transparent to you—it's handled in real time, and RAM cards are so fast that you probably won't notice any difference in speed.



#### • simply the best!

Stock #F1002A [128K RAM card]	List \$150.....	\$129.95
Stock #F1003A [512K RAM card]	List \$300.....	\$249.95
Stock #F1004A [1MB RAM card]	List \$600 .....	\$485.95

### Epson

• from the world's largest manufacturer of memory cards—these use latest low power CMOS SRAM and include a custom system power controller that automatically lowers power to 0.25 ma standby. 512K and 1MB (not 2MB) cards have a secondary lithium battery so you can replace the card battery while card is out of computer.

Stock #2767 [512K Epson RAM Card]	.....	\$119
Stock #2768 [1MB Epson RAM Card]	.....	\$209
Stock #2769 [2MB Epson RAM Card]	.....	\$334

### ACE Technologies

• pre-formatted—and pre-loaded with FREE software, games like Chess, HP Tetris and Invaders, plus utility programs including one that can copy from one card to another with your 95.

Stock #2521 [512K RAM ACE card]	.....	\$113
Stock #2522 [1MB RAM ACE card]	.....	\$189
Stock #2396 [2MB RAM ACE card]	.....	\$319

• DoubleCards not only compress data on card, but also have an extra DoubleRAM program that doubles your HP 95 RAM capacity by compression.

Cards are preformatted and loaded with free utility software (a 3½" disk is also included with duplicate program). Free card batteries for 5 years, too; reassuring lifetime warranty.

Stock #2595 [512K/1MB compressed ACE DoubleCard]	....	\$132
Stock #2596 [1MB/2MB compressed ACE DoubleCard]	....	\$209
Stock #2598 [2MB/4MB compressed ACE DoubleCard]	....	\$349

### Sparcom CORPORATION

• up to 40% longer battery life than standard PCMCIA RAM cards.

Stock #2368 [256K RAM card]	List \$160.....	\$139
Stock #2586 [512K RAM card]	List \$240.....	\$199
Stock #2369 [1MB RAM card]	List \$360.....	\$289
Stock #2587 [2MB RAM card]	List \$630.....	\$499

### Plug-in Flash Cards the hot new high-capacity memory for your HP 95

Better than a hard disk on a card—with flash memory chips and a built-in solid-state controller. It slides into the PCMCIA Rev. 1.0 slot of your HP 95 and is 100% MS-DOS compatible.

You can store many really big programs in one, and plenty of data, just like a hard disk. But you can remove it when you're done—lock it up for security, give it to a friend for use in his PCMCIA-equipped computer, or mail it back to your office.

No back-up is required—this is a back-up! Flash memory is non-volatile so there are no batteries. This means no replacements for you. It also means super reliability—up to 100 years!

Your flash card will be up to 20 times faster than a hard disk drive, and it will consume 100 times less power. It has no moving parts, so it's extremely durable and can take heavy shocks or vibration even while it's operating.

Some flash cards come with built-in data-comprehension routines (Stacker L2S technology). These cards are marked for 2:1 compression ratios in our descriptions, but spreadsheet files may compress at a more than 3:1 ratio while some DOS files may have only a 1:1 ratio. This data compression is transparent to you—it's handled in real time, and flash cards are so fast that you probably won't notice any difference in speed.



### HEWLETT PACKARD

Comes with driver routine, utilities and bonus "Stacker Anywhere" compression software on both 3½" and 5¼" disks—requires a PC and connectivity kit for installation; 1-yr warranty. Works with HP 95/100.

Stock #F1018A [5/10MB compr HP Flash Cd] List \$525.... \$499

### Sun Disk

Available  
July '93

Uses flash memory chips developed jointly by SunDisk with AT&T and Matsushita.

SunDisks work with standard data-compression software. But you can order yours with optional, inexpensive data-compression already installed. This will roughly double the capacity (depending on your data); that means you can have up to 20 MB capacity!

Your SunDisk Flash Card comes with its driver routine on a separate ROM card, so no connectivity kit is needed to install it. Includes User's Guide; 1 yr warranty. Works with HP 95/100.

Stock #2822 [2½ MB SunDisk]..... \$359

Stock #2823 [5 MB SunDisk]..... \$499

Stock #2824 [10 MB SunDisk]..... \$739

Stock #2826 [2½ MB/5MB compressed SunDisk]..... \$379

Stock #2827 [5 MB/10MB compressed SunDisk]..... \$519

Stock #2828 [10 MB/20MB compressed SunDisk]..... \$789

Sale—buy a TMD550 External ThinCard Drive on the same order as your SunDisk—you'll SAVE BIG as you read and write to your SunDisk with your PC! See page 18.

Available  
Summer '93

### ACE Technologies

\*'plug-n-play' DoubleFlash Cards

A ROM card is provided to allow you to install the DoubleFlash in a matter of seconds. Comes with built-in Batman battery-management software. Includes DoubleRAM to compress your HP 95's internal RAM disk. Includes additional software, too—Password, CardCopy, Unmount, and a collection of shareware programs. Lifetime warranty.

Stock #2872 [5MB/10MB compressed ACE DoubleFlash].... \$519

Stock #2873 [10MB/20MB compressed ACE DoubleFlash].... \$789

# HP 95/100LX

## Cables/Interfaces

### How to hook up your HP 95

It's simple to connect to a PC—you'll need a cable (we offer several below) and some software which includes a standard datacomm protocol (such as Kermit or XMODEM).

But suppose you want to be able to hook up to printers and modems as well? If your cable is EduCALC's #2449 or CMT's #2342 (or you're using JetEye) you should have no problem. But if it is our #2556 or #2588 or HP's Serial Interface Cable, you will require their Adapter Kit #F1023A also.

### Dual-Purpose HP 95 Serial Cable

Switches so it can connect to computer or to printer—eliminates adapter and NULL modem. Elegant, lightweight, 6' long.

Stock #2449 [Dual Purpose Serial Cable] .....\$36.95

### Experimenter's Serial Cables

#### ■ Engineers

#### ■ Instrument Makers

#### ■ Hobbyists

Connect your HP 95 to anything you want! Six foot cable has 4-line serial connector molded onto one end, with the other end unterminated (just 4 wires for you to solder).

You can also order this cable terminated with a female 9-pin (computer RS-232) connector and built-in strain relief.

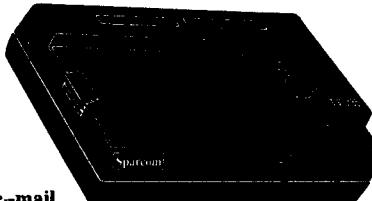
Stock #2601 [Unterminated Serial Cable, 6'] .....\$15.95

Stock #2609 [4- to 9-pin Serial Cable, 6'] .....\$22.95

### SmartDock docking-station connectivity for your HP 95

### Sparcom CORPORATION

- quickly up/download to disk units
- easily FAX your memos
- conveniently send/receive e-mail



When you click the HP 95 into your docking station's elegant contours, its 4-pin serial port and AC adapter port align automatically—simple, all at once, without unsightly cables or plugs (an AC adapter and PC serial cable are included with each SmartDock along with a 1-year warranty).

**Station95** instantly connects your 95 to a PC so you eliminate time-consuming hook-up procedures and prevent battery drain.

**MacStation 95** instantly connects your 95 to your Macintosh computer.

**PrintStation** connects your 95 to any parallel printer, as well as to a PC—has built-in series/parallel converter, comes with DOS/Windows connecting software on 3½" disk.

**ComStation** has it all! Built-in modem accesses Internet, Compuserve, ATT-Mail, MCI Mail, Prodigy and other e-mail services—PSILink and DOS/Windows connectivity software included on 3½" disk. FAX any text file with system-compliant Fax Manager software (included). Connect to a PC or a parallel printer. Has built-in serial/parallel converter and rechargeable batteries.

Stock #2588 [Station95] List \$60 .....\$49.95

Stock #2737 [Sta95 + Pod Pal (#2684) + Games (#2687)] .....\$124.95

Stock #2756 [MacStation 95] List \$80 .....\$69.95

Stock #2742 [PrintStation] List \$170 .....\$154.95

Stock #2741 [ComStation] List \$400 .....\$349.95

### EC-95 Aluminum Environmental Case

Waterproof and shockproof for hostile environments, with built-in rechargeable power supply.

Stock #2776 [Environmental Case] .....\$395

### JetEye InfraRed to LaserJet Printer Interface for the HP 95

**Extended Systems®**

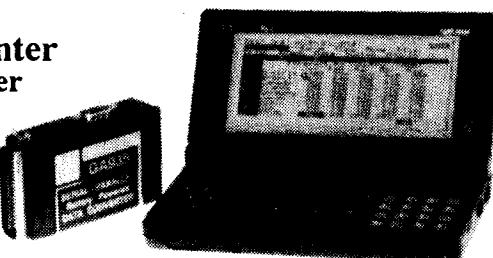
A point and shoot printer interface for your HP 95! You can install it, in seconds, without power cords, cable changes or printer reconfigurations. You merely insert its plug between your printer cable and LaserJet—your one or many PCs will still print as usual.

Works with HP 48 also. Supports LaserJet II, IID, IIP, III, IID, 4, and IISI. Multiple-page printing requires driver software for the 95 (included) and an optional Serial Interface on your PC to install it. InfraRed reception distance 8 inches. 2 year warranty.

Stock #ESI9500A [JetEye Interface] List \$129 .....\$99.95

### Battery-powered HP 95 to Parallel Printer Data Converter

**Greenwich Instruments**



Get beautiful printout—now your HP 95 can drive a portable parallel printer (such as the Canon BJ-10e Bubblejet).

You connect this serial-to-parallel converter to any PC via a serial cable, and send its output to any parallel printer via a 'Centronics' 36-lead cable. Up to 250 hours on one 9v battery (not included).

Stock #GA935 [Serial/Parallel Converter] List \$100 .....\$79.95

Stock #9V [Alkaline Battery] .....\$2.80

### Connectivity Products for your HP 95

Use the 4.9 foot Serial Interface Cable to link the HP 95 to your IBM-compatible PC—optional Connectivity Pack includes cable and datacomm software for the PC, plus a female 9- to 25-pin adapter (in case you need one).

Pack contains PC versions of the Appointment Book, Phone Book and Memo Editor, all programmed by Lotus specifically to take advantage of the HP 95's environment—plus this software will translate files from *Metro*, *Sidekick* or *PC Tools* for your 95.

You get PC versions of the HP Financial Calculator and Filer applications, too, along with *DOS-Connect*, a utility that lets you treat the HP 95 as a disk drive while you are within other software applications on your PC.

With the Connectivity Pack you'll have symmetric environments on your HP 95 and your PC. But users who don't want this added convenience can still do PC-to-HP 95 file transfers by purchasing the cable alone to connect to their PC and communicate via standard datacomm protocols (for example, Kermit or XMODEM).

You can use your Serial Interface Cable to connect the HP 95 to a printer or modem, but you will need the Serial Cable Adapter Kit as well.

Pack includes both 5¼" and 3½" disks and a brief manual.

Stock #F1015A [IBM Serial Interface Cable only] .....\$24.95

Stock #F1023A [Serial Cable Adapter Kit] .....\$24.95

Stock #F1016A [Mac/ApL Ser. Interface Cable only] .....\$24.95

Stock #F1001A [Connectivity Pack] List \$100 .....\$79.95

# HP 95/100LX

## Cables/Interfaces cont.

### Connect your 95 to your PC

this software runs with the following applications under Windows 3.0:

- IBM Current including mainframe PROFS
- Borland Sidekick 2.0 (under Windows 3.0)
- Asymetrix Toolbook and Daybook, with memos
- MS Word for Windows & AmiPro & Excel
- Paradox database (maps PHONE and MEMO fields)
- Q + E support for dBASE and SQL Server
- Windows 3.0 Clipboard • Lotus 1-2-3 for Windows

Direct imports/exports to/from Windows applications at the field level with a few simple clicks of the mouse! Requires HP 95 with Serial Cable and PC running MS Windows 3.0 (IntelliLink is HP New Wave aware). Stock #2517 (IntelliLink 2.51, 5 1/4" & 3 1/2") List \$100.....\$89.95

### Serial-to-Parallel Connectivity Kit



Drive a parallel printer at 19,200 Baud — drive a hard disk at 19.2-115.2 Kilo-Baud! Requires serial cable.

Stock #2816A [Serial to Parallel Kit w/out serial cable].....\$79.95  
Stock #2609 [4- to 9- pin Serial Cable, 6'].....\$22.95

### Connectivity Kit between PC and HP 95



Transfer and translate Lotus spreadsheets, word processing text or Hypercard files—merge, upload or download the appointment book and phone book, memo, calculator and filer. Autotranslation (just point and click) of HP 95 Phone and Appointment Book to Sidekick, Paradox, Metro, PC Tools or CDF.

Kit contains 1.5 meter serial cable, communication software and Owner's Manual.

Stock #2556 [PC Connectivity Kit, 3 1/4" & 5 1/4"] List \$99.....\$79.95

### Serial Interface Kit for HP 95

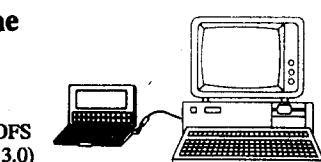


Avoid connector misfits! This 6' cable fits HP 95 Serial Port on one end and its other end is a phone jack. Cable is shielded and has strain relief.

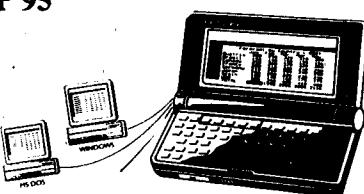
4 adapters are included that accept the cable's phone jack — a 9- and a 25-pin female to fit PCs, a 25-pin male for a modem, and a 25-pin male for a printer.

Kermit communication program for PCs is included on disk, along with brief directions for its use.

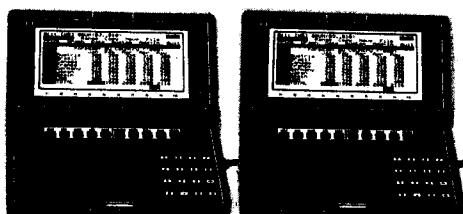
Stock #2342 [95 Serial Interface Kit, 5 1/4"].....\$36.95



Awarded May 1992



4 x 4 Cable for fast data transfer, 95 to 95



Works with two HP 95s or two HP 48Ss or HP 48SXs, just like Infrared transfer but 4 times as fast. 2' cable has 4-pin serial connectors on both ends and is small enough to fit in a case with your instrument.

Stock #2624 [4 x 4 Cable] .....\$22.95

### MacLinkPlus for the HP 95



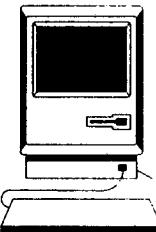
Back up, translate and transfer files between your HP 95 and any Mac Plus (with hard disk and OS 6.0.3, or newer; System 7 compatible) —with a few clicks!

Translate files between popular word processors, spreadsheets, databases and PIM applications for the Mac and the HP 95, including its Phone and Appointment Books, Memo and Lotus 1-2-3.

Includes serial cable, software and Reference Manual.

Stock #2820 (MacLinkPlus 95, 3 1/4") List \$129.....\$109.95

### DataExchange Macintosh connectivity pack



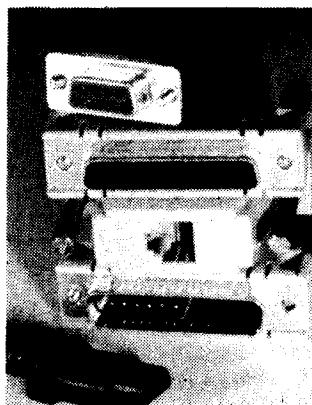
Link your 95 to a Mac — transfer and convert phone, appointment and Memo files.

DataExchange software is System 7 compliant and supports many Mac applications, including Addressbook Plus and Hypercard. Includes software, cable and manual.

Stock #2685 [DataExchange, 3 1/4"] List \$90.....\$79.95

## Peripherals

### Engineer's Interface Box



Attention: hardware developers and electronic hobbyists—let your imagination soar. How about a tiny hard drive? a special modem? a receiver for Global Positioning Satellites?

We've done the hard part for you—here is an empty plastic shell to house your product—precision molded to fit perfectly with an HP 95 into the MDL cradle. It has texture and color exactly like the 95 itself, so your finished product will have that fully professional look!

Comes with drawings for overlays and 2 PCBs you may mount inside, and there's enough internal volume to accommodate more electronics. Battery compartment can flexibly hold a 9v block-type batteries.

5 plastic pieces and drawings are included; approx 1 x 2 1/2 x 3 3/8 inches outside.

Stock #2688 [Engr's Interface Box] 1 to 9 units.....each \$7.95

Stock #2689 [Engr's Interface Box] 10 to 49 units.....each \$4.95

(Please call us for quotations in larger quantities.)

# HP 95/100LX

## Peripherals cont.

### Drive95

Portable 3 1/2" Disk Drive  
for your HP 95

### Sparcom CORPORATION

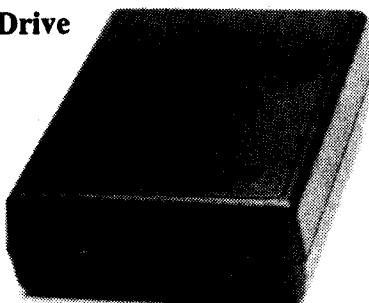
This lightweight, battery-operated disk drive features Sparcom's device driver software, engineered to read and write in MS-DOS format on standard 3 1/2" HD floppy disks.

Drive95 makes it affordable to store data, simplifies program execution from 3 1/2" disks and facilitates basic file operations, such as copying, transferring, and formatting.

Designed for remote operation, the drive has an intelligent cache which extends battery life up to 15 hours on a single charge. Compact (7 1/4" x 5 1/4" x 2") and contoured to complement the HP 95, Drive95 also interfaces with the HP-48SX or any DOS based palmtop, laptop, or desktop computer, and supports 720K and 1.44MB capacity 3 1/2" disks.

Includes device-driver software, manual, serial cable and AC charger/adaptor; 1 year warranty.

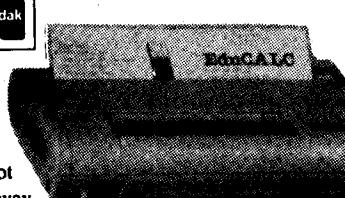
Stock #2602 [Drive95] List \$330.....\$284.95



BUY A DRIVE95 NOW and SAVE \$25 on Games 95. Order your DRIVE95 and use the stock # below for your Games 95 on the same order. See Games 95 description on page 23.

Stock #2747 [Games 95 ordered with DRIVE95].....\$19.95

### Diconix 180si Portable Printer



- Make last minute revisions to your presentations
- Create new overheads in an instant
- Customize your proposals on the spot
- See your letters in final form right away
- Respond to clients while you're on the road

Only 2 x 6.5 x 10.8 inches, and it weighs just 2.9 lbs (3.5 lbs with optional batteries); RS232C serial interface; prints on sheet or tractor plain paper or transparency. Multiple fonts and print modes in 96 x 96 dpi Draft or 192 x 192 dpi Quality resolution. Quiet; just 45 dB. Includes AC adapter/recharger.

HP ink-jet print head is user-replaceable. Can recharge its batteries even while printing. 1 yr warranty.

Stock #K180SI [Diconix Serial Printer] List \$450.....\$339

Stock #CN [NiCd C Cell] (requires 5).....ea \$4.49

Stock #2351 [Kodak Print Head].....\$13.95

Stock #51604A [HP InkJet Print Head].....\$8.95

### External Card Drive

#### Steel Creek Technologies



4" x 1" x 8"; 19 oz. Includes AC Adapter, connects to your parallel printer port on your PC. Reads or writes to RAM cards or SunDisk FLASH.

Stock #CD3568ZZ [Card Drive].....\$154.95

FREE 95 Mug — see back cover

### Internal ThinCardDrive

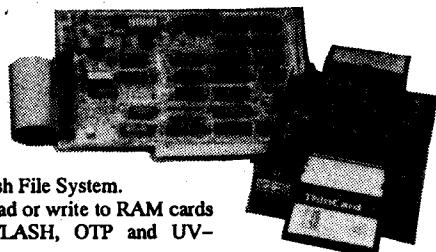
#### Databook

Transfer data from IC memory cards to and from PC/XT/AT computers—in all popular formats including PCMCIA, POQET, Metataformat and Microsoft Flash File System.

Model TMB-200 will read or write to RAM cards and can also program FLASH, OTP and UV-erasable EPROM cards.

System contains a half-length PC board, 24" interconnect cable, card drive unit which fits into slots for either 3 1/2" or 5 1/4" disc-drive units, software and user's guide.

Stock #TMB200 [ThinCard Drive].....\$289



### External ThinCardDrive

#### Databook

Read and write to cards with your PC! Just plug this into the printer port of your DOS or Windows computer, and plug your printer into this for pass-through operation.

Model TMD500 reads and writes static RAM cards in all popular formats; TMD550 also handles FLASH cards. Both models come with complete, self-installing software, cable and User's Manual.

Stock #TMD500 [External Card Drive] List \$300.....\$229

Stock #TMD550 [External Card Drive] List \$349.....\$259

### Sale — buy a SunDisk now with your TMD550 and Save Big!

Here's how—order any SunDisk hard-drive card, 2.5MB to a whopping 10 MB, and use the stock number below to buy your External ThinCard Drive that works with your SunDisk on the same order—you'll save \$129.50 and you'll get yourself enough memory! See SunDisk description and stock numbers on p. 15.

Stock #TMD550ZZ [TMD550 ordered with SunDisk] Sale...\$129.50

### Solid-state Data Drives

#### Adtron

Brand  
New



- read and write PCMCIA memory cards
- easily transfer data and programs between palmtop and desktop
- all models read & write RAMs and read Sundisks

External drives are low cost, low power and portable—they have parallel or line-printer interfaces (6' cable included) so they are high speed. Universal model #2739 reads/writes FLASH and OTP cards as well as RAMs.

Internal drives are high speed, low power and low profile — this one reads/writes FLASH cards, too. It fits into a standard 3 1/2" floppy drive bay and its 8-bit adapter card plugs into your PC's expansion bus.

Stock #2738 [Standard Parallel Card Drive] List \$295.....\$269

Stock #2739 [Universal Parallel Card Drive] List \$395.....\$349

Stock #2855 [Internal Card Drive] List \$395.....\$349

### EduCALC News Line (714)582-3976

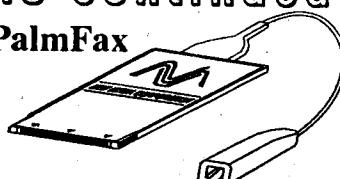
Phone EduCALC any time for weekly reports on the latest products and activities for handhelds and palmtops. Updates are made each Tuesday. Topics include new products or services, special offers, novel applications, and news about the activities of user groups.

# HP 95/100LX

## Peripherals continued

### PalmModem 2400/PalmFax

#### New Media



Just plug this into your HP 95's card slot—you've got a modem or a send-only fax machine! It's PCMCIA compatible and also supports Zeros and Sharp palmtops as well as F8680 subnotebooks.

Up to 2400 bits/sec for data, compatible with all major communication standards. Fax transmission will go at 4800 bits/sec using CCITT V.27ter, V.22 bis, V.22, V.21, Bell 212A, and Bell 103 standards.

All terminal emulation and facsimile software is built into this card, plus there's 128K RAM onboard, so data is made transmittable without using your 95's memory.

With this you won't even have to carry a printer—just fax your output to a local fax machine to get hard copy!

**Stock #2680 [PalmModem] List \$259** .....\$234

### Will you want to phone home? Take along this tiny modem!

#### Worldport

About the size of a deck of cards, it's completely portable. There is an internal 9-volt battery, so it draws no current from your computer or from a phone line.

Even though it's the smallest modem of its kind, and Hewlett-Packard recommends its use with the palmtop HP 95, it works just fine with your desktop PC as well (or any other computer that has a serial port).

The WorldPort comes in three models, for 1200 and 2400 baud, all designed for the HP 95. Each provides dual communication standards, so you can use it anywhere in the world. It supports the Bell 103/212A standards in the USA and also the internationally recognized CCITT v.21 (300 bps) and v.22 (1200 bps) standards, and it is both switch- and software-selectable. The 2400-baud models also support the world-wide v.22 bis standard.

Each modem is fully compatible with the Hayes AT Command Set, including all the latest extended commands. It also has Auto-dial and Auto-answer capabilities and automatic power control.

Of course, it has a U.S.-standard modular phone jack. But sometimes you're in a phone booth, a hotel room or a foreign country where no jack is available. The WorldPort gives you additional, direct interface to optional, low-cost acoustic cups for such field situations.

Comes with battery and AC adapter, 7' modular phone cable, acoustic cups adapter cable, internal speaker, Manual and Quick Reference Guide, plus bonus MNP Level 5 software for fast transmissions by data compression; 2-year warranty. It's made in the USA; furthermore, you'll have 800-number tech support. To use it with your HP 95 you'll need a Serial Cable (best buy is #2449). Two-year warranty on all modems.

**Stock #2461 [WorldPort 1200 Modem] List \$159** .....\$134.95

**Stock #2462 [WorldPort 2400 Modem] List \$229** .....\$194.95

New MDL cradle model—needs no serial cable, instead slides directly into HP palmtop cradle #F1007B. Runs on internal 9 v battery or cradle AC power. MNP 2-4 error control, MNP5 data compression.

**Stock #2766 [WorldPort 2400 V42.bis] List \$249** .....\$224

FAX with your modem—new model will send-only, ASCII symbols only, to a FAX machine at 4800 bps (has all other features of #2462).

**Stock #2383 [Worldport 2400 Plus Modem] List \$249** .....\$219

Save 75% on telephone charges—world's fastest pocket-size lightweight external 9600 to 300 bps modem with MNP 4 error control.

**Stock #2585 [Worldport 9600 v.42 Modem] List \$499** .....\$479

### SkyStream Receiver with MDL cradle for HP 95



Receive e-mail  
& messages, news &

sports, weather and market reports—right now, when you need them. Even works inside buildings and airplanes.

Update appointments & travel schedules, to-do lists and Lotus spreadsheets—instantly, wirelessly, anywhere, anytime.

Receiver is built for a fixed frequency, ready for SkyTel service (not included here, costs perhaps \$50-\$80 per month)—telecommunications via satellite, nationally, regionally or internationally. To learn more about subscription, call 1-800-456-3333, ext. 764.

The new SkyStream Receiver has 32K message memory when standing alone. But slide it into the MDL cradle (included) along with your HP 95 (not included) and you can store incoming message-files in the 95 or automatically update files that are already there—then you can read and review these files or send them to your printer.

Receiver weighs 3 oz, comes with MDL cradle, software application card (F1006A), User's Guides and operating instructions; 1 yr warranty.

**Stock #F1009B [SkyStream Receiver] List \$525** .....\$429

**Stock #F1007B [Cradle only] List \$60** .....\$54.95

### Mobile Data Link



Cradle connects HP 95 with NewsStream receiver while still providing access to serial and infrared communication interfaces as well as the AC adapter. Your 95 will slide easily into cradle.

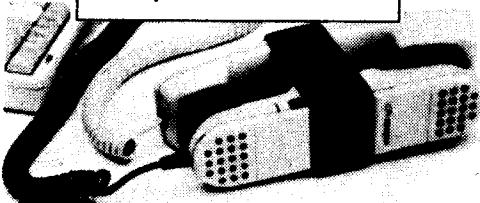
The NewsStream receiver is a product of Motorola, Inc.; it is not included in this package. Cradle size 8.7 x 3.7 x 1.08 inches; software application card, nameplate and User's Guide included.

**Stock #F1006A [Mobile Data Link, card] List \$119.95**

### Telecoupler II

#### Computer Products Plus

- ✓ pay phones
- ✓ foreign phones
- ✓ customer's phones
- ✓ hotel phones
- ✓ digital phones
- ✓ car phones



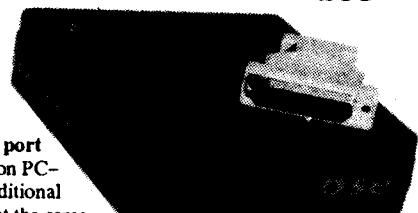
Works with any telephone, and most modems—you won't have to search for an RJ-11 jack.

Does not work with "line-powered" modems. Transmits up to 2400 baud for modems or 9600 baud for fax.

**Stock #2674 [Telecoupler II] List \$160** .....\$139.95

### Flashdrive 25 portable hard-disk drive

-bse-



- tiny—only 1½ lb.
- rechargeable batteries
- 20MB to 130MB
- costs less than RAM cards

Just plug it into your printer port and go! Runs from parallel port on PC-3000 or Series 3 and provides additional port so you can use your printer at the same time—for HP 95 or Poqet PC use optional 9 to 25-pin, serial/parallel converter. Solve all your storage problems—save and back up, programs or data—at last you have enough room! Comes complete with tested hard disk, cable, AC adapter, software, internal rechargeable batteries, instructions, on-line FREE support and a 1 year warranty. Requires DOS 3.0 or higher.

**Stock #2812 [Flashdrive 25, 20M] List \$299** .....\$289

**Stock #2814 [Flashdrive 25, 80M] List \$549** .....\$489

**Stock #2815 [Flashdrive 25, 130M] List \$649** .....\$589

**Stock #2816A [Serial/Parallel Conv w/out serial cable]** .....\$79.95

# HP 95/100LX

## Software



CONTACT SOFTWARE  
INTERNATIONAL

### take your ACT! on the road

you'll have the world's most popular contact-management software where you need it most—right with you, in your 95.

### Track your contacts and clients

**Tasks Contacts Directory**  
Phone-list

Company:	Corporate Image Products		
Contact:	Tom Huffman		
Phone:	214-357-4998	X:	CC:
Title:	Owner		
Sec:	Maryanne	Dear:	Tom
Address:	32432 St. Thomas		
City:	Irving	ST:	TX ZIP: 76062
Call:	/	:	
Meeting:	/	:	
To-do:	09/05/91	10:00a	order new cat.
Screen:	1	of	11

- Tracks up to 4000 contacts
- 71 user-definable fields
- Hide/protect field attributes
- Database Password Protection
- User-definable and keyboard search
- Automatically-updated contact history
- User-definable, pop-up windows for easy data entry
- Instant contact 'Look-Up' capability
- Date-stamped notes for each contact

### Generate reports, to view, file and print out

**Edit Schedule Clear Lookup Phone**  
View Xpenses Report Quit

Comp	September 91						
Cont	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Ph	1	2	3	4	5	6	7
Ti	8	9	10	11	12	13	14
Addr	15	16	17	18	19	20	21
C	22	23	24	25	26	27	28
	29	30					062
Meeting:	/	/	:				
To-do:	09/05/91	10:00a	order new cat.				
Screen:	1	of	11				

- Address list
- Phone List
- Tasklist for all activities
- Future Activity report
- Contact report
- Calendar of to-dos

### ZAP business cards and integrate data

**Business Card Send Receive**

Company:	Corporate Image Products		
Contact:	Tom Huffman		
Phone:	214-357-4998	X:	CC:
Title:	Owner		
Sec:	Maryanne	Dear:	Tom
Address:	32432 St. Thomas		
City:	Irving	ST:	TX ZIP: 76062
Call:	/	:	
Meeting:	/	:	
To-do:	09/05/91	10:00a	order new cat.
Screen:	1	of	11

- Import/export ASCII delimited data
- ZAPCARDS wireless business card exchange
- Direct ACT! data exchange with PCs via cable (included)

### Manage your calendar and to-do list

Days	Meetings	To-do's
--Thursday--	--Saturday--	--Friday--
Sep 5	Sep 7	Sep 6
Thomas Office	Express Offi	National Pap
9:00a Thom	4:00p Kell	Make travel
--Friday--	--Monday--	
Sep 6	Corporate Im	
Jordan Offic	8:00a Huff	
9:30a Will	--Wednesday-	
OK Office Su	Sep 11	
2:00p Nels	Superior Dis	
--Sunday--	2:00p Lena	
Sep 8		
Paper Moon		
8:00a Step		
Tasks 09/05/91-09/15/91	02/27/92	4850E

- Daily activity list of calls, meetings and to-do's
- One-finger" scheduling of multiple activities
- Instant "Tasklist" for any date-range
- Week-at-a-glance calendar view
- "Pop-up" alarms for critical activities

### Track all your expenses, on the fly

**Lookup Report Done**

Date:	All Expenses:	\$1,286.06	
Type:	02/12/92	Travel	
Amount:	\$567.64		
Payment:	Company credit card		
Charge:	Sales		
Purpose:	New client		
Where:	Airline		
Company:	Thomas Office Supplies		
Contact:	Greg Thomas		
City:	Dallas		
ST:	TX		
Screen:	1	of	3

- Expense detail, billable hours and mileage
- Expense reporting by date range or type of expense

What, you may ask, does 'Zapcards' mean? That's when you wish to give your business card or other contact info to a friend—you simply press CTRL-Z, line up the infrared ports on your two HP 95s and Zap! it goes like a TV remote.

It's easy to get started—to download you connect your HP 95 to your PC using the cable included with ACT!, put the ACT! program disk in your PC, and type INSTALL—that's all! In one step, ACT! is transferred to your 95. Once it's there, you have easy-to-use menus to guide you. Keystroke commands are like those for the PC version of ACT! and there's friendly HELP at your fingertips.

In addition to your User's Guide, you'll get a tutorial, a Quick Reference Card and an ACT! template for your 95's keyboard. (5 1/4" and 3 1/2" disks plus a 6', 4-to 9-pin cable also included). This program needs at least 150K free system RAM in your HP 95. Manufacturer's 30-day money-back guarantee.

Stock #2600 (ACT! for the HP 95, 3 1/4" & 5 1/4") List \$149 ..... \$89.95

### ACT! and the HP 95, together

Buy both together, your new HP 95 (either model) and a copy of ACT! for it, and save even more.

Stock #2621 [HP 95 512K & ACT! #2600] List \$699 ..... \$479

Stock #2622 [HP 95 1MB & ACT! #2600] List \$948 ..... \$669

### ACT! preloaded in a RAM card

EduCALC will load your copy of ACT! for the HP 95 into a 256K RAM card—so all you do is insert the card into your 95 and turn it on! Price includes ACT! software, RAM card, and a nominal \$5 loading charge.

Stock #2623 [ACT! #2600 in RAM card] List \$348 ..... \$194

### What about ACT! in your PC?

If you want ACT! in your HP 95 to exchange data with your PC, you'll need ACT! version 2.11 in that PC. If you're now a registered owner of ACT! version 2.1, you'll automatically receive a free upgrade to version 2.11 by mail.

But if you need a copy of ACT! for your PC as well, order this latest version now at our deep discount price. It comes on both 3 1/4" and 5 1/4" disks.

Stock #2620 (ACT! for PCs v. 2.11) List \$395 ..... \$249

Stock #2735 (ACT! for Windows v. 1.01) List \$495 ..... \$349

# HP 95/100LX

## Software continued

### The Authorized Insider's Guide to ACT!

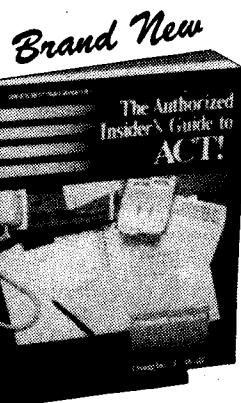
by Douglas Wolf

Get the most out of ACT! on the job—here's **everything you need to know** about how to install, use and customize it.

Create a database or a form letter, schedule a call, extract and merge word-processed files, generate reports, customize multiple databases, record macros, protect data with passwords, send documents directly to a FAX machine.

It's all here, including special design templates already made up for sales, real estate, accounting, law and insurance.

Stock #2879, Insider's Guide to ACT!, 165p softbound ..... \$26.95



### Money Manager software for your HP 95

Autobyte

Portable accounting in the palm of your hand—gives full control over banks, checks, credit cards, income and expenses—plus simple reconciliation of banks and credit cards. Complete reports on screen or sent to printer.

Requires HP 95 with #F1015A serial cable. Includes versions for 95 and also for your PC/compatible (512K RAM) on 3½" or 5¼" disk. Also, when you buy Money Manager, you may have us install the 95 version right on a 256K RAM card for you, ready to run even without a PC or cable (#2583 includes #2492).

Stock #2492 [95 Money Manager, 3½" & 5¼"] List \$60 ..... \$54.95  
Stock #2583 [256K RAM Card includes #2492 installation] ..... \$159.95

### FX-7 Flight Pak software for the HP 95

DARAGON TECHNOLOGIES

- flight plans
- DUATS weather briefings
- E6B and weight & balance



Generate great-circle routes in RNAV, LORAN or VOR to VOR format—largest database available with 34,500 airports, navaids and intersections—in all North and Central America.

Tap into the FAA computerized weather system from any phone, free, for plain English briefings that you can read, store or print out.

Calculate a full E6B. Store a customized weight & balance template for each aircraft you fly—then recall one before your flight to fill in only the parameters that have changed.

Capt. John Kimberling is a 9000-hour pro who does organ-transplant flights where every minute counts with a life in the balance. He says, *I have either used, tested, or bought every flight planning computer that there is and I have finally found something that I can use in every plane that I fly—from the single engines through the range of jets. I am extremely happy with the FX-7 program.*

Complete, pilot-friendly system includes 6 month's database—update subscription, comes on PC disks that require a Serial Interface to download to your HP 95. You'll need a modem for DUATS briefings. Drop shipped to you.

Stock #2544 (FX-7 Flight Pak, 5¼") ..... \$185.95  
Stock #2544A (FX-7 Flight Pak, 3½") ..... \$185.95

### The Golfer's EDGE truly portable in your HP 95

New

#### COMPUTERBOOKS

On the course you'll instantly score a round in progress, view hole statistics to devise an optimal strategy, plus access tips for playing a specific type of shot—off the course you'll quickly calculate USGA handicaps and analyze past rounds to identify strengths and weaknesses.

Includes pocket-sized User's Manual, stores info on up to 50 courses, including yardages, indexes and ratings, as well as green breaks, clubs used, etc. Comes either on ROM Card for insertion in HP 95 or on 3½" disk for downloading.

Stock #2845 (Golfer's EDGE, card) List \$100 ..... \$89.95  
Stock #2846 (Golfer's EDGE, 3½") List \$70 ..... \$64.95



### TravelWare

RSE

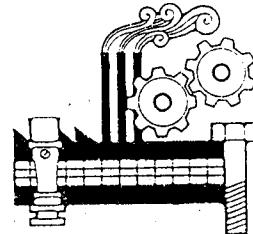


Keep all your trip records on the HP 95—to-do lists, schedules, flights, auto, lodging, meals, expenses. Summarizes expenses, has alarm clock. Instructions on-screen, plus Manual; comes on disk (and works on PC too) for downloading (requires Serial Interface).

Stock #2555 (95 TravelWare, 5¼") ..... \$29.95

### Mechanical Engineering Equation Library for the HP 95/100

Paul Harmon



160 most-used equations for MEs—plus Lotus 1-2-3 spreadsheets containing ME conversion factors, properties of common shapes and volumetric properties of common geometries. In addition there are text help files for each subject. All in less than 60K bytes of disk space.

Equation groups include spring design, gear design, beam design, stress analysis, press fit design, pressure vessel design, heat transfer analysis, electric motor design, fluid motion equations, a third order steam table approximation, more.

The equations are grouped together in logical sets by a practicing mechanical engineer and greatly simplify iterative design tasks. Using the HP 95's calculator, spreadsheet, and cut and paste facility allows straightforward access to problem solving algorithms, the material and conversion constants required by the algorithms, and an easy way to bring the two together. The equation sets are simple to modify or extend, and new equation sets can be integrated with the library.

Comes on PC disk; requires Serial Cable (#F1015A) to download.  
Stock #2535 (ME Library for HP 95, 5¼") ..... \$29.95

### ME Equation Library for Spreadsheet Use

Same as 2535 with all equations done in Lotus 1-2-3 spreadsheet form so the HP 95's HP-CALC program is not used. Spreadsheet format is HP 95 friendly, but may be used with any 1-2-3-compatible spreadsheet program.

Stock #2810 (ME Equation Library for Spreadsheets) ..... \$29.95

Derive, the computer algebra, calculus, graphics and numerical program—now available on ROM card for the HP 95. See page 65.

# HP 95/100LX

## Software continued

### Dictionary/Thesaurus ROM Card for the HP 95/100



Based on *The American Heritage Dictionary* and *Roger's II: The New Thesaurus*. Checks your spelling of a single word or every word in your document. Gives you all the meanings of a word, and then finds similar words for any one of those meanings. Next, you can insert just the right synonym in your document with the touch of a key, since this ROM program works neatly together with other HP 95 applications, like MEMO.

Extra features include Wildcards searches, where it finds all the words when you have a partial spelling. Also has an Anagram function that gets you every word you can spell with a given collection of letters—for killer Scrabble! Includes the popular word game Hangman.

Stock #F1005A (Dictionary/Thesaurus, card) List \$150.....\$129.95

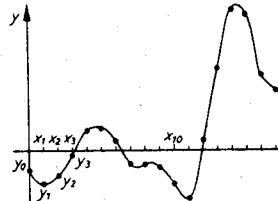


### Curve Fit linear-regression software for the HP 95

#### MacroMed

✓ Scientists    ✓ Engineers  
✓ Physicians    ✓ Pharmacists

- enter up to 99 (x, y)—data points
- find area under curve between 2 points
- compare std. deviations of best-fit curves
- graph curves and data on 95's screen



New version 2.0 calculates 1<sup>st</sup> or 2<sup>nd</sup> derivative, graphs on your monitor, scales graphs.

Automate least-squares fit of 2-term curves for straight line, exponential, logarithmic or power equations—plus 4-term equations for cubic polynomials and for Fourier series. Analyze a curve's coefficients for each term's significance. Save and retrieve data and equations to an ASCII file.

Comes on a 256K ROM card that you insert directly in your HP 95.

Stock #2545 (Curve Fit, ROM card) List \$260.....\$235

### Personal Food Analyst Nutritional software for your HP 95

Mirical



#### Take control of your own body!

Take this intelligent diet program along with you—it will analyze food for 27 nutrients to show you how much you should eat (based on your personal profile and daily goals), record what you do eat, and keep track of how well you've done during the past week (printing it out if you wish).

The Personal Food Analyst + HP 95 acts like your own personal Nutritionist or Dietician, and does it right at the table with you! You can preview the full spectrum of a food's nutritional content before you eat it—there's a built-in data base of over 4000 foods, and you can add as many more as you want. Then the Analysis Screen shows you bar graphs of your day's or week's results—you can see at a glance how well you've done.

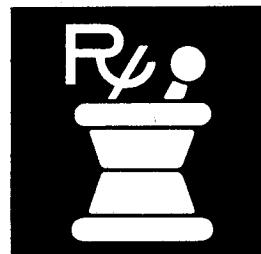
Comes on 1 Meg ROM card to slide into the slot on your HP 95—so easy to use that in 20 minutes it will start having a stunning effect on your health and appearance! Infovideo and illustrated booklet included.

Stock #2852 (Personal Food Analyst, card) List \$289.....\$269

### Medical Software for your HP 95

COMPUTERBOOKS

Sale  
New Low Price!



■ **Pharmaceuticals**—gives you instant dosages, warnings and contraindications, therapeutic and pharmacologic classifications, and supplier information on over 3300 generic and trade-named drugs. Fits into 500K.

■ **Patient Management**—replaces those cumbersome 3 x 5 cards with automated records, styled your way, for patient information, medical history, lab results, notes, reminders, etc.—so you'll never have to call your office again to get this updated data. Fits into 256K.

■ **Patient History**—eliminate hand-written questionnaires, rapidly record each patient response using yes/no, multiple choice, fill-in-the-blank, numerical and reference table formats. Satisfy HCFA documentation requirements for higher-charge CPT codes and justify all charges in a Medicare audit. Creates tailored history with over 260 questions on general information, personal and family medical history and complete review of systems. Fits into 256K.

■ **Drug Interactions**—gives you quick and easy, yet thorough research on interactions. Works 3 ways: give it your list of drugs and it tells you their interactions. Or it will find all drugs that interact with a single agent. Or select a drug classification and it will list all the member drugs. Fits into 256K.

Each program comes on 3 1/2" diskette for downloading from your PC (requires Serial Interface). EduCALC can load any of these programs onto a RAM card for you—call us for details. Each program comes with complete User's Manual plus an 800-number for technical support.

Stock #2759 (95 Pharmaceuticals, 3 1/2") List \$199.....\$174.95

Stock #2761 (95 Patient Mgmt, 3 1/2") List \$199.....\$174.95

Stock #2762 (95 Patient History, 3 1/2") List \$199.....\$174.95

Stock #2760 (95 Drug Interactions, 3 1/2") List \$199.....\$174.95

**Free**—buy any 2 of these Medical Software programs and we will include a free copy of Physician's Reference 1, a \$299 value, to save you time in your daily diagnostic analyses. 26 formula-based subprograms from Alveolar-arterial O<sub>2</sub> Gradient to Systemic Vascular Resistance. When you buy 2 of the above programs just add following line to your order:

Stock #2899 (95 Physician's Reference 1).....Free

### Antibiotica PC infectious disease analytical software for the HP 95 (or any PC-compatible)

New



MacroMed

You can quickly, precisely choose appropriate treatment for infections—with lifesaving, best-choice accessibility to antibiotic, bacteria and patient-specific data.

You can simultaneously evaluate up to 100 organisms for 1st, 2nd, 3rd and variable sensitivity drugs of choice—plus list toxicities of antibiotics. Offers copyrighted antibiotic substitution analysis by computerized drug-spectrum matching and computer-assisted optional drug selection.

You may customize this program to develop sets of sensitivities, add organisms or antibiotics, modify the antibiotics of choice for each specific hospital, filter out antibiotic classes and individual drugs for patient allergies or physician preferences—even optimize drug selection based on cost.

**Plus** version has all the above **plus** ■ calculations for renal failure dosing ■ an empiric therapy data base for clinical situations ■ identification of unusual pathogens for clinical setting ■ add clinical conditions with empiric antibiotic choices ■ listings of most common diagnoses associated with a specific organism.

Comes on 3 1/2" PC disk for downloading. You may call 1-800-848-8726 for further discussion and demonstration diskettes.

Stock #2847 (Antibiotica PC, 3 1/2") List \$95.....\$89.95

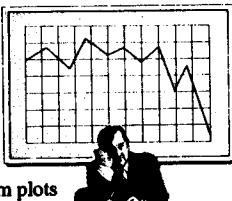
# HP 95/100LX

## Software continued

### QC-Link/HP quality-control software for your HP 95

Labtronics

*New*



- get real-time plots from any RS232 device
- collect your data directly into Lotus 123
- update instantly for X, R, XY, Sigma and histogram plots

Program lets you know immediately if a reading is out of control. You can easily modify incoming data so only required readings are used or add data/time stamps or user-defined prompts, batch or operator number, etc. You can even command your HP 95 to request data values at regular intervals, so you can graph time-dependence.

NO knowledge of programming is required. You'll set up with a new device in a couple of minutes—develop new plots by simply filling in prompts in an easy-to-understand window.

QC-Link/HP will convert collected data to the format your desk-top PC program requires. Comes on PC disk to download.

Stock #2864 (QC-Link/HP, 3 1/4") ..... \$389

### Smart Rounds Physician's software for the HP 95

"The program has already paid for itself by allowing precision CPT Code billing under my control in the hospital setting. Also, just as important, the clinical note area is very useful in keeping track of my chemotherapy protocols for hospitalized patients." Glenn Tisman, M.D., Advanced Treatment Cancer & Blood Diseases Center, Whittier, California



MacroMed

- track hospital visits and procedures
- print out or interface CPT4 codes and descriptions
- finger-tip access to 700 commonly used diagnoses

Replace your index cards or note pad with the impressive new HP 95 and Smart Rounds! You'll view at a glance all patient information, from alphabetical name, room number or account number. Access diagnoses by description or by ICD-9 code. Supports multiple physicians and multiple hospitals or locations.

Requires at least 130K system RAM available in your HP 95; you'll probably also want a RAM card to hold your patient data. Comes on PC disk for downloading (requires Serial Interface) or on 512K RAM card to insert directly into your HP 95.

Stock #2548 (Smart Rounds, 512K RAM card) List \$745 ..... \$619

Stock #2549 (Smart Rounds, 5 1/4" disk) List \$495 ..... \$399

Stock #2550 (Smart Rounds, 3 1/4" disk) List \$495 ..... \$399

### Games95

Sparcom  
CORPORATION

- Chess
- Checkers
- Backgammon
- Tetris
- Space Invaders

Comes on diskette with manual; 1 yr warranty.

Stock #2687 (Games95, 3 1/4") List \$50 ..... \$44.95

### GAMEcard volume 1

ACE Technology

Plug a lot of fun into your HP 95—here are 14 games on a single ROM card, including Tetris, Blackjack, Craps, Adventure, Reversi, Go and Poker.

Stock #2651 (GAMEcard vol 1, card) ..... \$78.95

**Ace Technologies**

*New*

### Switch 2.0 Launcher/ Control Program

*Multi-tasking*

You'll have easy control of your 95—to launch up to 48 HP-specific programs (.EXM files) from a single menu. Now supports multi-tasking—no more closing System Manager before running your DOS applications.

You'll have that same menu-power over an additional 48 DOS programs per drive. Plus the convenience of having your favorite programs (DOS or EXM) under their very own hotkeys, for instant launches.

You'll also get a Function Key Control Panel so you can supervise many of your HP 95's functions—defaults, auto power-off timer, battery levels, free memory & disk space, port status, cursor and scrolling.

Comes on disk to download; requires 128K RAM card and uses 94K active, 66K on disk.

Stock #2679 (Switch, 3 1/4") List \$69 ..... \$64.95

### Switchable Programs —

HP 95 applications that will run simultaneously with the built-in programs like MEMO, PHONE, and LOTUS. Additionally, Switch 2.0 comes with a loader file that will make ACT! for the 95LX switchable. Also, Personal Food Analyst (#2852) is switchable.

### fastWRITE!

A full-featured word processor for the 95 that supports multiple files and formats—and you can edit files from WordPerfect, WordStar, MS Word and XYWrite. Has built-in 100,000 word spell checker yet requires less than 300K storage.

Stock #2867 (fastWRITE!, 3 1/4") ..... \$99

*New*

### fastCOMM!

The only full-featured menu-driven communication utility for your 95. Supports transfers up to 9600 baud—can be fully automated with its powerful Macro Language.

Stock #2868 (fastCOMM!, 3 1/4") ..... \$89

### fastNOTES!

Lets you create, organize and access information as electronic pop-up notes—features include auto time-stamp, global search, ASCII import/export and quick index.

Stock #2869 (fastNOTES!, 3 1/4") ..... \$69

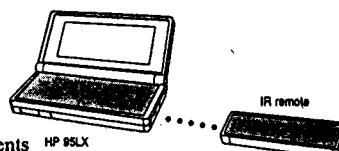
### fastLINE!

Fast HP 95 outliner and text processor—supports up to 8MB outlines and can be used for text retrieval with global searching. Auto date and time stamping for PIM functions. Built-in File Manager, requires less than 200K of RAM.

Stock #2871 (fastLINE!, 3 1/4") ..... \$89

### myREMOTE 2.0

- A/V presentations
- simplified VCR recording
- TV/stereo wake-ups
- single-key set up of all components



Turn your HP 95 into an audio-video remote control with this software!

Controls multiple IR components and switches them with a single keystroke. Macros send multiple commands with a single keystroke, for full customization, including programmable delay timer. Executable from a batch file.

Must be 'trained' for each device and is not guaranteed to work with all equipment—does work with many popular brands of TVs, VCRs, CDs, other A/V or camera or appliance control systems.

Stock #2808 (myREMOTE, 3 1/4") ..... \$37.95

# HP 95/100LX

## Software continued

### Developer's Kit for Switch 2.0

Ace Technologies

Available  
Summer '93



You can develop System-Manager compliant applications in just minutes! Kit gives you a simple application interface (API) to convert your DOS programs. Easily makes Assembler, C, QBASIC, PASCAL, Forth, etc., programs compliant, too. Includes unlimited royalty-free license to distribute.

Requires RAM card.

Stock #2807 (Switch 2.0 Developer's Kit, 3 1/4") List \$99.....\$89.95

### BATTman

Ace Technologies

Protect yourself from sudden data-loss — use this battery-management software and nickel-cadmium rechargeable batteries.

This program constantly monitors your batteries. Its special algorithms predict the sharp voltage drops that are inevitable with rechargeable batteries. BATTman warns you, and it shuts your 95 off automatically, saving your data.

Also gives you a timely warning when your RAM card battery is low (if one is installed) or if your HP 95's backup lithium battery is low.

Algorithm works equally well with NiCd, Lithium, Nickel, Metal Hydride or Alkaline cells installed in your 95. Comes complete with 2 NiCd batteries and a quick charger; manual.

Stock #2727 (BATTman, 3 1/4") List \$59.....\$56.95

### 95 Utility Pack

Richard Harvey

Thirty-six small, efficient programs written in assembly language, each optimized for the 95 and its 40-column mode, to add many useful commands to DOS 3.22. Programs download from your PC.

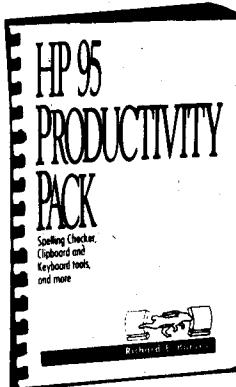
Get accurate information about memory, battery status, contrast, speaker level, keyboard state, . . . Set computer states from the command line. Find files fast. Filter extraneous characters from files for viewing or transmitting. Display graphics. Play music. Automate graphics demos. Enhance cursor.

Stock #2467 (95 Utility Pack, 3 1/4" & 5 1/4") List \$35.....\$27.95

### HP 95 Productivity Pack

Richard Harvey

New



Spelling checker, Clipboard enhancer — and all System-Manager compliant, so you can switch easily between these and built-in programs.

Spell-checker has 3 versions, so you can choose the one you have room for. You can edit the clipboard and copy its files to disk. There are even 2 games as a bonus. Manual included.

Stock #2809 (HP 95 Productivity Pck, 3 1/4" & 5 1/4") List \$50...\$38.95

### QAPALM Database application-generator for DOS palmtops

QA Systems

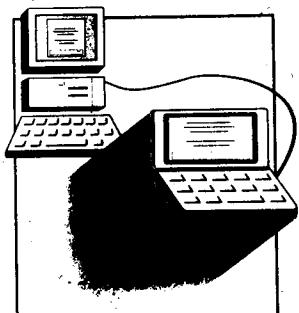
Create your own custom 95-program to manage phone or address lists, catalog items, client tracking, job management, payroll . . . you name it.

No experience necessary with this easy screen-painting approach — you just type in your captions and labels on your PC using intuitive menus to create fields, pop-up choice lists, specify default values, etc. Next emulate it on your PC, then download to your palmtop.

Features 2-way data transfer with your PC. Several applications can be run on your palmtop (with only one runtime module).

Stock #2642 (QAPALM, 3 1/4") List \$145.....\$134.95

Stock #2643 (QAPALM demo 5 1/4").....\$5



### PodiumPal

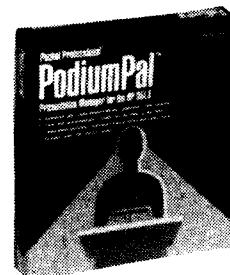
Sparcom  
CORPORATION

For your Public Speaking — so you'll have the confidence of being organized, on time and to the point.

A true pal when you need one, it paces you with a clock and reminds you of key points. This mini-course comes with a workbook that includes 100 famous quotes, and it's easy to learn and use.

Kelly Roberts, Director of Public Speaking at the University of Florida, says "PodiumPal is to speakers what the calculator is to accountants — power at your fingertips."

Stock #2684 (PodiumPal, 3 1/4") List \$60.....\$54.95



### Match Up

Brand New  
Sale

Interactive  
Digital

- intellectually appealing
- surprisingly revealing
- thoroughly amusing

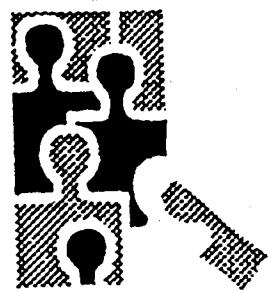
A real fun-and-games ice-breaker, at home, in the office or traveling — enhances social interaction and stimulates conversation at a party, or improves interpersonal communication, or increases self-awareness.

Match Up poses revealing questions on opinions, attitudes, values and feelings about Politics, Romance and Spiritual Beliefs — even has a Teenage Questionnaire to narrow the generation gap. Includes a challenging takeoff on the Prisoners' Dilemma Game.

Comes on disk; you can use it (in color) on your PC and also download it (using a cable) to your HP 95. Also available on card to plug into your HP 95.

Stock #2853 (Match Up, 3 1/4") List \$90.....\$39.95

Stock #2856 (Match Up, card) List \$120.....\$74.95



*Check out anything you want without risking a penny. At EduCALC you get a 30 day return privilege.*

# HP 95/100LX

## Software continued System 95 Surveying Software

TDS

Have your field data-collection AND your office-computation software all in the same machine—your HP 95 palmtop! This is small and easy to carry and to use, yet it's powerful and fast, with a big display to make your work easier.

You'll have all of the popular TDS-48 Survey Card and much more. Here are the groups of functions you'll work with—Job Creation and Review, Setup, Data Collection, Triangle Solutions, Leveling, Sun Shots, Earth Work, Coordinate Geometry, Stakeout, Curves, Adjustments, File Transfer to PC, and Print/Plot.

Comes on ROM card that plugs right into your 95. Communicates with all major RS 232 serial-port Electronic Total Stations.

Stock #2716 (System 95, card) List \$695 ..... \$549

### The Maclean Mailer automates MCI Mail for your HP 95

Pete  
Maclean

*New*

Put your MCI Mailbox in your pocket—this superb program is the only one that automates your MCI access via HP 95, and it works as well on any PC.

Small—only 58K disk space and 26K as a TSR. So automatic that you won't need a manual. Supports MEP2 and MNP, plus all MCI message types including FAX and telex dispatch. Even works smoothly with AT&T desktop payphones. Highly configurable for worldwide use, has special features for MCI Global Access.

Use requires a modem and an MCI Mail subscription, plus cable to download from PC to HP 95.

Stock #2854 (Maclean Mailer, 3½ & 5¼") List \$49 ..... \$44.95

### Keep in View the first PIM for your HP 95

Lucid

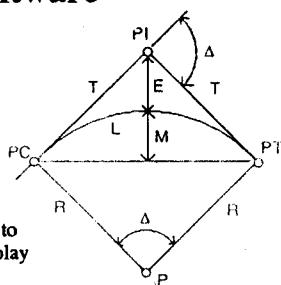
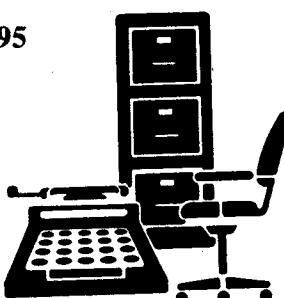
*New*

An easy-to-use 3-D information organizer—a combination outliner and free-form data base, fully system-manager compliant.

Your information is organized like in an office filing cabinet, in 4 levels with each level expanding details from the level above. Add notes up to 16K long, marking any names or dates you wish for special reference. Later you can search all notes or add to any one, then print what you want.

Has powerful context-sensitive HELP, especially for users with very little HP 95 experience. Includes User's Guide, comes on disk for downloading from your PC.

Stock #2851 (Keep in View, 3½") List \$70 ..... \$59.95



## NavPlan-95

Claron

*Brand  
New*



Yachtman's navigation software for the HP 95—calculates Routes and Waypoint Coordinates, bearings (magnetic or true), distances (nautical miles or miles), fuel usage and estimated travel time.

Easy to use, with windows-style menus. Data can be input to Loran-C or GPS system. Comes on 3½" diskette and requires Serial Cable for downloading to HP 95.

Stock #2890 (NavPlan-95, 3½") ..... \$99.95

## Programming Aids

### Swift!BASIC

A modern and structured, compact and fast language for your HP 95

**Sparcom**  
CORPORATION

Integrated in the System Manager environment, so programs will have the same user interface as the 95's internal applications. A joy to use, even for an inexperienced programmer—has a built-in editor that automatically checks syntax.

You'll jump from one program to another with a 'hotkey'. All your programs share a single copy of the runtime module and library functions—this unique feature saves memory, especially important for the 512K model.

Floating-point calculation, graphics (from dot to pie charts), animation, bit manipulation, virtual arrays—here's real programming power, plus full support of all the HP 95's features! Comes on diskette to download.

Stock #2637 (Swift!BASIC, 3½") List \$179 ..... \$159.95

### muLISP for the HP 95

Soft Warehouse

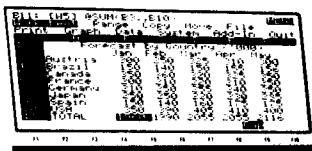
Customized for the 95's unique screen, memory and power constraints. Port your expert system to the 95 with this fast, compact language! Comes on PC disk, requires Serial Interface to download to 95.

Stock #2560 (95 muLISP, 5¼") List \$400 ..... \$329

### Text-Sort/Browse free-form text programs for the HP 95

Dale Thorn

*Brand New*



An analogy to the browse or view functions of a major database program, except this is equipped to index free-form text files. Indexes selected words, has full-screen browse (21 lines at a time) alternating with full-context browse of text file. Minimum configuration is 100K.

Stock #2891 (Text-Sort/Browse, 3½") ..... \$47.95



# Business Books & Software

## 1•2•3 for Scientists and Engineers

by William Orvis

Did you realize that ordinary 1•2•3 offers mathematical operators and functions comparable to those in BASIC or FORTRAN? It does them with 15-digit precision and easily prints them out in handsome charts and graphs, too.

This how-to guide gives scores of examples based on real scientific applications, so you can learn to get solutions quickly and elegantly, and to present them in intuitive, graphic format.

You can create data and function tables, plot and fit curves, calculate statistics, sum series, differentiate and integrate, solve simultaneous equations and differential equations (ordinary and partial), and use database techniques for data handling.

Stock #525, 1•2•3 for Sci/Eng, 341p softbound ..... \$24.95

## Quick Guide to Financial Formulas for 1•2•3 Users

by Steve Adams

Find out what IRR really is and how to use it in 1•2•3, how to create formulas to calculate loan interest, how to track stock market gains, how to evaluate capital expenditures, how to calculate equity, how to depreciate real estate, more.

This practical book has hundreds of real-world examples to help you strengthen business skills and give you

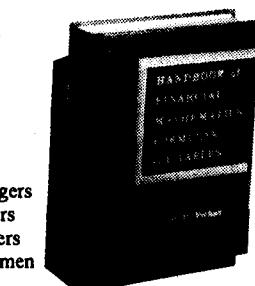
Stock #2513, Financial Formulas for 1•2•3, 401p softbound....\$24.95

## Handbook of Financial Mathematics, Formulas and Tables

by Robert Vichas

- analysts
- accountants
- advisors
- lawyers

- portfolio managers
- financial officers
- securities brokers
- insurance salesmen

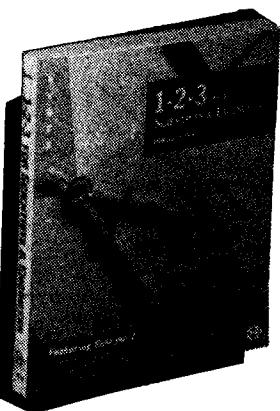


Here are those formulas and mathematical shortcuts you'll need to minimize costs, conserve cash, predict potential bankruptcies up to 3 years early, apply inflation accounting, reduce losses, improve liquidity, evaluate businesses, acquire property and hedge receivables.

Definitions, descriptions and numerical examples will guide you as you zero in on just the right formula or ratio for your current project. Though nearly half of this volume is devoted to tables that you may prefer to replace with your calculator, there are 465 pages of solid financial reference here, all in one book, with one good index, one notation and one clear style, bound to last you years of hard use.

Stock #2662, Handbook of Financial Math, 870p hrdbnd.....\$64.95

*There is no reading more easy, more fascinating, more enjoyable or more appropriate than a catalog.*



## An Easy Course in Using DOS

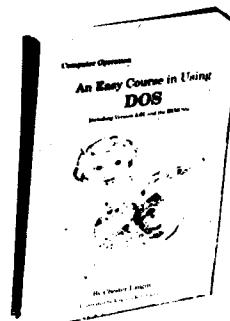
by Chester Langin

Teach yourself — here's the finest, friendliest explanation about DOS, the operating language of PCs, with stimulating, memorable examples and self-quizzes, for versions up to 4.01.

It's thorough, too, even though "easy", starting with a brief history of calculating machines and a fascinating explanation of your computer's inner workings.

With this help you will grasp DOS, never again to be intimidated by your machine.

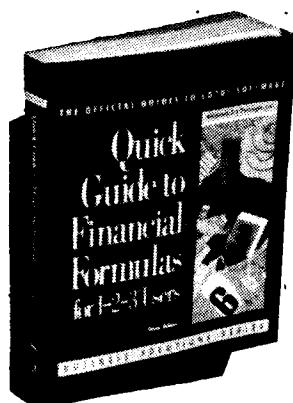
Stock #2456, Easy Course in DOS, 336p softbound ..... \$19.95



## From a former winner of EduCALC's Free Calculator drawing —

"I am overwhelmed, flabbergasted, excited . . . Thank you so much for the 15C. I will enjoy it and enjoy learning its capabilities. A quick thumb of 'Enter' says that it too will be fun to read and useful in my tutoring.

Thank you again for 'making my day'." R. A. Sturley, Kirkville, NY



### Entry Coupon

## Free Calculator Drawing

*Fill out and return this coupon to EduCALC before August 15, 1993, to enter (no purchase necessary).*

1. What are the most important features of the EduCALC catalog? Select 2.

- 30 day return policy
- 800 telephone #
- News line
- Accurate descriptions
- Technical support
- Trade-In programs
- Technical notes
- Index
- Low prices
- Other \_\_\_\_\_

2. What would you add to the EduCALC Catalog?

- More technical details
- More comparison tables
- More PC software
- More calculators/palmtops
- More software for calculators
- More accessories
- More books
- More photos/drawings

3. How long have you had your favorite calculator/palmtop?

- Less than a year
- One to two years
- Two to three years
- More than three years

I want a free  HP 32SII  HP 17BII  HP-71BU  TI-81

Send it to me, \_\_\_\_\_  
(street) \_\_\_\_\_

(city, state, zip) \_\_\_\_\_  
(I agree to having my name announced if I win)

Thomas Kornack, Washington, D.C., won a free HP 32SII in our last drawing. Enter now—it may be you this time!

# Calculator Stands, Cases & Batteries

## START HERE

First find your instrument in these lists, then check out the stands & cases that fit it. Buy your batteries from the list on page 30.

	Battery Calculator HP10B, 14B, 17B(II), A 20S, 21S, 22S, 27S, 32S(II), 42S	No. x Size 3 x A76	Stands 642, 2403 2127, 2326	Hard Leather Cases 2062	Protective Cases 2068, 2070 92169K 92169M	Vinyl Cases
<b>B</b>	<b>HP18C, 19B(II), 28C, 28S</b>	<b>3 x N</b>	<b>769, 2025</b>	<b>2063</b>	<b>92169D/F</b>	
<b>C</b>	<b>HP11C, 12C, 15C, 16C</b>	<b>3 x A76</b>	<b>629, 998</b>		<b>92169B</b>	
<b>D</b>	<b>HP41C, 41CV, 41CX</b>	<b>4 x N</b>	<b>2403, 642, 2127</b>	<b>511</b>		<b>82111A</b>
<b>E</b>	<b>HP71B</b>	<b>4 x AAA</b>				
<b>F</b>	<b>HP48S, 48SX, 48G, 48GX</b>	<b>3 x AAA</b>	<b>2403, 2249, 2252</b>	<b>2225</b>	<b>2638, 2579, 2736, 2763 2865</b>	<b>82221A</b>
<b>G</b>	<b>HP 95LX HP 95LX1mb HP 100LX</b>		<b>2 x AA 1-CR2032</b>		<b>2638, 2579, 2736, 2665, 2519, 2520 2764</b>	

Manufacturer	Stock #	Battery No. x Size	Stands	Manufacturer	Stock #	Battery No. x Size	Stands
Calculated Industries	CMIII	1 x CR2032	642, 2127	Psion	2751	2 x AA	
Calculated Industries	CMIIITP	1 x CR2032	642, 2127	Sharp	PC3000	2 x AA, 1 CR2016	
Calculated Industries	CISM	2 x CR2430	642, 2127	Texas Instruments	TI30STAT	2 x A76	
Calculated Industries	ECP	1 x CR2032	642, 2127	Texas Instruments	TI68	1 x CR2032	642, 2127
Franklin	DRS11	4 x CR2032		Texas Instruments	TI81	4 x AAA	2249, 2252
Franklin	LM3000	4 x AA		Texas Instruments	TI85	4 x AAA, 1 CR1616	2249, 2252
Digitool	DCINCH	2 x A76		Casio	FX115D	solar power	
Digitool	DTTM	solar power		Casio	FX7000GD	3 x CR3032	2249, 2252
Sharp	OZ9600	4 x AAA		Casio	FX7000G	4 x CR3032	2249, 2252
Sharp	OZ7420	3 x CR2032		Casio	FX7000GB	4 x CR3032	2249, 2252
Sharp	EL9200C	4 x AAA	2249, 2252	Casio	FX8700G	4 x CR3032	2249, 2252
Sharp	EL9300C	4 x AAA	2249, 2252	Casio	FX6300G	2 x CR3032	

## Desk Stands

- Dramatic—give your desk a professional look
- Sensible—avoid keying errors by putting your instrument at the right angle on non-skid feet
- Eye-easing—reduce fatigue with a better view of your readout

Astech

**Rigid Plastic Case & Stand**—tough, good-looking protection—with a clever double hinge so it becomes a stand when open. Coffee brown.  
Stock #2326 [Rigid Case/Stand, size A] .....\$18.95

EduCALC

**Ice-clear acrylic stand**—strong and thick, for desk-top sparkle.  
Stock #998 [Acrylic stand: Clear, size C] .....\$14.95  
Stock #2025 [Acrylic stand: Clear, size B] .....\$18.95  
Stock #2127 [Acrylic stand: Clear, sizes A, D] .....\$9.95  
Stock #2252 [Acrylic stand: Clear, size F] .....\$11.95

**Get Instant Gratification—  
use our optional UPS Overnight Delivery!**

Brown plastic folding stand—adjustable viewing angle, quickly collapses for your pocket. A *Best Buy*.

Stock #2403 [Plastic stand; Brown, size A, D, F] .....\$5.95

Oak stand—dense, thick and sturdy—complements your desk and blends with other accessories.

Stock #629 [Oak stand, size C] .....\$14.95

Stock #642 [Oak stand, sizes A, D] .....\$14.95

Stock #769 [Oak stand, size B] .....\$19.95

Stock #2249 [Oak stand, size F] .....\$16.95

**CHROME NAMEPLATE  
for your desk stand**

EduCALC

Personalize any stand above with your own name, engraved in blackened letters on bright chrome-plated brass. Self adhesive backing. Please fill in boxes below for up to 16 engraved characters (including punctuation and spaces)—just tear out this page and send it with your order.

--	--	--	--	--	--	--	--	--	--	--	--

Stock #AWNP [Custom Nameplate: Chrome] .....\$7.95

*Everything you want, at the best price!*

# Calculator Stands, Cases & Batteries



► Find out what fits your instrument in chart on preceding page

## Hard Leather Cases

- Outdoors—surveying, construction, line work
- Inside the shop, factory, lab or mill

Insure your calculator—if you work rough and ready, protect it with rigid 8 oz cowhide. Rugged, professional looking, with broad belt loop. Light tan.

These cases are handcrafted; they may require a long delivery time.

Stock #511 [Case: HP 41 without Crd Rdr, size D] List \$39.....\$34.95  
 Stock #2062 [Hard Leather Case, size A] List \$35.....\$34.95  
 Stock #2063 [Hard Leather Case, size B] List \$56.....\$48.95  
 Stock #2225 [Hard Leather Case - 48SX, tan] .....\$42.95

## Soft Vinyl Cases



Just like the one that came with your instrument.  
 Stock #82111A [Vinyl case: Brown, size D] .....\$9.95  
 Stock #82221A [Vinyl case: Black, size F] .....\$14.95  
 Stock #82110A [Vinyl case: Black] .....\$4.95

**Sale**

Chary

Side-folding wallet with a BIG BONUS—this wallet opens to become a desk stand when you use your instrument—holds it at the proper angle for hand and eye. Soft, thick, top-grain cowhide.

Stock #2068 [Wallet/Stand: Black, size A] List \$30 .....\$21.95  
 Stock #2070 [Wallet/Stand: Burgundy, size A] List \$30 .....\$21.95

Tuck-top wallet with a second layer of pliant cowhide

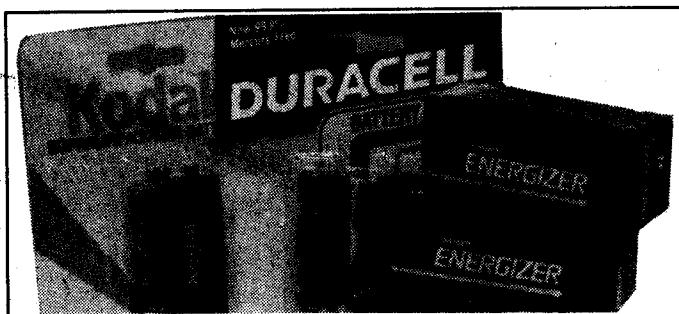
Stock #92169K [HP wallet: Black, size A] List \$19 .....\$17.95  
 Stock #92169D [HP wallet: Black, size B] List \$19 .....\$17.95  
 Stock #92169F [HP Wallet: Burgundy, size B] List \$19 .....\$17.95  
 Stock #92169B [wallet: Brown, size C] List \$12 .....\$10.95

Stock #2638 [HP48/95 Black Executive Case] .....\$43.95  
 Stock #2579 [HP 48 Leather Case, black] .....\$34.95

In a hurry? Use our UPS 2ND DAY AIR

A Big Hurry? UPS OVERNITE AIR!

# Calculator Batteries



The most used calculator battery size is A76, an alkaline button which is also called LR-44, PX76A, 1166A or V13GA. The A76 may also be replaced with our super long life (at least 225% more) silver-oxide battery, S76 (also called SR44, EPX76, MS76, RS76, G13, V76PX or 1107SOP).

Stock #A76 (Alkaline battery).....\$0.89  
Stock #S76 (Silver oxide battery).....\$3.20

The following alkaline batteries are usually the original equipment specification. We also offer nickel-cadmium (NiCd) rechargeables in most of these sizes (and rechargers)—please call us for details.

Stock #AA (Alkaline battery).....\$0.89  
Stock #AAA (Alkaline battery).....\$0.89  
Stock #C (Alkaline battery).....\$1.39  
Stock #D (Alkaline battery).....\$1.39  
Stock #N (Alkaline battery).....\$0.98  
Stock #9V (Alkaline battery).....\$2.80

The lithium button-cells listed below last twice as long as alkalines.

Stock #CR1616 (Lithium battery).....\$1.75  
Stock #CR2016 (Lithium battery).....\$1.75  
Stock #CR2025 (Lithium battery).....\$1.95  
Stock #CR2032 (Lithium battery).....\$1.95

## Batteries

- Get extra batteries now—avoid memory loss—avoid shopping trips!
- Get fresh batteries from EduCALC—we sell the most calculator batteries, so we replace our stock fast!
- Premium brands (Eveready, Kodak, Duracell, etc.) guarantee longer life and freedom from leakage and corrosion—they're tested!
- Find out what fits your instrument in chart on preceding page.

## Business Calculators



**HP 10B**  
Algebraic entry—  
for Business Professionals  
and Students

Now—  
Traditional HP reliability  
is affordable

**hp** HEWLETT  
PACKARD

The HP 10B is the ONLY calculator  
under \$40 that gives you ALL 3—

- HP dependability—molded keys, so the letters will never rub off and you'll never have to worry about sticking keys or double entries.
- Label descriptors—make it easy to understand and enter cash flows, and to see which values in a schedule are interest, principal and remaining balance.
- Easy access to your solutions—large 12-character display. Simple movement between functions, so you don't lose your data (no cumbersome 'compute' keys or mode switching, either). Auto-increment feature generates amortization schedules quickly.
- Essential business and finance functions—time value of money, amortization schedules, cash flow analysis with IRR and NPV, interest rate conversions, percent and percent change, margin and mark-up.
- Statistics and math functions—1- and 2-variable statistics with mean, weighted mean, sample and population standard deviations, forecasting and linear regression, basic math functions.

15-memory registers (more memory than similar models, and it's more usable), automatic constant saves keystrokes on repetitive calculations. Special 3-key 'M' memory for simple, fast use.

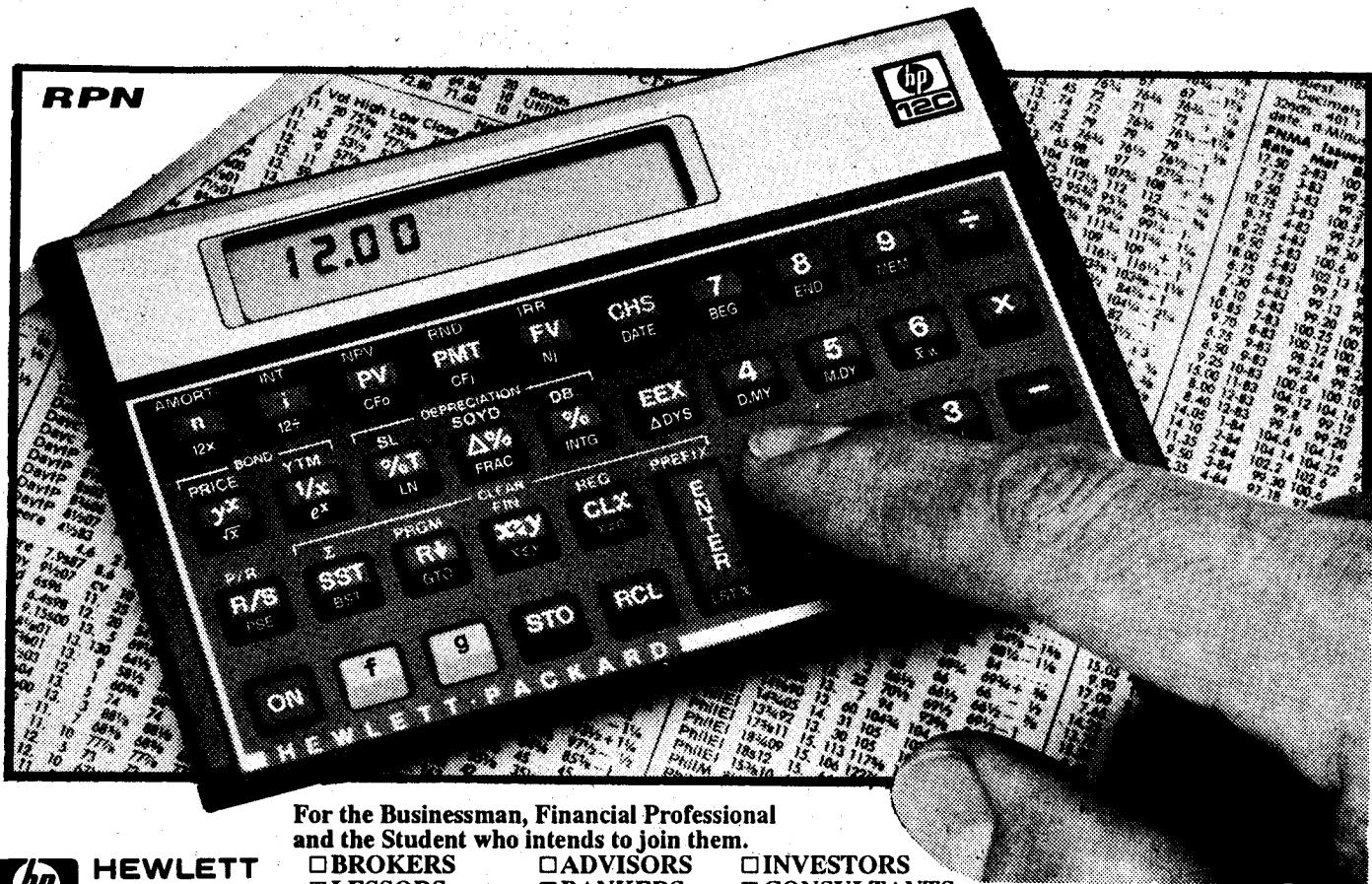
Batteries, Manual, wallet included, 1 yr warranty.

Stock #HP10B [Business Calculator] List \$40 .....\$32.95

**Calculator stands & cases—see pp 28-29**

**Check out anything you want without  
risking a penny. At EduCALC you get  
a 30 day return privilege.**

# HP 12C Business Calculator



For the Businessman, Financial Professional  
and the Student who intends to join them.



**HEWLETT  
PACKARD**

Imagine Yourself . . . Calculating what-if answers with ease—right on the spot!!! Answering your client's questions instantly without tables. Being first with IRR and NPV figures, to the penny! Freeing yourself from arithmetic, so you can do the real thinking.

YOU CAN—get yourself an HP 12C calculator and buy the book or tape 'SELF SEMINAR' listed below that fits your needs. Then invest a couple of hours study time. You'll be delighted with your quick new power and ease.

FINANCE/BUSINESS: Solves for Number of Periods (n), Compound Interest Rate (i), Present Value (PV), Payment (PMT), and Future Value (FV); Amortization with Accumulated Interest and Remaining Balance; Net Present Value (NPV); Internal Rate of Return (IRR); Bond Yield and Price; Depreciation by

Straight-Line, Declining-Balance, Sum-of-Digits (SOD); Odd-day's Interest; Simple Interest; Percent, Percent Change and Percent of Total; Calendar Functions; Beginning—or End-of-Period selection; 5 Financial Registers.

STATISTICS: Summations; 2-Variable Statistics with Means, Standard Deviations, Linear Regression, and Correlation Coefficient; Factorial.

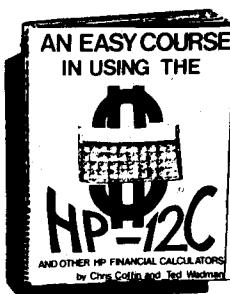
PROGRAMMING: Up to 99 Steps; Program Review; Unconditional Branching; 2 Conditional Tests; Pause.

Yet it's FRIENDLY—a first-time calculator user can expect to solve amortization and cash-flow problems with the 5 top-row keys in a matter of minutes! Stock #HP12C, List \$95 (Battery, case & manual incl) ..... \$74.95

## An Easy Course in using the HP 12C

by Coffin/Wadman

Written just for you, to work at your own pace. You can relax, sit back and let these experts show you the way with lots of illustrations, example stories and quick reviews. This is a sometimes playful treatment, from the beginning, with many common applications in lending and investment analysis. It may also be used with other HP calculators, such as the 37, 38, 67/97 with pac software, and 41 with module software. HP #92234 Stock #260, Easy Course 12C, 256p wirebound ..... \$19.95



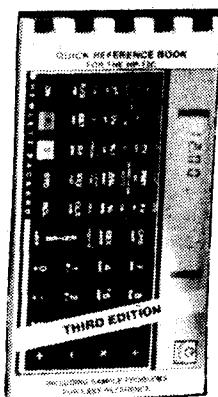
**Calculator stands, cases & batteries: see pp 28-30**

## Quick Reference Guide for the HP 12C by Evan Gost

This booklet is no bargain by the ounce—that's because it's been boiled down so it fits in your shirt pocket (even with cigarettes there), or in the 12C case. It is a training guide and ready reference which supplements your Owner's Handbook. The author also gives seminars on the use of the 12C, so he knows what you need:

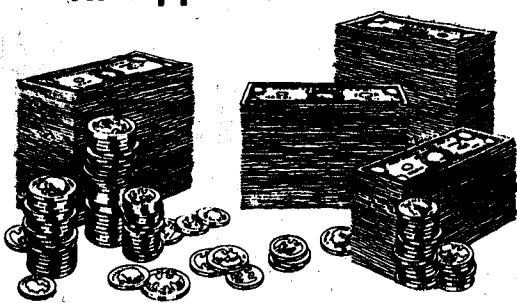
Believe it or not, this little book contains methods and examples covering every function of the calculator—plus more examples to steer you through problems complex enough to require two-stage solutions. It's concise, complete and useful.

Stock #243, 12C Quick Reference Guide, 36p softbound ..... \$4.50



# HP 12C Business Calculator

## HP Applications Books



**hp** HEWLETT  
PACKARD

### The HP 12C Training Guide

New! A self-seminar from Hewlett-Packard that begins at the beginning and ends with you feeling comfortable with your HP 12C. Lots of examples, tests with answers, summaries and reviews will guide you. When you're finished, you'll be able to calculate mortgage payments, loan amounts, determine IRRs, write and run a program, and much more!!

Stock #90022, 12C Training Guide, 169p softbound ..... \$14.95

### HP 12C Solutions Handbook

Here are keystroke procedures from Hewlett-Packard supplementing your owner's handbook for applications to real estate, lending, savings, investment analysis, securities, forecasting, pricing, statistics, personal finance, Canadian mortgages, and more.

Stock #477, HP 12C Solutions, 152p softbound ..... \$14.95

### HP 12C Leasing Applications Handbook

Stock #90021, Leasing Applications, 117p softbound ..... \$14.95

### HP 12C Real Estate Applications Handbook

Stock #90015, Real Estate, 102p softbound ..... \$14.95

## The HP 12C Made Easy

by Edric Cane

Open the box, open this book, and you're in business — master teacher Edric Cane will not so much simplify it as make it obvious. A realtor himself, Cane chooses examples mostly from real estate. They illustrate all the compound interest features on the HP 12C for regular cash flows. No prior knowledge of the calculator is assumed (and this course can be used with the HP 37, 38 and 41 machines as well).

This book was born in seminars where thousands of students have successfully gotten understanding and power — seminars at UCLA and UC Berkeley and to boards of realtors, executives and investors from New York to Hawaii. It anticipates your questions and gives clear, complete explanations of concepts.

Stock #273, HP 12C Made Easy, 246p combbound ..... \$19.95

VOLUME II: Complete your kit of 12C skills — learn how to handle IRREGULAR CASH FLOWS, STATISTICS and PROGRAMMING.

It's all quickly made clear to you by Edric Cane, the master teacher who wrote Volume I as well.

Vol I is not prerequisite to Vol II — but you'll need to thoroughly understand regular cash flows and simple arithmetic on the HP 12C.

Stock #682, 12C Easy Vol II, 228p combbound ..... \$19.95

Professional Real Estate  
Problem Solving Using the HP 12C  
by John Tirone

*Brand  
New*

Professional  
Real Estate  
Problem Solving  
Using the HP 12C

A  
Step  
By  
Step  
Approach  
by John V. Tirone

Your confidence will grow with every problem and example you do — you'll learn why and when, not just how, to do them.

Author Tirone is an attorney who has taught thousands of RE professionals how to calculate the numbers they need to make money fast. You'll like his clear, step-by-step instructions and simple explanations — most of all, his practical examples.

Stock #2859, 12C RE Problem Solving, 271p combbound ..... \$27.95

## The HP 12C Pocket Guide:

Just in Case  
by Coffin/Wadman

Jiffy HELP that fits in the pouch with your HP 12C — yet it is complete enough, with Descriptions, Instructions and Examples.

It covers every common type of problem, even guides you with (excellent) diagrams and illustrations in the authors' humorous style. It is quite well-written, plus you'll recognize the keyboard colors printed right in the instructions. Could you ask for more?

Stock #649, 12C Pocket Guide, 50p softbound ..... \$6.95

## Investment Securities Program Guide using the HP 12C

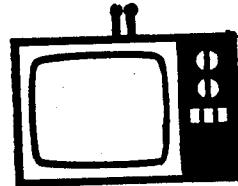
"With the programs in this book, I've got the answers my clients want while my competitors are still setting up the problem," says Stephen R. Willson, VP (Public Finance), Blunt Ellis & Loewi, Incorporated; "I'm not always near my computer. But I always carry my HP 12C."

John L. Maginn, CFA, Exec VP and Treas, Mutual of Omaha Insurance Co., says, "I especially appreciated the organization of the *Program Guide* across the spectrum of calculations for securities, options, warrants/calls, and portfolio management. The book is concise, complete, comprehensive — and essential for the investment practitioner that loves the convenience and power of the HP 12C."

Stock #435, Investment Securities 12C, 147p softbd ..... \$17.95

## HP 12C Video Training Program

Smartz



Just pop this in your VCR and relax. Your trainer, Dale Hillard, takes you right from keyboard layout through programming basics — this full 2-hour training session gives you an end run around that owner's manual.

Former college professor Hillard is the RE broker that conducts HP 12C workshops nationally for the RE, banking and financial industries.

Stock #2182 (HP 12C Video Training Program) ..... \$44.95

*Want a calculator for your PC?  
See our Math Software Section.*

# HP 17BII Business Calculator

## New model 17BII—

It has HP's time-tested RPN entry system AND it has the Algebraic System common to other calculators. You choose—RPN or Algebraic—it does BOTH, and you can change it any time—you decide, and you can even try out either system while you use the other.

### ► Business and Finance

- Amortization with table printout
- Bonds: price, yield
- Date arithmetic
- Depreciation
- Interest rate conversions
- List-based cash flows
- Mark-up as percent of price and cost, percent change, percent total
- Number lists; edit, sort, store
- Time value of money

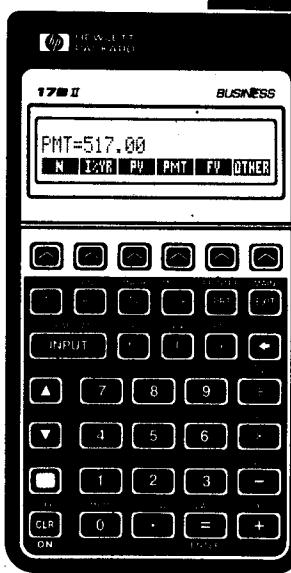
### ► Statistics and Math

- Mean, standard deviation (1 or 2 variables)
- Weighted mean
- Forecasting/curve fitting
- LN, LOG, ex, 10x, yx,  $\sqrt{x}$ ,  $x^2$ ,  $1/x$

### ► Time and Dates

- Appointments and alarms
- Clock, calendar

## HP 17BII



**RPN**  
Algebraic



**HEWLETT  
PACKARD**

► 6,500 bytes of Usable Memory

► Algebraic Entry System with Menus and Softkeys for Easy-to-Use Power

► State-of-the-art Vertical Design with one-piece keyboard/case (robot assembled) and the sleek lines of a new German car

► HP SOLVE — enter custom equations without programming

► Clock, Calendar and InfraRed Printer interface

It's 15 times faster than the HP 12C, and displays more than 4 times as much information. This powerful calculator from Hewlett-Packard is an indispensable companion for all the business problems you face daily. Practical, dependable, the HP 17B is by far the most function-packed business calculator you'll find anywhere for the price.

The HP 17B's powerful set of functions includes time value of money, amortization, discounted cash flows (NPV and IRR), interest rate conversions, percentage calculations, bonds, depreciations and more.

You'll use the HP 17B's list-based cash-flow and statistics functions to find

solutions for a wide variety of business problems. Plus, you can store lists of data for quick retrieval, editing and calculating. And the HP 17B keeps a running total as you go.

You can analyze your sales by fitting them to four different curve models and use the HP 17B's forecasting application to predict future sales. In addition, this multipurpose calculator performs time calculations and reminds you of pending appointments.

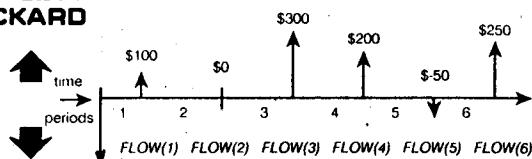
And 6,500 bytes of usable memory mean you have enough room to store everything you need. Manual, batteries, soft case included; 1 yr warranty.

Stock #HP17BII [Business Calculator] List \$110 ..... \$84.95

## Step-by-Step Books for Business Using the HP 17B



**HEWLETT  
PACKARD**



Stock #544, Real Estate, Banking, Leasing.....	\$9.95
Stock #545, Business, Finance, Accounting.....	\$9.95
Stock #546, Marketing, Sales.....	\$9.95
Stock #547, Personal Invest/Tax .....	\$9.95

## An Easy Course in Using the HP 17B

**GRAPEVINE PUBLICATIONS, INC.**

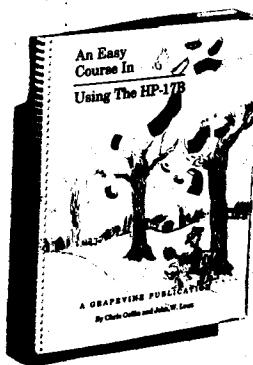
A clear, straightforward explanation of your HP 17B. It's written in Grapevine's friendly style, so it's easy to understand, right from the first.

You'll learn to work with menus, lists, arithmetic—how to develop your personal list of equations. Then you'll explore the built-in financial equations, the 'hows' and 'whys' of loans, mortgages and investments—and make sense of them all with the Time Value of Money keys NPV, NFV, IRR, and MIRR.

Clear diagrams and explicit, worked-out examples from Savings, Real Estate and Banking will tie it all together for you, painlessly!

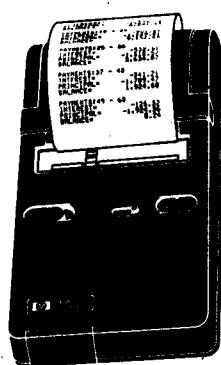
Stock #540, 17B Easy Course, List \$23..... \$19.95

**Calculator stands, cases & batteries: see pp. 28-30**



# HP 17BII Business Calculator

InfraRed Printer  
for your HP 17, 18, 19, 27, 28,  
41 with IR Module, 42 or HP 48



Get hard copies of all your graphics, data, programs or calculations. This silent thermal printer operates on four AA alkaline batteries (included) for go-anywhere portability — a set of batteries prints about 6000 lines, or there is an optional AC Adapter.

Printer connection cords have been replaced by an invisible infrared beam from your HP calculator. It's the only link required for your printing needs.

You have plenty of leeway — up to a foot and a half — to put the printer where it's most convenient for you. Just point your calculator at it and push [PRINT]. No cords to tangle with.

Print speed with fully-charged batteries is just a shade over a half second per 24-character line. By putting the printer in TRACE mode, you can print out a complete record of the numbers you've used in your calculations, as well as your results. Or print selectively and provide clients with copies of quotes, amortization tables or itemized lists.

Stock #82240B [Portable InfraRed Printer]	List \$135	\$115.95
Stock #F1011A [AC Adapter for IR Printer]	.....	\$39.95
Stock #82175A [2 1/4" Printer Paper, black, 6 rolls]	.....	\$9.95
Stock #AA [Batteries, Printer uses 4]	..... ea	\$89
Stock #92169G [Cover, black]	.....	\$22.95
Stock #92169H [Cover, brown]	.....	\$22.95
Stock #92169J [Cover, burgundy]	.....	\$22.95

Foreign adapters available; see page 14 (HP 95 section).

## The Home Buyer Income Qualification Manual — HP 17 and HP 19 Routines

■ Realtors  
■ Investors  
■ Loan Officers  
by John Tirone

Don't chase deals that cannot income-qualify! It beats the back of the envelope and the paper napkin by miles — your calculator automatically takes account of lending ratios, taxes, other expenses and debt load, and returns to you standard PITI, annual income to qualify, required down payment, or average after-tax payment cost as a function of holding period. Manual has explanations, formulas, examples and practice problems with all its programs.

Stock #2187, Home Buyer Qualif Manual, 73p wirebound ..... \$9.95

## 1991 Revisions to The Home Buyer Qualification Manual

by John Tirone

This supplement to #2187 expands the coverage of the main book and is a must for the real estate professional.

Stock #2514, 1991 Revisions for Qualification, 90p ..... \$14.95

**In a hurry? Use our UPS 2ND DAY AIR.  
A Big Hurry? UPS OVERNITE AIR!**

## An Easy Course in Using the HP 27S GRAPEVINE PUBLICATIONS, INC.

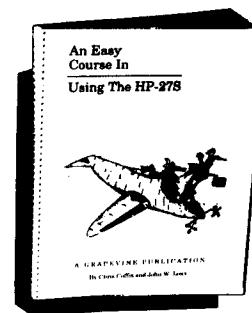
A clear, straightforward explanation of your 27S. It's written in Grapevine's friendly style, so it's easy to understand, right from the first.

This Easy Course starts with the basics, with lessons on keyboard operation, arithmetic and how to move through a menu. Next it explains the built-in equation-solver (including its 'smart' features). Then you'll put it all together in a series of commonly encountered, practical problems (with complete solutions).

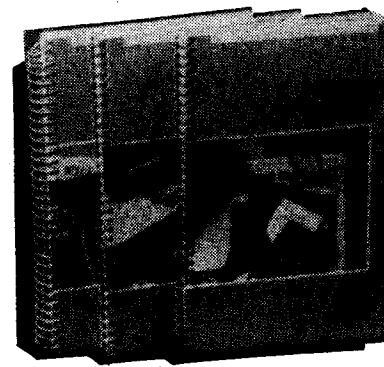
You'll also get extensive training in personal finance using the TVM (Time Value of Money) menu, including concepts and methods of financial analysis.

Includes clear diagrams and explicit examples.

Stock #542, 27S Easy Course, List \$23 ..... \$9.95



## Step-by-Step Books for Business Using the HP 17B, 19B and 27S



Let experts help you set up your calculations so you can work with them most easily. These professional references include practical routines and tips for getting the most from the Built-in Menus as well as setting up Personal Menus for your specific profession. Order the ones that fit your work.

Stock #544, Real Estate, Banking, Leasing	.....	\$9.95
Stock #545, Business, Finance, Accounting	.....	\$9.95
Stock #546, Marketing, Sales	.....	\$9.95
Stock #547, Personal Invest, Tax Plan	.....	\$9.95
Stock #548, Tech Applications using HP Solve	.....	\$9.95

## The HP 17B Pocket Guide: Just in Case

GRAPEVINE PUBLICATIONS, INC.



Refreshes your memory after you have completed the Easy Course. Lots of examples to follow, each with keystrokes and explanations. And this Friendly Companion fits right in your calculator's case.

Stock #2022, HP 17B Pocket Guide, 64p softbound ..... \$6.95

# HP 19BII Business Consultant II

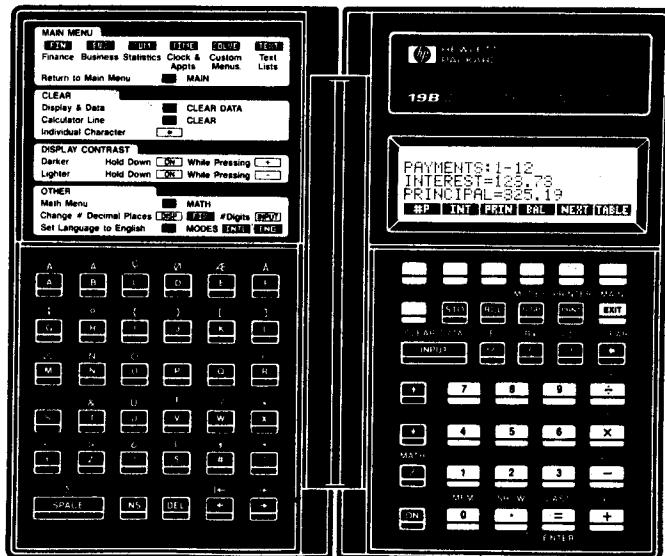
John C. Dvorak of the *San Francisco Examiner* and *PC Magazine* calls the Business Consultant "The hottest new portable super calculator." He likes the printer, too: "Forget about RS-232 cables. This is the way to go. Watching a little printer magically print data from an infrared link is both eerie and exciting."

## Data-Saving and Sorting Power

## Problem-Oriented Power

## Time-Managing Power

## Menu-Driven Power



### New model 19BII—

It has HP's time-tested RPN entry system AND it has the Algebraic System common to other calculators. You choose—RPN or Algebraic—it does BOTH, and you can change it any time—you decide, and you can even try out either system while you use the other.



## Solve your special problems WITHOUT PROGRAMMING!

**USER DESIGNED POWER**—Hewlett-Packard asked people like yourself what they wanted in a finely-designed business calculator. Now you've got it. There are 2 straightforward keyboards—one has numbers and function keys while the other keeps your alphabet separate for typing ease—yet the Business Consultant II folds for your pocket. The revolutionary 4-line LCD screen shows you the numbers you're calculating with, or menu options to choose from. An infrared printer interface drives the optional printer, without bothersome cables.

**MENU-DRIVEN POWER**—the Business Consultant II is self-guiding, with Prompts in English, so you'll find it easy to use right from the start. You won't be referring to the manual very often.

Standard business formulas are already built in. Simply make a choice, then push a button.

To help you find your way around, menus—a series of headings—appear on the Business Consultant's four-line screen.

They make these functions push-button close:

<input type="checkbox"/> Interest rates	<input type="checkbox"/> Statistics
<input type="checkbox"/> Time and appointments	<input type="checkbox"/> Internal rate of return
<input type="checkbox"/> Payment schedules	<input type="checkbox"/> Interest rate conversions
<input type="checkbox"/> Markup and margin	

**PROBLEM-ORIENTED POWER**—the Business Consultant II is smart, so you'll only tell it the problem formulas, and it will figure out how to solve your problem for you. No more will you need to program your solutions; just tell your BUSINESS CONSULTANT what the problem is!

**TIME-MANAGING POWER**—the Business Consultant II is punctual, so it will remember appointments for you—and remind you with a beep. In addition to the 19B's calendar, there's a handy clock in it, and memory for your expenses, so you can note them right on the spot. With the clock you can keep track of billable time.

**DATA SAVING & SORTING POWER**—when you key in data to do statistical analysis (say, mean and standard deviation even on weighted data) your Business Consultant II remembers every data point, not just those sums it uses to calculate your statistics. Furthermore, it will sort your data points, so you can find their minimum, maximum, range, median, mode, and percentiles, or print them all out in sorted order.

The Business Consultant II does bond price/yield/depreciation, plus all the usual financial calculations, percent, compound interest, cash-flow analysis, calendar, statistics, factorial, trig, probability, and  $\ln x$ ,  $e^x$ ,  $y^x$ —all the functions you expect.

Its new power includes Interest Rate Conversions, Markup as % of Cost and Price, Net Future Value (NFV), Net Uniform Series (NUS), Clock Functions, Appointments and Alarms, Logarithmic and Exponential and Power Curve Fitting, Currency Conversions.

It calculates with Algebraic Logic, dealing with equations just as you write them. It has 6500 bytes of RAM memory for your own customized menus, equations or data, and it remembers everything while it's turned off. It's 15 times faster than the HP 12C, and displays more than 9 times as much information.

The Business Consultant II is 3 5/8" wide by 6 1/2" high and 5/8" thick when folded; open, it's 7 1/2" wide. Owner's Manual and batteries included.

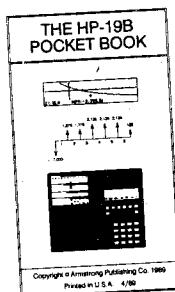
Stock #HP19BII [Business Consultant II] List \$175..... \$134.95

**Calculator stands, cases & batteries: see pp. 28-30**

**InfraRed Printer: see p. 34**

# HP 19BII

## HP 19B Pocket Book



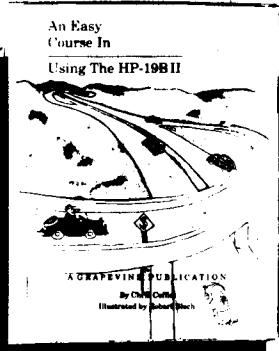
All the help and reference you'll want to have along with you—fits right in the case with your instrument.

Covers calculator operation and all the functions, using menus, printing, etc. Details with examples for TVM, amortization, even and uneven cash flows, bonds, depreciation, more. How to use time and appointment functions, equation solving, text lists, exchange rates and conversions.

Stock #2142, 19B Pocket Book, 60p softbound ..... \$6.95

## An Easy Course in Using the HP 19BII

GRAPEVINE PUBLICATIONS, INC.



Your own "Driver's Training Course" for the 19BII—quick & easy.

First shows you how to use menus, lists and arithmetic, in either RPN or algebraic notation. Then you get lots of "on-the-road training" in financial problem-solving and cash-flow analysis. Perfect for HP 19B as well.

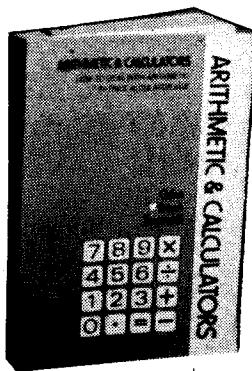
Stock #541, Easy HP 19BII, 320p softbound ..... \$19.95

## Read our mail from Texas—

"Please tell all of your employees to keep up the good work. They will keep and expand their jobs by solving the customers' problems immediately, as they are doing and not by trying to pass the problem along to someone else. I am amazed that so few people really understand that their primary job is to take care of, and take over, customer problems." Robert L. McIntyre, Brownsville

## Arithmetic and Calculators

by Chinn/Dean/Tracewell



Ideal for adult self-study or for a gift to your bright-eyed relative. These experienced authors first cover arithmetic from the ground up and make it clear. Then they carefully teach its real-world applications. The book covers pre-calculus math except for trig with many delightful topics thrown in, like Fibonacci numbers and magic squares. Plenty of exercises including word problems. Written for any calculator with algebraic logic.

Stock #23, Arithmetic and Calculators, 488p softbound ..... \$8.95

"We recommend HP financial calculators to our commercial banking clients because they are the accepted standard—the only creditable solution on the market." *Globecon Group, international banking consulting firm, New York City, New York*

# School Calculators

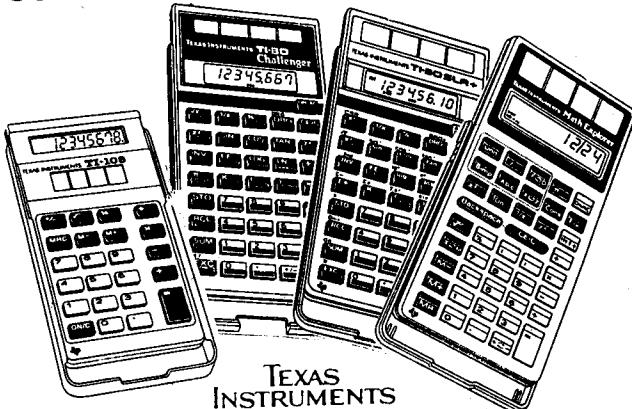
## Notice to Educators —

EduCALC is your distributor for school calculators—from TI, HP, Sharp and Casio—designed to follow your student's progress, K through 12, in his or her American classroom.

Call our School Specialist, Deanna Beck, at (800)677-7001 for your best wholesale price in large or small quantities (min. 10). We'll deliver them to you quickly.

Please address your Requests for Bids to Deanna, also.

## School Calculators



TEXAS  
INSTRUMENTS

Each model is ANYLITE solar-powered and has a big 8-digit LCD display. Each has its large keys color coded and arranged in 'zones' for easy, natural learning.

Each model is engineered for heavy use in schools—impact-resistant, with a clever slide-on case that can take a beating. Instructions included; 1-year warranty.

### For grades K through 4: TI-108

Four basic functions plus percent, square root, and plus/minus keys, as well as automatic constant.

Stock #TI108 [Grade School Calculator] ..... \$6.50

### For the Youngest Students: TI Math Mate

AOS Algebraic Operating System with parenthesis and memory keys—tough case is attractive red with yellow buttons.

Stock #TI7 [Math Mate] ..... \$8.50

### For grades 4 through 8: TI Math Explorer

4-8th grade students do fraction arithmetic on this unique calculator—input, display, simplify and manipulate fractions or whole numbers. They get other functions, too, like integer division with whole-number remainder results, and place value computations.

Stock #TIME [Math Explorer] ..... \$20.95

### For grades 7 through 10: TI-30 Challenger

All basic math, trig and scientific functions, including logarithms, anti-logarithms, and pi. Large color-coded keys speed calculations, minimize errors.

Stock #TI30C [Challenger 30] ..... \$15.95

### For grades 9 through 12: TI-30SLR+ & TI-34

TI-30 SLR+ has the functions HS teachers want for college prep—log and antilog, trig and 1-variable statistics.

TI-34 has all the functions of the TI-30SLR+ and also does hex/binary/octal conversions, Boolean logic and fractions. 10-digit display.

Stock #TI30SLR [Sci/Stat Calculator] ..... \$16.95

Stock #TI34 [Advanced Scientific] ..... \$20.95

See our projectable calculators, for overhead displays, on p 38. See calculator activities books on p 40. Note the new Casio Student Graphics Calculator on p 39.

# Scientific Calculators

## HP 20S

A powerhouse scientific calculator with algebraic entry—and a startling low price for real HP reliability!



This HP 20S is the ONLY calculator for under \$50 that gives you BOTH

- Keystroke Programming
  - 99 program steps
  - 10 storage registers
  - conditional tests and branching
- A Program Library
  - equation solver
  - curve fitting
  - quadratic equations
  - complex number operations
  - numerical integration
  - 3 x 3 matrix operations

All essential math functions are here—exponential, natural and common log and antilog, pi, percent, percent change, polar/rectangular coordinate conversions, many more.

Two-variable statistics—including means and weighted means, regression, linear estimation, standard deviation, correlation coefficient; combinations, permutations, factorials.

Every essential trig function—including hyperbolics.

Base conversions and arithmetic—decimals, hexadecimal, octal, binary.

English/metric unit conversions—mass, distance, volume, temperature.

All this with 12-digit precision, an excellent LCD readout, and a keyboard that includes alpha A-F (for labels/subroutines/hexadecimals)! Batteries, manual, soft case included; 1 yr warranty.

Stock #HP20S [Scientific Calculator] List \$40 ..... \$32.95

## HP 32S

### Step-by-Step Solutions Book



Hewlett-Packard's step-by-step Solutions Book for your HP 32S covers useful routines specific to engineering; they will help you set up applications the way you want them.

Stock #628, Engineering Applications, 108p ..... \$9.95

### An Easy Course in Using the HP22S

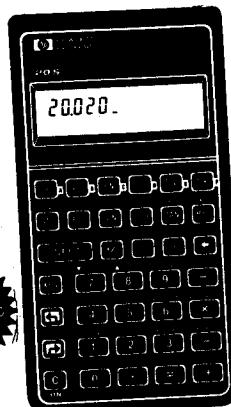
GRAPENEVE PUBLICATIONS, INC.

If you're looking for a clear, straightforward explanation of math/science calculations on the HP 22S, this is your book!

Get friendly, how-to diagrams and examples for your work with menus, lists, variables and registers, statistics, and the built-in equation library.

Then you'll learn how to develop your own custom list of SOLVE equations — power, power, power!

Stock #2152, Easy Course/HP22S, 253p spiralbound ..... \$9.95



## HP 32SII



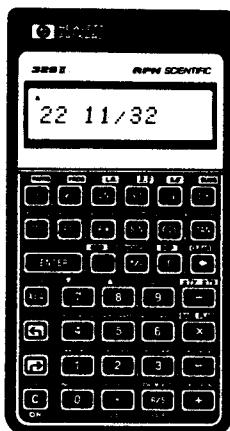
New  
Algebraized  
Model

### ■ Real Programmability

### ■ Real HP RPN

- Algebraic HP Solve Application
- Algebraic Equation Entry/Evaluation
- Unit Conversions
- Fractions

Still with full RPN  
Still only \$56.95



- Over 180 functions, including all from HP 11C
- Root finder, SOLVE for any variable
- Base conversions: decimal/hex/octal/binary
- Polar/rectangular; decimal hours/hours-min-sec
- Probability: factorials, permutations, combinations
- 2-variable statistics, correlation and regression, with weighting

### ■ Numeric Integration

### ■ Complex Number Functions

### ■ RPN Data Entry—quick and sure

### ■ Menus and Softkeys—alpha variables and messages

### ■ Modern vertical design with the Sleek Efficiency of a New German Car

### ■ Random Numbers

### ■ HP EQUATION SOLVER: solutions without programming

There's no guesswork with the HP 32SII—prompts, menu labels, and short messages help you know where you are every step of the way.

Enter keystrokes as a program—there are 390 bytes of memory and 26 storage registers—no keystrokes to learn since it's plain English (4 flags, 26 labels, 8 tests, indirect addressing—the works).

Playing out 'what-if' situations is simple with the HP 32SII. Just set up your equation, then solve for any variable. You key in the equation only once. When the situation changes, simply enter the new values for your changed variables. You get the answer—based on the new information—with little effort.

Manual, batteries, soft case included. 1 yr warranty.

Stock #HP32SII [Scientific Calculator] List \$70 ..... \$56.95

**Calculator stands, cases & batteries: see pp 28-30**

### Tips and Programs for the HP 32S

by

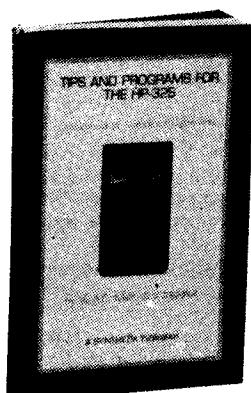
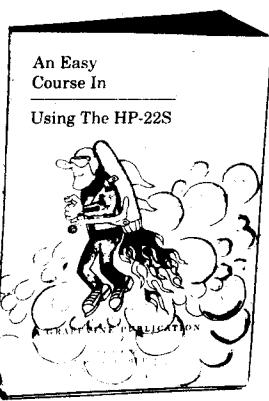
W.A.C. Mier-Jedrzejowicz

Your pocket rocket to skill and success with your HP 32S.

You start from GO, but there's also a quick-start for RPN-users. By Chapter 2 you'll do short programs that you may use in college courses. Then you'll learn how to make and use larger programs that add extra power to the HP 32S statistics and integration functions.

Lots of examples with keystroke sequences and readouts to show you just how and to teach you new tricks.

Stock #2014, HP 32S Tips & Programs, 81p spiralbound ..... \$7.95



# Scientific Calcs

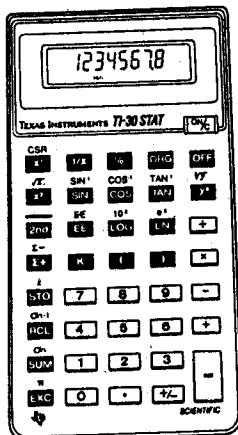
## TI-30 STAT Scientific Calculator

TEXAS  
INSTRUMENTS

New—with algebraic logic and statistics—a BEST BUY for learning to calculate.

52 functions, including factorials, powers, roots, logs and trig in degrees, radians and grads; 1-variable statistics including mean, variance and standard deviation for both sample and population data. 4-key Constant, Memory retains numbers when unit is off.

Large LCD display with 8 digits or 5 digits and a 2-digit exponent. Automatic Power Down if no key is pressed for 15 minutes or so. Comes with Easy Reference Guide which fits into nice blue wallet. Battery included. Stock #TI30 [STAT-SCI Calculator] List \$16.....\$12.95



## TI-68 Advanced Scientific Calculator

For almost two years, Texas Instruments asked thousands of technical students what they needed, and interviewed their professors. In addition, TI studied the calculator usage of its own technical staff. Then they fed the data into a computer to redesign the scientific calculator's functions and features to fit your needs. The result is the perfect machine for college technical students—the all new TI-68!

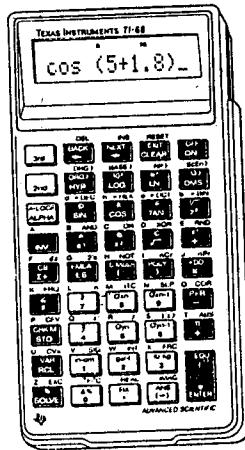
TEXAS  
INSTRUMENTS

- 254 Most Needed Functions for Math, Science and Engineering
- Simultaneous Equations
- Complex Numbers

- Solve up to 5 simultaneous equations—with real or complex coefficients.
- Evaluate 40 complex functions—arithmetic to advanced trig—polar or rectangular form.
- Recall, check, edit your last equation.
- Store up to 36 values—with alpha numeric names you define.
- Program up to 12 formulas you define—up to 440 program steps.
- Integrate your formulas on an interval—uses Simpson's rule.
- Calculate roots of quadratic, cubic, quartic polynomials—with real or complex coefficients or roots.
- Do 1- and 2-variable statistics—including linear regression, trend analysis.
- Make number-base conversions and calculations—to/from/in decimal, hexadecimal, octal and binary—plus Boolean logic.
- Convert polar/rectangular, English/Metric and deg/radians/grads.

12-character alphanumeric display scrolls to display 80-character formulas. Constant Memory. Automatic Power Down.

Includes comprehensive Guidebook with step-by-step examples, Quick Reference Card for handy summary, unique rigid sliding case; 1-year warranty. Stock #TI68 [Advanced Sci Calculator] List \$65.....\$49.95



Be sure to check out our surplus HP 71B offer on page 45.

# Projectable Calcs

## fx-115D TURBOScientific Solar Calculator

Casio

- 167 functions
- base conversions
- regression analysis
- engineering symbols
- complex numbers
- logical operations

AOS algebraic operation with 18 levels of parentheses, 1 independent and 6 constant memories. Includes Workbook and pouch.

Stock #FX115D [Solar Scientific Calculator] List \$25.....\$16.95



## HP 15C Advanced Functions Handbook

Continues where the *Owner's Handbook* leaves off—tells you how your 15C performs its advanced functions and how to interpret their results. There's a whole section on using SOLVE effectively; another that shows you just how to work with the Numerical Integration key-function.

A third section covers calculation in the Complex Mode and shows you how to use SOLVE and to integrate complex functions with example applications. Section 4 fully describes Matrix Operations, with some application programs (like least-squares and eigenvalues/vectors) that you might use later.

The appendix thoughtfully surveys accuracy and error analysis. Stock #90011, 15C Adv Functions, 221p softbound.....\$14.95

## Educator Overhead-Display Calculators

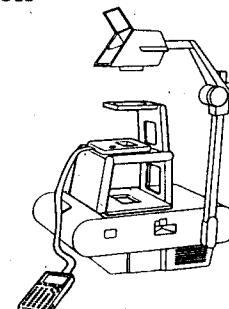
Excite and motivate your students—just lay your Educator on the stage of a standard overhead projector. It's transparent, so your whole class will see every keystroke, every result.

ELEMENTARY model emulates TI Math Mate, BASIC model emulates TI-108, INTERMEDIATE model emulates TI Math Explorer, SCIENTIFIC model emulates TI-30. Solar powered; comes with vinyl case.

Stock #2572 [Educator ELEMENTARY Calculator]	.....\$39.95
Stock #2195 [Educator BASIC Calculator]	.....\$39.95
Stock #2196 [Educator INTERMEDIATE Calculator]	.....\$79.95
Stock #2197 [Educator SCIENTIFIC Calculator]	.....\$79.95
Stock #2325 [Educator TI-34 Calculator]	.....\$79.95

## TI-81 or TI-85 ViewScreen

TEXAS  
INSTRUMENTS



All features and functions of the TI-81 or TI-85 in a hand-held control unit that is connected by a 10-foot cable to its display unit which will fit on top of most any OH projector (not for high-intensity or reflective-type projectors).

Package includes Overhead Enlarger, Thermal Absorption Device, Guidebook, 4 AAA batteries and a rigid case for it all.

Stock #2328 [TI-81 ViewScreen]	List \$400.....\$400
Stock #2733 [TI-85 ViewScreen]	.....\$449

## Overhead Projectable Model

Casio

All features of the fx-7000G or the fx-7700G plus a transparent screen.

Stock #OH7000G [Overhead Projectable Display]	.....\$274.95
Stock #OH7700G [Overhead Projectable Display]	.....\$274.95

For Sharp EL-9200C/9300C, see page 39

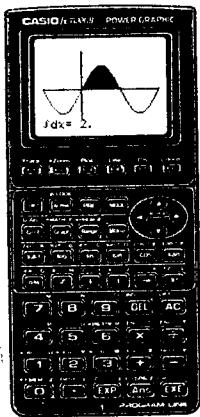
# Graphics Calculators

The Nat'l Council of Teachers of Math recommends that ALL students use calculators

## Casio Graphic Computer fx-7000GA/fx-7700G for Science and Business

New fx-7700GB  
has computer-link  
capability, too!

*Now with  
high-contrast LCD*



- analyze data or formulas with graphic clarity
- plot trends and analyze characteristics
- graphically compare values, with ZOOM
- New! Nothing like it before

192 usual functions including Scientific and 2-Variable Statistical ones, Logical Operations and Base Conversions/ Calculations. Perfect entry system, including ALPHA—check back replay function.

Graphic functions including Graph Composition, Trace, Plot, Line, Enlarge/Reduction, Coordinate Range Designation, Overwrite, Statistical Graph.

Up to 422 Programming Steps or 78 Memories.

Comes complete with manual, three CR2032 batteries, Applications Book.

Power-graphic fx-7700G has up to 4164 steps.

Power Link fx-7700GB is the same, except that it has a port—with it and an optional SB-60 cable you can transfer programs and data from unit to unit. This way a teacher can download lesson materials to a student's unit; homework can be uploaded, too, for later grading.

Stock #FX7000GA [Graphic Computer] List \$90.....\$74.95

Stock #FX7700G [Power-Graphic Cmpt] List \$110.....\$92.95

Stock #FX7700GB [Power Link Cmpt] List \$120.....\$99.95

Stock #SB60 [Unit-Unit Cable] List \$13.....\$11.95

## Lo-lo-price Graphics Calculator for High School Students

Casio

You'll have both scientific and statistical graphs—with trace, plot, line, zoom, scroll functions for graph analysis, base calculations and logical operations. Does standard deviations and regression analysis. Instant replay function, fractions, trig; 400-step program memory.

Comes with protective sliding case and manual; 1 yr warranty.

Stock #FX6300G [Casio Graphics Calculator] List \$55.....\$43.95

**Calculator stands, cases & batteries: see pp 28-30**  
**OH projector models: see p 38**

## TI-81 Graphics Calculator

*Best Buy*

TEXAS  
INSTRUMENTS

Superior interactive graphing features—so you'll have the power to easily analyze the behavior of several functions at once and solve equations graphically.

Pull-down display menus—so you'll quickly access more than 300 advanced scientific functions.

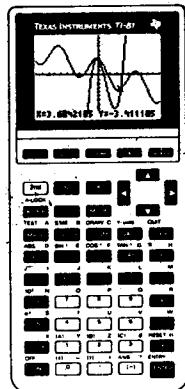
8 line by 16 character display—so you'll view the entire expression as you enter it, as well as see the results you've calculated.

Big Constant Memory—so you can save up to 37 programs totaling 2400 bytes, using up to 27 stored variables.

Manual, protective slide-on cover, batteries included; 1 year warranty.

Stock #TI81 [Graphics Scientific Calculator] List \$110.....\$73.95

Stock #PC81 (Emulator Software for PC, 5 1/4") .....\$45.95



## TI-85 Graphics Calculator

TEXAS  
INSTRUMENTS

✓ professionals ✓ students

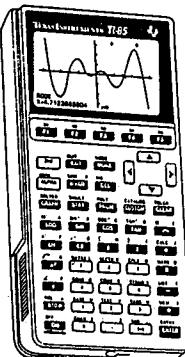
Your powerful visual tool for advanced math, science and engineering—now you can store, graph and analyze up to 99 functions, parametric equations and polar functions, plus differential equations.

Solve for any variable in an equation, or 30 equations simultaneously—find roots of polynomials up to degree 30. Solve calculus problems both numerically and graphically.

Programmable with branching and looping; 32K bytes RAM

BIG screen shows 8 lines of 21 characters text or 64 x 128-pixel graphs—2 levels of display menus. Main and back-up batteries included; 30" cable and I/O port for data sharing between two TI-85s; 352-page guide book; slide-on cover; 1 yr warranty.

Stock #TI85 [Graphics Calculator] List \$130.....\$109.95

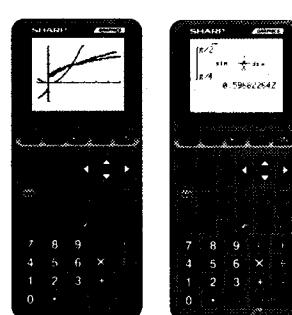


## Graphing Calculators EL-9200C/9300C

**SHARP**  
FROM SHARP MINDS.  
COME SHARP PRODUCTS.



- Algebra 1 through beginning Calculus
- user-friendly statistics
- Graphing and visual exploration
- 14-digit internal precision of multiple functions
- numeric integrals and derivatives
- an interactive programming language
- dual equation solver (EL-9300 only)



- matrices, determinants, transposes
- high-contrast super-twist display

Zoom in on 4 live equations and 99 stored equations—box, in, out factor; autorange and 18 default ranges; jump, intersect; trace x, y, dx/dy. 99 titled programs with BASIC-style commands.

EL-9300C solves 99 stored equations by Algebraic, Newton or Graphic methods—plus has communications port for unit to unit or overhead or printer or cassette.

EL-9200C and EL-9300C are almost identical in functions, so they can be used in the same classroom without any confusion.

Stock #EL9200C [Graphing Calculator] List \$120.....\$99.95

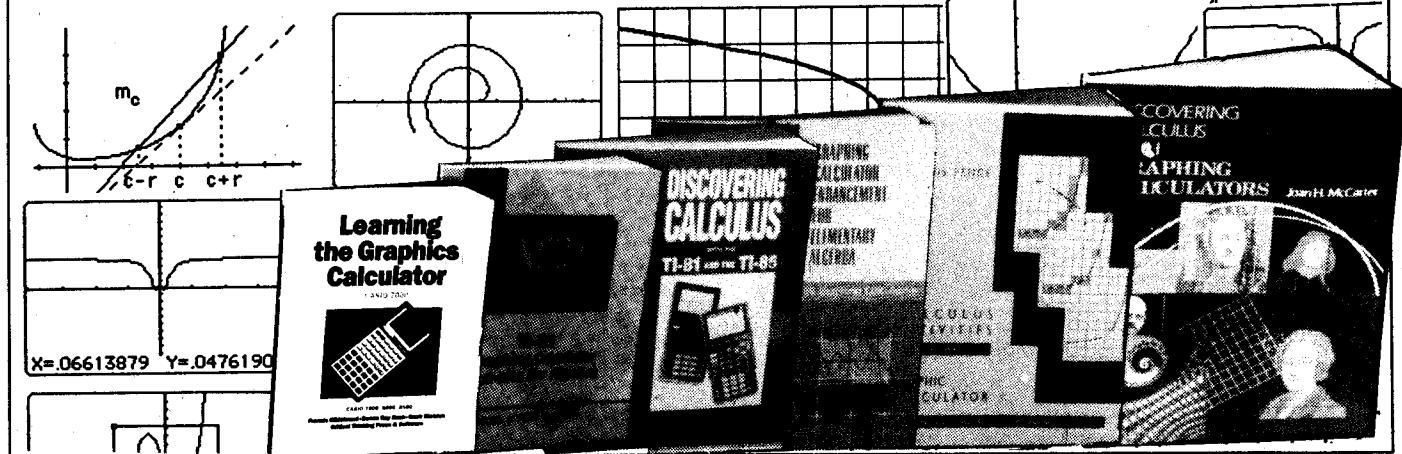
Stock #EL9300C [Graph/Solve/Port Calculator] List \$150...\$129.95

# Graphics Calculators

**Need help graphing?**

**Get it right with a book—  
that's the easy way!**

**Learn about the calculator,  
learn about the course –  
study with a class or  
work by yourself.**



## Learning the Graphics Calculator

Casio 7000 • 8000 • 8500

by Hildebrand/Buck/Dietrich

For self-study, for pleasure, for mastery—calculator in hand, you'll learn step-by-step to operate and to program your Casio Graphic Calculator.

The left hand of each page shows pictures of the keyboard, graphs, diagrams, etc., while the right side gives simple written instructions—so this book itself is very graphic!

Stock #2661, Learning Graphics/Casio, 209p softbound.....\$19.95

## Graphing Calculator Activities

by Lund/Anderson

Let your calculator teach you Algebra I and II—covers from linear equations through exponential, logarithmic and trigonometric functions.

You can use any graphing machine here, but quick reference tips are provided for the TI-81 and Casio fx-7000G, fx-7700G.

Stock #2605, Graphing Calculator Activities, 84p softbound ..\$12.95

## Graphing Calculator Enhancement for Elementary Algebra

by Carolyn Meitler

Plenty of help here—use this manual as a supplement or a review of your course. It consists of clearly worked-out examples and exercises for you to practice on, plus Appendices with keystroke details for TI-81 & 85 and Casio fx-7700G.

Stock #2881, Graphing Calcs/Elem. Algebra, 83p softbound ....\$8.95

## Explorations with the Texas Instruments TI-85

by Harvey/Kenelly (eds.)

Tells you exactly how you can use the TI-85 in each of eight undergraduate math courses. The chapters, of an average 42 pages for each course, are independent, so you can study one of them without working through any other.

The courses are Precalculus, Business Math, Prob/Statistics, Calculus I and II, Linear Algebra, DEs and Advanced Engineering Math.

Stock #2829, Explorations with TI-85, 360p softbound.....\$32.50

**Explorations in Algebra, Precalculus, Statistics**  
a manual for the TI-81 or any Casio, Sharp, TI or HP  
graphing calculator

by Iris Fetta

Not a text—this book shows you exactly how to use graphs to visualize concepts, explore, experiment, estimate, generalize and check solutions.

These techniques solve meaningful problems—so you'll think about the math in a new, effective way.

Stock #2860, Explore Alg, Precalc, Stats, 416p softbound .....\$10.95

## Discovering Calculus with Graphing Calculators

by Joan McCarter

"A picture is worth a thousand words." Here's your picture of first-year calculus, given by graphs, the best pictures of functions.

50 projects, each with examples, exercises and problems—these are independent, so you can start wherever you want in the standard topics (through series). Only basic operations are used, with minimal programming, so differences in calculators are equalized. Example graphs are printed for the Casio fx 8000G and the HP 48SX, and an appendix explains operation of current models: 6 from Casio, 3 from HP, 3 from Sharp and 2 from TI.

Stock #2858, Calculus with Graphing Calcs, 167p spiralbnd ..\$19.95

## Calculus Activities for the TI-81 Graphics Calculator

by Dennis Pence

How to use your graphics calculator to enrich first-year calculus—with Appendices for Casio fx-7700G and TI-85.

Covers the standard topics through series and differential equations—has many worked-out examples and exercises.

Stock #2830, Calculus with TI-81, 252p softbound.....\$20.95

## Discovering Calculus with the TI-81 & the TI-85

by Smith/Minton

Find out what's really going on in your 1st calculus course—work along with your calculator. This is all practical stuff, with clear explanations, step-by-step button sequences and read-outs, plus many exercises (often with an applied slant; answers for the odd-numbered ones).

Stock #2880, Discovering Calculus TI-81/85, 271p softbnd ....\$17.95

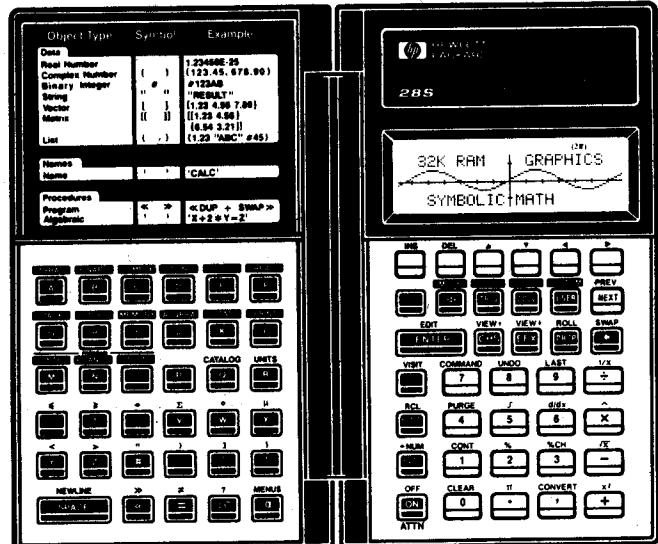
# HP 28S Scientific Calculator

## HP 28S (used) Scientific Calculator



### WARNING

Hewlett-Packard discontinued the manufacture of the HP 28S in 1992. You are in luck, however; EduCALC has used units at great savings—now.



- Six months warranty on used machines
- Separate keyboards, the right hand one for numbers and the left for letters. You fold it up to pop it in your shirt pocket
- On-screen menus and softkeys, just like a PC
- Graphics—function graphs two at a time, SOLVE, plus statistical plots
- Symbolic algebra and calculus, with all real and complex number functions
- Statistics including regression, plus normal, Students t, F and chi-square distributions
- Programmability, including number bases and logical operators
- InfraRed Printer Interface
- Original list price was \$195

Stock #HP28SU [Used HP 28S] ..... \$89.95

**HP 48S/SX (used Scientific Calculators): call  
EduCALC for great savings on used units.**

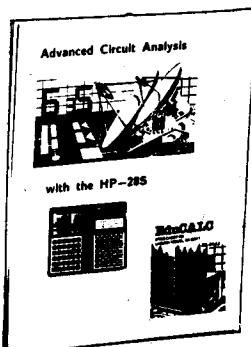
## Advanced Circuit Analysis with the HP 28S

by Robert Boyd

Programs with listings, examples and discussions show you how to analyze circuits with the full power of your HP 28S.

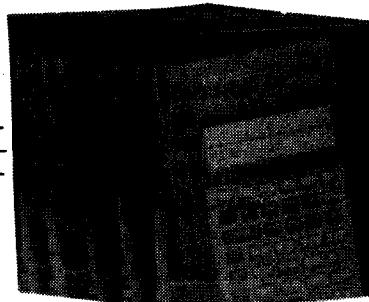
Boyd's unique new method handles higher order or non-linear problems and circuits with dependent sources, even when the coefficient matrices are not symmetric. Some of the programs here will work on the HP 42S, the HP 41/Advantage Pac and HP 71/Math Pac, as well as other computers that handle complex matrices with double precision.

Stock #2063S, 28 Circuit Analysis, 47p softbnd ..... \$9.95



**Calculator Enhancements —**  
workbooks that use your graphing calculator to help study  
university math

Clemson University  
Calculator Project



Here's how your friendly calculator can help you learn math—with programs, tips, tricks, explanations and exercises.

- Single-Variable Calculus
- Introductory Statistics
- Multivariate Calculus
- Linear Algebra
- Differential Equations

All have programs written for the HP 28S (except for the Sharp EL-5200, Stock #2722, in Statistics), but most of them will run on the HP 48 as well, just as they stand. Some instructions are given for editing programs to take advantage of the HP 48's powers.

Stock #2719, Enhance Single Var Calc, 99p softbnd ..... \$9.95  
Stock #2720, Enhance Multivariate Calc, 94p softbnd ..... \$9.95  
Stock #2721, Enhance Differential Eqns, 105p softbnd ..... \$9.95  
Stock #2722, Enhance Intro Statistics, 160p softbnd ..... \$11.95  
Stock #2723, Enhance Linear Algebra, 130p softbnd ..... \$9.95

## Advanced Graphing for the HP 28S

by Brian Maguire

**Don't get this book until  
you understand the manual!**

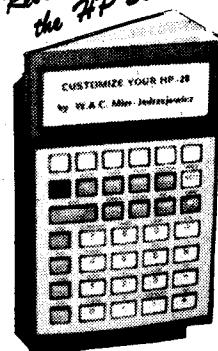
But if you want your HP 28S to draw fractals, 3-D graphs or animated displays, you'll get plenty of how-to information and explicit program listings here.

Covers simpler stuff, too, like polar graphs and drawing shapes. Gives lots of examples.

Stock #2247, Advanced Graphing, 304p combbound ..... \$19.95

**Customize your HP 28 2nd edn**  
by Wlodek Mier-Jedrzejowicz

*Revised to include  
the HP 28S*



Make your 28 behave exactly the way you want it to. Here you get information and ideas that are not in the manuals.

The first 2 chapters show you how to do some fairly simple things, like setting modes and creating variables. Chapter 3 gives ways to use the special instruction SYSEVAL.

You'll learn about machine-language programming in Chapter 4—so you can really take control. A final chapter shows you exactly how to customize by modifying the hardware. Appendices discuss differences between HP 28 models.

Now you'll be able to make your HP 28 act more like a FORTH computer or else more like an HP 41. Stock #557A, Customize your HP 28, 100p softbnd ..... \$9.95

## Read our mail from Manitoba—

"By taking the time to fax me a new of the relevant pages from the required calculator manual, you not only saved me a considerable shipping charge by negating the need to use a courier service delivery to Canada. I also had the information I needed quickly. Incidentally, the calculator manual I order did arrive parcel post in less than a week."

Tom Tessier, Winnipeg

# HP 28S & 42S Scientific Calculators

## Precalculus Activities for the HP 28S

edited by  
Messer & Dick

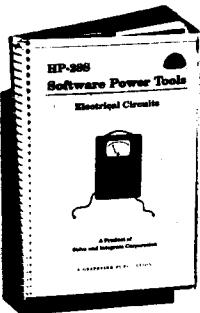
49 algebra, trig and pre-calculus activities, class-tested by O.S.U. and the Albany, Oregon, Public Schools.

Front of each activity sheet is a ready-to-use blackline master and the back has a complete solution key. Reference Section gives examples of needed keystroke sequences.

Stock #2198, 28S Precalculus Activities, combbound ..... \$9.95

## HP 28S Software Power Tools Electrical Circuits

GRAPEVINE PUBLICATIONS, INC.



Analyze steady-state AC circuits with your HP 28S complex-matrix-crunching power!

Do mesh or nodal analysis, constant general network and ladders, build friendly, easy-to-edit descriptions of your circuits. Then vary the source frequencies and plot results, either right on your display or with an IR printer.

It's easy—this book teaches you about your machine as it guides you through its powerful software—every routine is explained, every piece of program is documented (including memory diagrams).

Stock #2117, 28S Electrical Circuits, 256p spiralbnd ..... \$8.95

## HP Step-by-Step Books for the HP 28S and HP 28C

HEWLETT  
PACKARD

Let experts help you set up your calculations so you can work with them most easily. These professional references include practical routines and tips for getting the most from the Built-in Menus as well as setting up Personal Menus for your specific profession. Order the ones that fit your work:

Stock #603, Algebra & College Math 90101 ..... \$9.95

Stock #604, Vectors & Matrices 90105 ..... \$9.95

Stock #605, Calculus 90102 ..... \$9.95

Stock #606, Probability & Stat 90104 ..... \$9.95

Stock #607, Math Applications 90111 ..... \$9.95

## HP 42S Quick Reference Guide

by Dex Smith

POSA Position in Alpha.	RCL Recall.
PRA Print Alpha.	RCL+ Recall add.
PRLCD Print LCD.	RCL- Recall subtract.
PROFF Printing off.	RCL $\times$ Recall multiply.
PROMPT Prompt.	RCL $\div$ Recall divide.
PRON Printing on.	RCL $\downarrow$ Recall element.
PRP Print program.	RCLII Recall II pointers.
PRSTK Print stack.	RDX Radix comma.
PRUSR Print user (variables and labels).	RDX Radix period.
	REALRES Real-results.

PRV Print variable.
PRX Print X-register.
PR $\Sigma$ Print summation registers.
PSE Pause.
PUTM Put matrix.
PWRF Power fit.
QUIET Quiet mode.
RAD Radians mode.
RAN Random number.

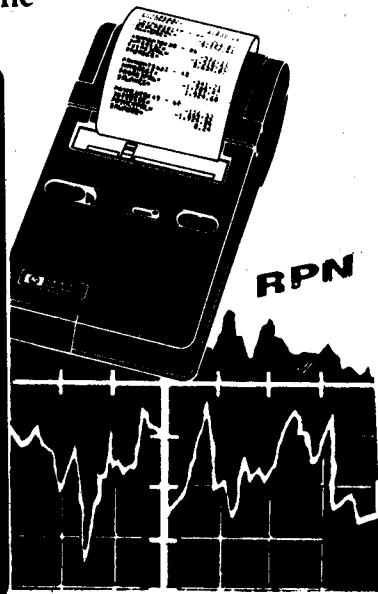
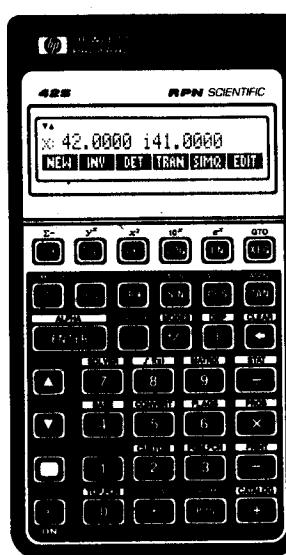
Super-concise summary that fits right in your instrument case—

► using menus	► statistics
► base conversions	► data types
► modes and flags	► simple programming
► matrix operations	► numerical integration
Stock #2064, 42 Quick Ref, 20p softbound	\$4.95

## HP 42S

Engineered for the Engineer  
SuperFast RPN Scientific

hp HEWLETT  
PACKARD



- Shirt-pocket power—more than 600 functions built into 64K ROM, 7.2K of user's RAM, 2 line  $\times$  22 character display shows inputs or results right above English menus, prompts and label keys. 12-digit precision with exponents up to E499. Infrared signals to printer. 5.6  $\times$  3  $\times$  0.5 inches thick, 5 oz.
- Exceptional matrix entry and editing—with more matrix and vector operations than any other calculator. They are fast—to enter and edit, fast to run.
- Complex and real numbers—work together and interchangeably. This is the only calculator that labels the complex element, so you won't need to keep track of it.
- Solves, integrates, converts bases—and it gives polar answers directly, without converting to rectangular mode first.
- Statistics and forecasting—with 4 curve fits and automatic best fit. 2-variable list and cumulative statistics with weighted mean.
- Full IIP 41CV program compatibility—every one of the thousands that are available may be keyed in to run as-is in your new calculator, but up to 10 times faster! Of course, you can enhance these programs to use the powerful features of the HP 42S, like softkeys and menus, and the HP SmartCatalog will file them in order and scroll them for you at a keystroke.
- Traditional HP reliability—with gold-plated PC-boards and rigorous test procedures . . . high performance engineering that will serve you for years. 1 year warranty transfers if you sell it or give it away.

Stock #HP42S [RPN Scientific Calculator] List \$120..... \$89.95

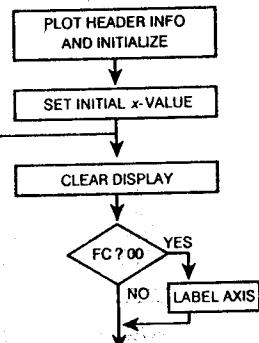
## Programming Examples and Techniques for the HP 42S

HEWLETT  
PACKARD

The serious programmer's option—examples to help you master many advanced uses of menus, labels, prompts and variables, so you can put them right to work in your own programs.

Lots of advanced techniques, too, so you can get the most out of your instrument's solver, integrator, matrix, statistics, plotting and graphics routines. Includes easy-to-load Time Value of Money routines that make it into a menu-driven financial calculator!

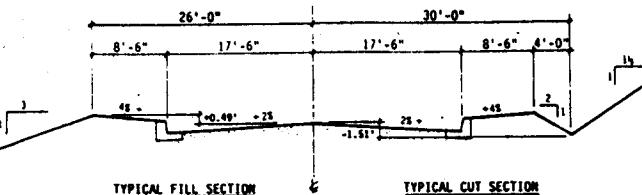
Stock #2065, Prgrmng Examples, 234p spiralbnd ..... \$9.95



# HP 42S Scientific Calculator

## HP 42S Surveying Solutions

from DZign



TYPICAL FILL SECTION

TYPICAL CUT SECTION

- You'll like these FRIENDLY programs—written just for the surveyor.
- You'll access all of your HP 42S MEMORY and use all of its SPEED—with programs written just for it.

Point-storage traverse stores 200+ pairs of coordinates, handles sideshots and inverses and can interface to intersection solutions program. Run your traverse in any form—it's all MENU-PROMPTED. Input is single-key, output can be azimuth or bearing.

Traverse adjustment by either COMPASS or TRANSIT method—also in-verses between the points as it adjusts them for a complete listing of traverse. Layout inverting for spraying in points.

No more decimal degrees—you add/sub/mult/divide or do trig functions in degrees/min/sec without converting.

Optional programs included for Coordinate Transformation, Predetermined Areas, Bearing/Azimuth and Azimuth/Bearing conversions.

You'll be able to dump your coordinate listings automatically, to an Infrared printer.

Stock #2173, 42S Survey Solutions, 86p softbound.....\$17.45

## Booklets of Programs for the HP 42S

### Surveyor's Vertical Curves

Calculates CONTINUOUS vertical alignment without changing back and forth between Grade and Curve routines. Also calculates vertical intersections, symmetrical or asymmetrical curves. Solves for station when the elevation is known, or the station can be given, to calculate the elevation.

Stock #2222, HP42S Vertical Curves Programs, Booklet ...\$8.95

### Surveyor's EDM Slope-Staking

Set up anywhere near an alignment and slope stake it. Sets slope stakes from the remote instrument location directly. Includes a three-point resection program for finding the instrument's location by either station-offset or coordinates. All data needed to mark the stake is output (or may be stored), and there is a subroutine for setting the reference stake.

Stock #2223, 42S EDM Slope-Staking Pgms, Booklet .....\$8.95

### Alignments/Offsets

Follow any alignment's circular curves and tangents, then calculate the coordinates or radial ties to any station or offset to a station.

Options include coordinate output, auto-inverse, or both. The instrument and backsight points do not have to be on the actual alignment. Stake grade, rights-of-way, pipe lines, etc. without have to establish the centerlines of the streets first.

Stock #2229, 42S Alignment/Offsets Programs, Booklet.....\$8.95

### Topography

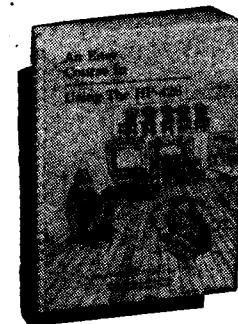
Turn your 42S into a manual data collector, complete with a labeling system that you can customize to suit the type of topo work you do. Your instrument may be set up anywhere, and all of the work is done by the calculator.

All of the shots are stored as finished data, by shot number, for later output. The program also gives you the choice of 3-D coordinates or Station-Offset-Elevation for the output.

Stock #2231, 42S Topography Programs, Booklet.....\$8.95

*Did you realize that the 2<sup>nd</sup> item you order from us gets free shipping? So does the 3<sup>rd</sup>, the 4<sup>th</sup>, . . . !*

## An Easy Course in Using the HP 42S from Grapevine



Straightforward help! Easy to understand—even the type is oversize. You'll start with the basics of your HP 42S and work your way up to some of the most complex features. An ample supply of examples, diagrams and layman's language will keep up your interest as well as your understanding.

Stock #2181, Easy Course/HP 42S, 384p spiralbound.....\$19.95

## Solution Books for your HP 42S Step-by-step examples and programs

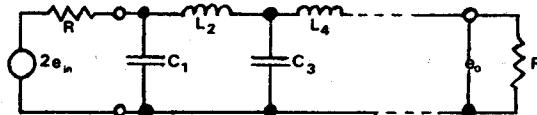
Stock #2016, Electrical Engineering .....\$9.95

Stock #2015, Mechanical Engineering .....\$9.95

## HP 41 Solution Books — work quite well with the HP 42 also — and the price is reduced!

 HEWLETT  
PACKARD

24 *	33 STO 07	41 XEQ 01
25 RCL 06	34 GTO IND 42+LBL 06	42+LBL 06
26 X12	07	43 1/X
27 /	35+LBL 04	44 CHS
28 2	36 SF 02	45 GTO 05
29 -	37 XEQ 03	46+LBL 01
30 STO 12	38 GTO 00	47 RCL 05
31 "TYPE??"	39+LBL 02	48 RCL 01
32 PROMPT	40 SF 02	49 /



Step-by-step keystroke listings for specific problems in specific disciplines—with lots of programming details. Perfect if you want specific programming solutions, program modifications, or a program reference library.

Stock #90093, Antennas.....\$13.95

Stock #90094, Business Statistics/Marketing/Sales.....\$13.95

Stock #90145, Calendars .....\$13.95

Stock #90100, Chemical Engineering .....\$13.95

Stock #90102, Chemistry .....\$13.95

Stock #90089, Civil Engineering .....\$13.95

Stock #90092, Control Systems .....\$13.95

Stock #90088, Electrical Engineering .....\$13.95

Stock #90139, Fluid Dynamics & Hydraulics .....\$13.95

Stock #90099, Games .....\$13.95

Stock #90443, Games II .....\$13.95

Stock #90084, Geometry .....\$13.95

Stock #90140, Heating, Ventilating & Air Conditioning .....\$13.95

Stock #90083, High-Level Math .....\$13.95

Stock #90096, Home Construction Estimating .....\$13.95

Stock #90086, Lending, Savings, & Leasing .....\$13.95

Stock #90090, Mechanical Engineering .....\$13.95

Stock #90144, Optometry II (Contact Lens) .....\$13.95

Stock #90142, Physics .....\$13.95

Stock #90136, Real Estate .....\$13.95

Stock #90137, Small Business .....\$13.95

Stock #90138, Solar Engineering .....\$13.95

Stock #90141, Surveying .....\$13.95

Stock #90082, Test Statistics .....\$13.95

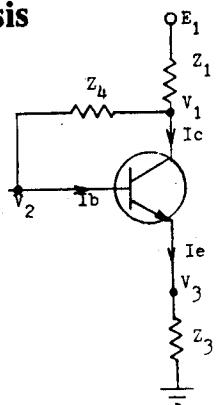
Stock #90395, Time Module Solutions I .....\$13.95

# HP 42S

Advanced Circuit Analysis  
with the HP 42S  
by Robert Boyd

Programs with listings, examples and discussions show you how to analyze circuits with the full power of your HP 42S.

Boyd's unique new method handles higher order or non-linear problems and circuits with dependent sources, even when the coefficient matrices are not symmetric. Some of the programs here will work on the HP 28S, the HP 41/Advantage Pac and HP 71/Math Pac, as well as other computers that handle complex matrices with double precision.



Great Circle Navigation between two points, Dead Reckoning to be used mainly with an INS or Omega or Loran, Remote Navigation for great circle navigation referencing Navaid to any other positions direct, VOR Positioning calculates aircraft's present position based on two VORs radii, and Point to Point gives course and distance to another radial and distance of a TACAN based on the current radial/DME as well as time to go based on an estimated ground speed. Manual has worked-out examples, complete program listing.

Stock #2570, 42 Global Navigation, 23p softbound.....\$24.95

Read our mail from Georgia —

"We have been using EduCALC for many years now for our HP needs and we have never taken the time to thank you for your prompt and courteous service." Ross A. Lynn, Associate V.P., Keck & Wood, Inc., Atlanta

44 (800)677-7001 with your Questions, 8-5, M-F OR Orders Only, Anytime (800)535-9650, ext. 9160

EduCALC #60

# HP Surplus Gear

## Surplus HP Gear

Now you can afford a

■ 9114B HP-IL 3½ Disk Drive

■ 2225B HP-IL ThinkJet Printer

■ HP 75D Package

Up to  
90% Off!

Stock #HP75DU1 [Used Computer Pkg] .....\$50



1. (HP 75) Portable Computer

2. (HP 82700) 8K RAM Memory Module

3. (HP 82718B) Expansion Pod

4. (HP 92267B) Barcode Wand

IIP 75D is 5 x 10 x 1 1/4 in, 26 oz, with 16K RAM built in. It has a card reader, wand interface and port, touch-type keyboard (the keyboards on these units have never been used). Comes with manual, battery pack and adapter/recharger, IIL cables.

Expansion Pod fits as a cradle on your 75, has 300 baud, direct-connect modem and decoders for 3 of 9 Code and Code 11.

Barcode Wand is medium resolution (0.19 mm min width of narrow element) for code produced on dot-matrix printers.

The total list price for this gear new is \$2715—so your cost is discounted an unbelievable 90% !!!

Stock #HP75DU [Used Computer Package] .....\$199

44 (800)677-7001 with your Questions, 8-5, M-F OR Orders Only, Anytime (800)535-9650, ext. 9160

EduCALC #60

# HP Surplus Gear

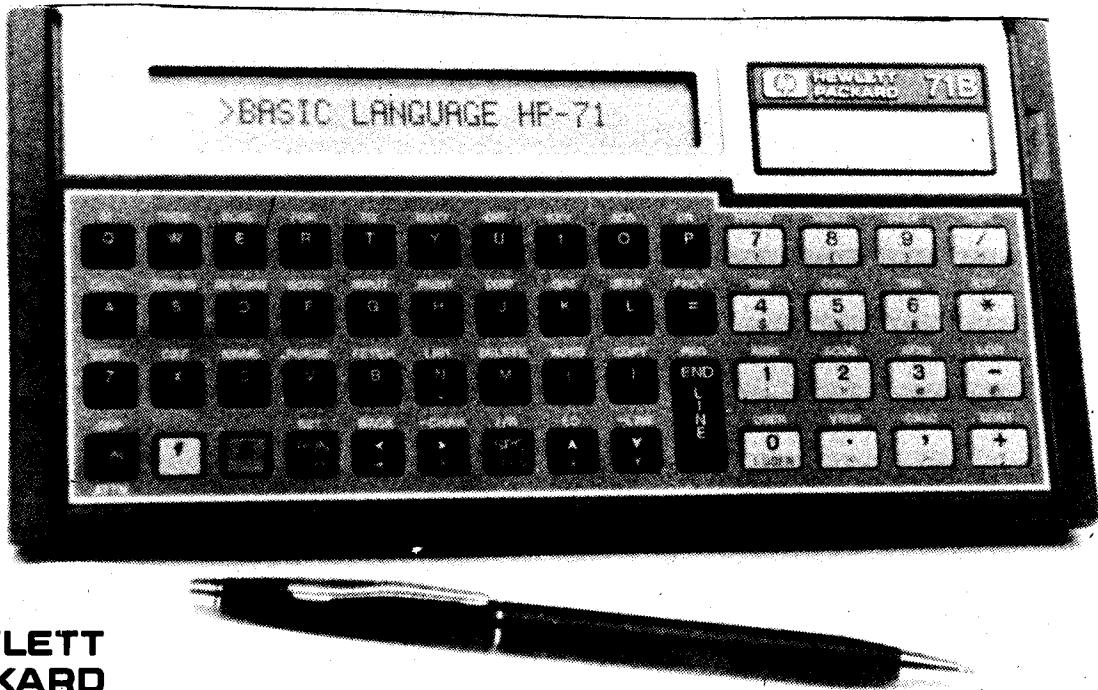
## HP-71B Surplus

- Palmtop computer—BASIC language, 240 instructions
- CALC mode—quick, easy calculations
- Statistics—15 independent variables
- Expandable—with software and with HP-IL (included FREE on used units)
- Every unit has our 1-year guarantee

### Limited Supply — act now!

We were lucky enough to find these at a large insurance company, and we have them in stock for you right now.

But—please act quickly—quantities are limited.



**HEWLETT  
PACKARD**

HP has discontinued making the HP-71B, although they continue to service and support it. But we now have surplus units for you—some are new and never used, while others have given service.

Either way, we warranty them to you to be in perfect operating condition—every unit has our 1-year guarantee. You are assured that if your unit does not operate properly in any way for a full year, we'll replace it free.

It speaks BASIC, with dynamically-declared variables and multi-line user defined functions. But it also has a CALC mode for quick, easy calculations, where you see intermediate results and recall them from a 5-level stack.

The rich programming language has more than 240 functions, statements, and operators, and it includes enhancements like statistics with 15 independent variables, trigonometry, and IEEE floating-point math standards (12-digit precision). Furthermore, variables are common to both modes, CALC and BASIC.

It has 17.5K memory, weighs only 340 g (12 oz.) and measures 7.5 x 3.8 x 0.5 inches.

It is fast, much faster even than the HP-41. Yet it excels at technical computations, has Continuous Memory (remembers programs and data while OFF), and sports a clock and a calendar.

It has a block QWERTY keyboard, with typing aids for program entry. And it has a 10-digit number pad, and the entire keyboard is redefinable.

The HP-IL plug-in option permits a variety of peripherals and instruments to be interfaced at 5,000 bytes/second—including printer, monitor, cassette drive, modem, plotter, or other computers. Hence, there's a wide world of configurations, all with HP support. Yet its LCD shows only 22 characters at a time from a scrollable 96 character line, and it runs for 60 hours on 4 disposable AAA batteries (AC adapter optional).

Used units come with an HP-IL module plugged in, and batteries. Manuals are optional. New units come with a new Card Reader (82400A) FREE. (New, the list price of the HP-71B with manuals, etc., was \$625.)

Stock #HP71BN [New HP Computer]	\$149.95
Stock #HP71BU [Used HP Computer]	\$89.95
Stock #875A, HP-71 Owner's Manual	\$12.95
Stock #482, HP-71 IL Owner's Manual	\$14.95
Stock #82400A [HP-71 Card Reader] List \$165	\$59.95
Stock #82707A [30 Magnetic Cards]	\$29.95
Stock #82059D [AC Adapter for HP-71]	\$18.95
Stock #82420A [4K RAM Module for 71] List \$75	\$64.95
Stock #82482A (71 Finance Module) List \$75	\$69.95
Stock #82485A (71 Text Editor Module) List \$75	\$69.95
Stock #82481A (71 AC Circuit Module) List \$75	\$69.95
Stock #656 (32K Ram Module, CMT)	\$149.95
Stock #82488A (Data Communications)	\$84.95
Stock #82483A (Surveying)	\$84.95
Stock #82402A (HP 71 Dual HP-IL)	\$79.95
Stock #82440A (Software Development Utilities)	\$29.95
Stock #82401A (HP IL Interface)	\$105.95
Stock #82462A (Blank Overlays - 5)	\$11.95
Stock #810 (HP 71 Touchpad)	\$11.95
Stock #AAA [Batteries]	ea \$ .89

**Used HP Calculators** — Used HP calculators from our Trade-in Program—with manuals, warranted by EduCALC for 6 months. Call us at (800)677-7001 for availability.

Stock #HP17BU [Used HP Calculator]	\$49.95
Stock #HP48SU [Used HP 48S]	Call
Stock #HP48SXU [Used HP 48SX]	Call

# HP 48G/GX Graphic/Expandable

**Everything!** All the functions and features of other graphics calculators, plus. It's that simple — it's the new generation.

**More, too!** More memory. More functions. More graphics.

**New Stuff!** Input forms. Dialog boxes. Plotting enhancements.

3-D graphics. Built-in equations.

Here are the 7 professional advantages you get with your HP 48G/GX —

**1. You'll stand out.** It has new, friendly colors and a distinctive size (3.2 x 7.1 in.), more keys (49) than any keyboard before and a wonderful, big LCD—so you'll be recognized the minute you walk in with it.

When you fire it up, you'll be surprised at how easy and intuitive its command structure is—so you'll get satisfying results immediately. Each application has a new input form, so you just fill in the blanks.

Just for fun, try the new TEACH function—instant demos of 21 functions and displays. Right out of the box, you'll even be able to do an animated display!

Next, use HP Equation Writer to enter a function in the same form as it appears in a book—sigma notation, integral signs, radicals, fractions, . . .

For an encore, you'll plot several functions, then interact graphically—zoom in, find roots, intersections, slopes, local extremes, derivatives, areas, . . . If that isn't enough for them, you can draw boxes and circles on the graph to emphasize your work, or do a polar or a parametric plot.

This is the first calculator that enters equations in textbook style, and it's the first that does all these graphics. *Will that get their attention?*

**2. You'll have assurance.** Solid power, right in your hand. You'll have the standard keys (SIN, LOG,  $\sqrt{x}$ , . . .) on this traditional keyboard, for quick hand calculations.

But, underneath, you'll have a giant 512K ROM of power, with more than 2300 functions that you'll access with 117 user-friendly menus. It's customizable, too—you'll have 128K of RAM to store your own personalized menus in (32K in the HP 48G).

You'll use the cursor keys to browse through a new library of 300 equations for geometry, stress analysis, electrical engineering, fluid flow, heat transfer, and more. Given your known values, solve for the unknown values with the multiple equation solver.

The X in GX means Expandable—it has two internal card slots. You'll be able to customize your HP 48GX with optional plug-in ROM cards, from HP and from others, for more math power, or statistics, or surveying, or . . . Also, you can increase your memory capacity with optional plug-in cards—it's expandable up to 4MB.

When you have all that, and know it will go on working with legendary Hewlett-Packard reliability, *won't you have assurance?*

**3. You'll communicate.** You'll have 2-way InfraRed, so you can share programs and data with another HP 48. You can also squirt programs, data and graphics via InfraRed to an optional portable printer.

Kermit is built right into the HP 48G/GX so you can also wire-up to your PC or Macintosh with an optional Serial Interface Kit—then you can generate high-quality printouts and use your computer's disk drive to store data and programs. You can use the computer's keyboard to program your calculator, too, and you can operate all the HP 48G/GX routines like an excellent number-crunching software package on your computer (you save the software cost).

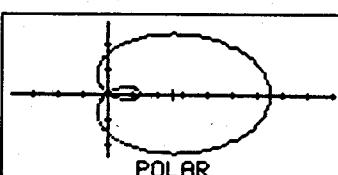
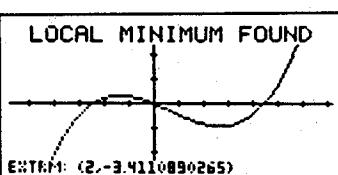
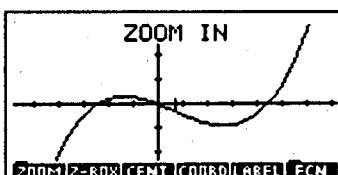
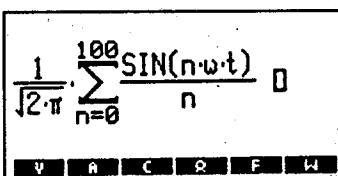
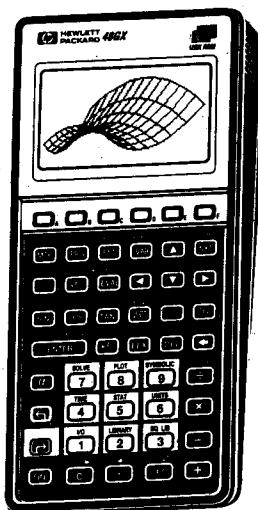
You'll have the world's best interactive calculator graphics. You'll have a beautifully-planned keyboard with well-engineered tactile feedback. *Isn't all this the kind of I/O power you've needed?*

**4. You'll be fast and timely.** This baby is fast — fast at computations and fast writing to screen. Its heart beats at nearly 4 MHz, so its throughput is 40% greater than for that old speed king, the HP 48SX.

You'll have a Review mode, plus the ability to edit the stack, matrices, etc, so you'll have rapid, correct data and program entry.

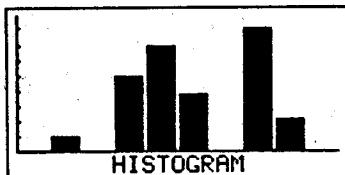
There's a calendar and a clock, and you can have them on your screen if you wish (there's date-arithmetic, too). You'll have two types of alarms: appointment and control. *OK?*

*Brand New*  **HEWLETT  
PACKARD**

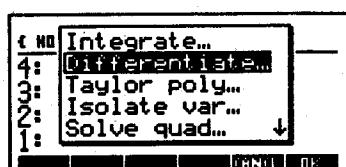
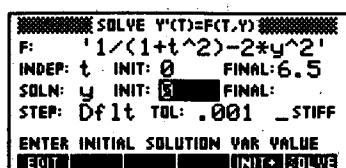
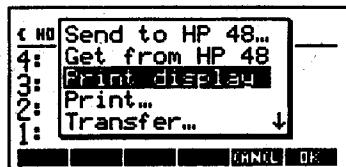
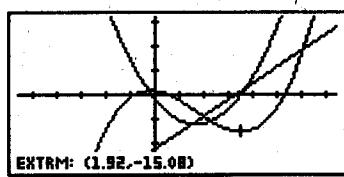
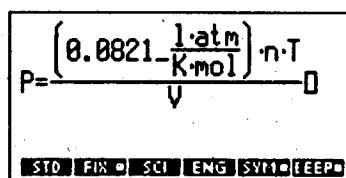
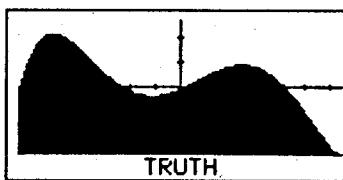
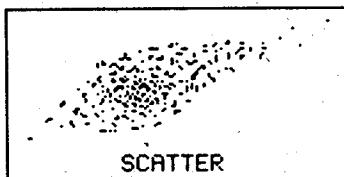


```
t HOME 2 05/24/90 05:55:39
4:
3: "HP 41 → HP 48SX"
2:
1: " HP 28 → HP 48SX"
P1 P2T P3TC PRLCD PRLHR CR
```

# HP 48G/GX Graphic/Expandable



The HP 48SX was the Grand Winner of EDN Magazine's Innovation of the Year Award, 1990; Winner in Popular Science Magazine's Best of What's New for 1990; Winner of Electronic Products' 1990 Product of the Year Award; and chosen as one of "The Best of NED" products by New Equipment Digest readers.



**5. You'll be accurate.** You'll use more than 2300 functions to manipulate numbers that are stored with 12-digit mantissas and 3-digit exponents (your machine calculates with 15-digit intermediate precision).

You can change coordinate systems, even using 3-dimensional polar or spherical coordinates. And you'll specify the precision you want in evaluating an integral or root.

Your big new boon to accuracy is going to be units management—your new HP 48G/GX will do measurement-unit conversions (Metric to English, etc). It will factor units by units (for example, 3.5 kg/s<sup>2</sup> factored with respect to Newtons, N, gives 3.5 N/m). It will perform math on unit objects (so 10 ft/s added to 10 mph gives 24.67 ft/s).

But there's more—if you enter the units for your calculations, right along with the numbers, your HP 48G/GX will keep track of the units throughout its arithmetic—so if you expect your result to be a temperature but its units are meters, you know something went wrong. This is like having a check-sum built into every calculation—and it also labels every number so you always know where you are in your work. There are 148 units built in, and you can add your own.

Here is the first calculator that converts units automatically, and it is a real pleasure to use—you can concentrate on applications of your problems, instead of looking for mistakes in unit conversions. *Isn't that what you've wanted?*

**6. You'll have new smarts.** If you have used the SOLVE function on a calculator, you know how useful it can be, and how much programming it can save you. But this one is something else. On the HP 48G/GX you can link several equations for simultaneous solutions. Or you can "solve a program" by using the SOLVR to invert a function. Or you can PLOT both sides of your equation, move the cursor near an intersection, and have the SOLVR find your root.

SOLVE different equations (with initial values), polynomials, or linear systems of equations, too!

You'll have a built-in, high-level programming language to work with, too—structured and object-oriented, with conditional expressions and looping structures, 64 system flags and 64 more for the user, improved DEBUG and SST functions, error trapping,...

*This is a student's best friend, an engineer's powerhouse and a programmer's dream machine, all in one!*

**7. You'll be up to the minute.** This machine does calculus—it can even find symbolic integrals (indefinite integrals)! It finds symbolic derivatives, too, and does lots of algebraic operations on symbolic expressions—simplify, expand product, collect like terms, distribute, factor common terms, . . . , and then it will evaluate.

The HP 48G/GX does the Fast Fourier Transform and its inverse. There is even list processing.

Your PLOTTR will find roots, intersections, local extremes, derivatives and slopes for you, or find areas under curves, so you get calculus applications too. For approximations, it will find Taylor Polynomials, then superpose them successively on their function to give an animated display!

Impressive new plot types include 3-D, wire form and grid map, plus you can ZOOM (15 ways).

Statistics routines include curve-fitting with 4 models—linear, logarithmic, exponential and power—as well as upper-tail probabilities (normal, chi-square, F, Student's t) and a random-number generator.

Matrix Writer lets you easily do arithmetic with matrices and vectors that have real or complex number entries. That includes vector cross-products, dot-products, and lengths. It includes matrix inverses, determinants, Frobenius and row and column norms, transposes and Hermitian adjoints. There's even a command that improves a numerical solution to a system of equations by iterating with extended precision. *Do you need this machine?*

**What's the difference between these two machines?** There are only two differences—memory and card slots. The Graphic Expandable HP 48GX has 128K RAM and 2 card slots, whereas the Graphic HP 48G has 32K RAM and no card slot. Each comes with Owner's Manual, Quick-Reference Guide, brushed nylon case and batteries; 1-yr warranty.

**How do these new HP 48G/GX machines relate to the HP 48S/SX?** These new machines will do more—bigger memory, more commands, better plotting, improved input routines, built-in equations. But they will run all the software designed for the HPS/SX as well, and any program you have developed for the HP 48S/SX will run just fine in your new HP48S/SX.

**Stock #HP48GX [Graphic Expandable Calculator]** List \$350.....\$274.95

**Stock #HP48G [Graphic Calculator]** List \$165 .....\$134.95

# HP 48

Here's where you find...

Accessories	48
Cables/Interfaces	50
Peripherals	50
Software	51
Programming Aids	58
Bookware	60

**TIP**  
Trade In Program  
Save even more—

**hp** HEWLETT  
PACKARD

TRADE IN your used HP 48S or HP 48SX. Just send it to us, insured, in working order, with all its Manuals. Take CRedit on your Order — \$45 CRedit for a 48S, \$95 CRedit for a 48SX—and put the order and your check right in the box.

If you prefer to keep your old instrument until your new HP 48GX arrives, just send it to us up to 45 days later, along with its Owner's Manual and a copy of the sales receipt for your new machine—we'll send you your refund right away. Offer limited to the first 2000 customers.



**Educators —**  
**HP 48G Ten-Pack** *Brand New* **EduCALC**

New cost-effective way to provide your whole class with the very best graphing calculator. Contains ten HP 48G calculators, one Owner's Manual, a poster of the 48G and a set of example problems. Buy 4 Ten-Packs and get a classroom OH display and an HP 48GX calculator for free—an \$850 value!

Call our School Specialist, Deanna Beck, at (800)677-7001, ext. 129, for your wholesale price.

## Accessories

### Battery-backed RAM Cards

**hp** HEWLETT  
PACKARD

Develop large programs and store more data in your HP 48SX/GX—You can configure this extra memory either to add to your instrument's main memory or to use it as an electronic disk for backups.

It plugs in inside your HP 48SX/GX, and it has its own long-lasting battery so you save your information even if you take it out to store it or mail it to a friend. Comes in 2 sizes, 32K and 128K, and your machine can hold up to 2 of them. 1-year warranty.

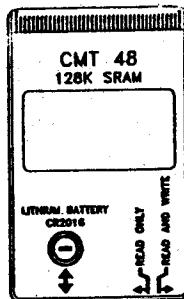
Stock #82214A [32K RAM card] List \$60 ..... \$49.95  
Stock #82215A [128K RAM card] List \$150 ..... \$124.95



*Thank you for your order!*

**Battery-backed  
128K RAM Card  
for your HP 48SX/GX**

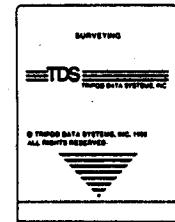
**CMT**



Special Write-Protect Switch guards against accidental erasure. Built-in tranzors protect from electrostatic discharge. CR 2016 battery included (2-3 year life). 1-year warranty.

Stock #2422 [48 RAM, 128K card] List \$95 ..... \$85.95

### HP 48SX RAM Cards



**TDS**

FREE Software — all TDS RAM Cards come with 5 1/4" PC disk containing both KERMIT transfer software and the TDS Financial Functions Library (\$95 value)—ready to download via Serial Interface.

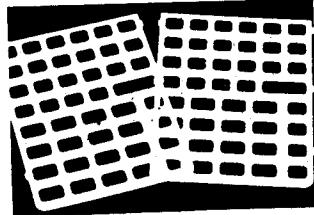
256 or 512K in one card! Includes software "bank-switches" so you get huge data capacity without card-switching. Also, with this software you can copy these huge amounts of data from one RAM card to another right in your HP 48SX. Battery-backed. Not available for HG 48GX.

Stock #2365 [128K RAM card] List \$115 ..... \$99.95

Stock #2475 [256K RAM card] List \$210 ..... \$187.95

Stock #2476 [512K RAM card] List \$375 ..... \$329.95

### Overlay Kit for HP 48

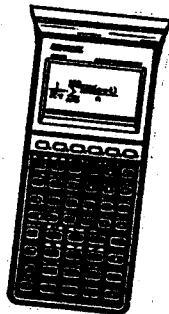


7 plastic keyboard overlays slip into place—3 transparent, 3 opaque (you can write key labels on these), and 1 with standard alpha keyboard markings.

Stock #82220A [48 Keyboard Overlay Kit] ..... \$14.95

### Protective Bag for HP 48

**COMP-U-BAG**



Zip out dirt and moisture—you can use your calculator right in the oil field (or the pillow fight) if it's in one of these flexible, transparent bags (not sealed against pressure); used daily, each bag will last a couple months. Fits into leather field cases, with easy access to plug-in ports.

Stock #543X [Standard Comp-U-Bag] ..... \$2.50

Stock #543XT [10 Std Comp-U-Bags] ..... \$19.95

Stock #543U [Anti-Static Comp-U-Bag] ..... \$2.75

Stock #543UT [10 Anti-Static Comp-U-Bags] ..... \$21.95

### Extras for your HP 48—

like those that come  
with the product

Stock #2250, HP 48SX Owner's Manual vol I & II ..... \$24.95

Stock #2251, Equation Library Owner's Manual ..... \$9.95

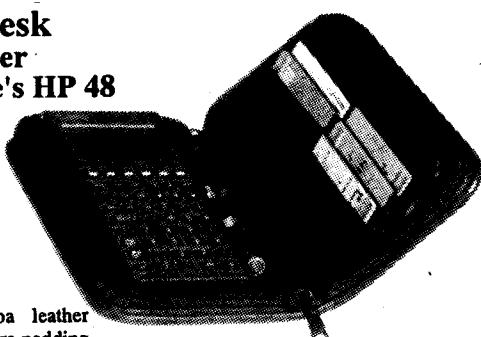
Stock #82221A [HP Soft Case] ..... \$14.95

Stock #AAA [Alkaline Battery] uses 3 ..... ea \$.89

## Accessories continued

**the Leather Desk**  
our best organizer  
for the executive's HP 48

EduCALC



*Brand New*

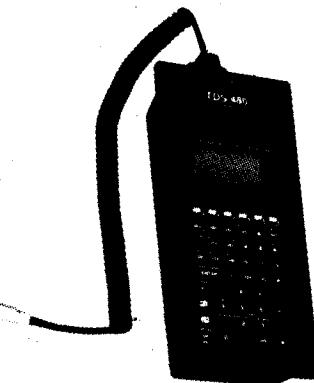
Sumptuous black napa leather coddles your 48, with extra padding for instrument protection. Software and memory cards fit into 6 slots, 2 pockets hold notes and diary. There's a zippered compartment for important documents and a loop for your pen.

It feels soft and rich in your hand, but there's a detachable carry strap, too. 8 1/4 x 5 x 1 3/4 inches outside.

Stock #2763 [HP 48 Leather Desk] ..... \$57.95

**TDS 480**  
**Survival Case**  
for your HP 48

TDS



Survival counts, where your 48 is concerned. This dust, shock and water-resistant case may be ugly—BUT, put your 48 into it, snap the cover down onto the O-ring, and your 48 is safe. You key in your data directly through a clear, flexible membrane.

There is a 9-pin port molded in—you can use a standard (serial) computer cable with a 9 or 25-pin connector on the other end for your PC. Port also accepts connector to recharge for case's built-in NiCd batteries.

TDS 480 Basic Configuration consists of case, rechargeable NiCd batteries, recharger and cloth carrying case.

Optional Cold Case goes on over Environmental Case to keep your 48 warm for up to 6 hours in below-freezing weather.

Optional Total Station Cable gives you a direct connection.

Stock #2424 [TDS 480 Basic Configuration] List \$145 ..... \$134.95

Stock #2426 [Cold Case] List \$110 ..... \$99.95

Stock #2427 [Computer Cable, 9 to 9-pin] ..... \$34.95

Stock #2428 [Computer Cable, 9 to 25-pin] ..... \$34.95

Stock #2332 [TDS 480 Cable, Leitz/Topcon] List \$75 ..... \$69.95

Stock #2333 [TDS 480 Cable, Nikon/Top Gun] List \$75 ..... \$69.95

Stock #2334 [TDS 480 Cable, Zeiss] List \$75 ..... \$69.95

Stock #2335 [TDS 480 Cable, Pentax] List \$75 ..... \$69.95

Stock #2336 [TDS 480 Cable, Kern] List \$75 ..... \$69.95

Stock #2337 [TDS 480 Cable, Wild] List \$75 ..... \$69.95

Stock #2338 [TDS 480 Cable, Geodimeter] List \$75 ..... \$69.95

Stock #2261 [TDS Tripod Bracket] List \$75 ..... \$69.95

## HP 48 Accessories—

Stock #2249 [Solid Oak Stand] ..... \$16.95

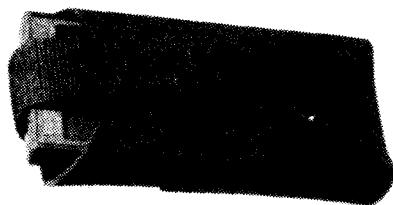
Stock #2252 [Clear Acrylic Stand] ..... \$11.95

Stock #2225 [Hard Leather Case]\* ..... \$42.95

\*May require a long delivery time

**The Pouch**  
for your HP 48 or HP 95

The Pouch

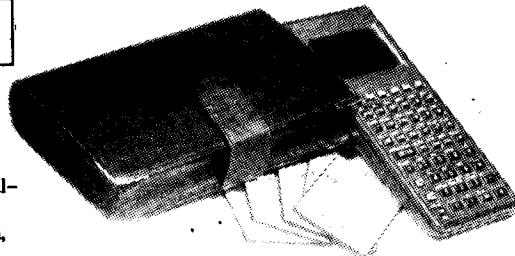


Are you a utilitarian? Here's a no-frills pouch for the simple life—made of bouncy neoprene foam and nylon, with belt-loop and velcro closure.

Stock #2736 [Instrument Pouch] ..... \$19.95

**black leather**  
**Wallet**  
for your HP 48

EduCALC



■ impress softly—  
with premium wallet leather

■ hold it all—a pen,  
cards, notes  
and checks as well as your 95

■ protect and cushion—you'll even have shiny brass corner guards

Half the fun of having a palmtop! Pocket for notes or checkbook. 6 slots organize your software or memory cards and business or credit cards. Velcro strap adjusts to hold the load snug.

Stock #2638 [Leather Wallet, black] List \$70 ..... \$43.95

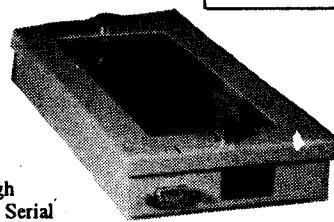
**Protect your 48 in a  
Hostile Environment**

Intelechy

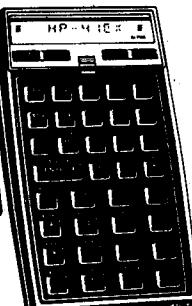
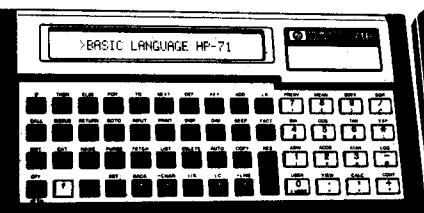
- Moisture      • Liquids
- Corrosives    • Dust
- Gases        • Shock

Rigid metal box has screw down gasket seal—foam shock mounts hold instrument. You operate buttons through flex-membrane; InfraRed window and Serial Port allow communication. Four screw holes for tripod mounting.

Stock #2473 [Metal 48 Case] ..... \$99.95



**Fantastic Savings available to**



**HP41/71 owners!**

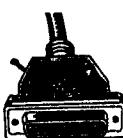
To get a FREE HP 41/71 Accessories Catalog, call (800)677-7001, ext 134.

# HP 48

## Cables/Interfaces

### Dual-Purpose HP 48 Serial Cable

EduCALC



Switches so it can connect to computer or to printer—eliminates adapter and NULL modem. Elegant, light weight, 6' long.  
Stock #2449 [Dual Purpose Cable].....\$36.95

### Serial Interface Kit for HP 48



Avoid connector misfits! This 6' cable fits HP 48 Serial Port on one end and its other end is a phone jack. Cable is shielded and has strain relief.

4 adapters are included that accept the cable's phone jack—a 9- and a 25-pin female to fit PCs, a 25-pin male for a modem, and a 25-pin male for a printer.

Kermit communication program for PCs is included on disk, along with brief directions for its use.  
Stock #2342 [Serial Interface Kit, 5 1/4"].....\$36.95

**Need fast data transfer from one 48 to another? See the 4 x 4 Cable from EduCALC on page 16.**

### Experimenter's Serial Cables

■ Engineers      ■ Instrument Makers      ■ Hobbyists  
Connect your HP 48 to anything you want! Six foot cable has 4-line serial connector molded onto one end, with the other end unterminated (just 4 wires for you to solder).

You can also order this cable terminated with a female 9-pin (computer RS-232) connector and built-in strain relief.  
Stock #2601 [Unterminated Serial Cable, 6'].....\$15.95  
Stock #2609 [4- to 9-pin Serial Cable, 6'].....\$22.95

### Serial Interfaces— Kits & Cables—for PCs and Macs

**hp** HEWLETT  
PACKARD



Wire-up your HP 48 to your computer—1.5-meter cable plugs into top of calculator (cable has 9-pin connector, and kit for PC contains a 25-pin adapter in case you need it).

You can store your data and programs on your computer's disc drive. You can use the computer's big keyboard to enter HP 48 commands—the Interface sends them to the calculator and returns results to computer screen for easy viewing (so you get excellent math software as a bonus).

Use your favorite computer text editor with the HP 48. Write and edit big programs, or enter large matrices and statistical data in a familiar way.

Comes with Instructions and computer software (3 1/4" and 5 1/4" discs for PC; 3 1/2" disc for Macintosh).

Stock #82208A [PC Serial Interface Kit] List \$60.....\$49.95  
Stock #F1015A [PC Serial Cable only] List \$35.....\$24.95  
Stock #82209A [Mac Serial Interface Kit] List \$60.....\$49.95  
Stock #F1016A [Mac Serial Cable only] List \$35.....\$24.95  
Stock #F1023A [Serial Cable Adapter Kit].....\$24.95

## Peripherals

### Program Development Link HP 48 to PCs

**hp** HEWLETT  
PACKARD

Turn your PC into an HP 48 program development system—pull-down menu-driven editor includes

- 1 or 2 edit windows
- Copy, cut, paste, undo
- Search and replace
- Automatic comment formatting
- Easy access to HP 48 special characters

This editor is integrated with data communications, so you transfer applications you've written to your 48 with one keystroke. It keeps track of what changes you make, and saves you time by transferring only changed variables.

On-line *HP 48 Programmer's Reference Manual*—click your mouse on any HP 48 command to see appropriate page of *Manual*, including stack diagrams, usage, flags affected, related commands, and an example if appropriate. Paper copy of *Manual* also comes in box.

Includes all transfer and execution utilities, 1.5m cable, instructions. Requires DOS 3.0, hard disk, 640K, 9 or 25-pin serial port.

Stock #82208B [Program Dev Link, 5 1/4" & 3 1/4"] List \$120....\$99.95

### InfraRed Printer for your HP 48

**hp** HEWLETT  
PACKARD

Get hard copies of all your graphics, data, programs or calculations. This silent thermal printer operates on four AA alkaline batteries (included) for go-anywhere portability—a set of batteries prints about 6000 lines, or there is an optional AC Adapter.

Printer connection cords have been replaced by an invisible infrared beam from the HP 48. It's the only link required for your printing needs.

You have plenty of leeway—up to a foot and a half—to put the printer where it's most convenient for you. Just point your calculator at it and push [PRINT]. No cords to tangle with.

Print speed with fully-charged batteries is just a shade over a half second per 24-character line. You can print out a complete record of the numbers you've used in your calculations, as well as your results. Or print selectively and provide clients with copies of quotes, amortization tables or itemized lists.

Stock #82240B [Portable InfraRed Printer] List \$135.....\$115.95

Stock #F1011A [AC Adapter for IR Printer].....\$39.95

Stock #82175A [2 1/4" Printer Paper, black, 6 rolls].....\$9.95

Stock #AA [Batteries, Printer uses 4].....ea \$8.89

Stock #92169G [Cover, black].....\$22.95

Foreign adapters available—see p. 14, HP 95LX section.

### Diconix 180si Portable Printer



- Create new overheads in an instant
- Customize your proposals on the spot
- See your letters in final form right away
- Respond to clients while you're on the road
- Make last minute revisions to your presentations

Only 2 x 6.5 x 10.8 inches, and it weighs just 2.9 lbs (3.5 lbs with optional batteries); RS232C serial interface; prints on sheet or tractor plain paper or transparency. Multiple fonts and print modes in 96 x 96 dpi Draft or 192 x 192 dpi Quality resolution. Quiet; just 45 dB.

HP ink-jet print head is user-replaceable. Can recharge its batteries even while printing. 1 yr warranty.

Stock #K180SI [Diconix Printer] List \$399.....\$339

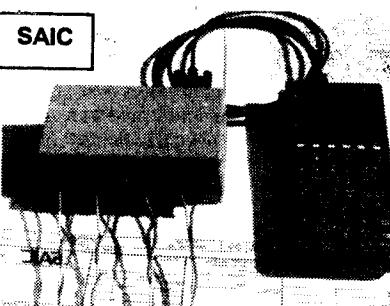
Stock #CN [NiCd C Cell] (requires 5).....ea \$4.49

Stock #2351 [Kodak Print Head].....\$13.95

Stock #51604A [HP InkJet Print Head].....\$8.95

## Peripherals cont.

### A/D Converter for the HP 48



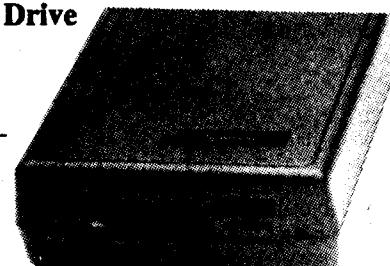
Automated, remote, passive monitoring in the  
 ■ laboratory  
 ■ environment  
 ■ machinery  
 ■ factory  
 ■ structure  
 ■ power system

A versatile, self-contained data-acquisition system with analysis capability and PC or Macintosh-compatible data files. Low cost.

Two 16-bit input channels, 0-10 vdc, scans as fast as 1 per second. Low cost. Comes with manual and complete HP 48 software listings; requires HP 48S with PC or Mac Serial Cable, plus a 9v battery (not included). Low cost. Stock #2304 [A/D Converter] List \$450.....\$399.95  
 Stock #9V [Alkaline battery] uses 1.....\$2.80

### Drive95

### Portable 3 1/2" Disk Drive for your HP 48



### Sparcom CORPORATION

This lightweight, battery-operated disk drive features File Manager software, a screen-based program that makes file transfers, calculator back-up, and directory management a simple point-and-click operation.

Designed for remote operation, the drive has an intelligent cache which extends battery life up to 15 hours on a single charge. Compact (7 1/4" x 5 1/4" x 2") and contoured to complement the HP 48, Drive95 also interfaces with the HP 95LX or any DOS based palmtop, laptop, or desktop computer, and supports formatted 720Kb and 1.44Mb capacity 3 1/2" disks.

Includes File Manager software, manual, Kermit, serial cable and AC charger/adaptor; 1 year warranty.

Stock #2602 [Drive95] List \$330.....\$284.95  
 Stock #2327 [Formatted 3 1/2" disk] .....each \$2.50

## Software

### HP Solve—Equation Library Application Card



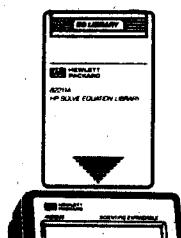
Plug in over 300 science and engineering equations—you'll use the HP 48SX cursor keys to select from equation topics such as columns and beams, electricity and fluid flow. Then touch a key to see a set of related equations. Choose your equation—the HP 48SX displays it, gives you a picture of the physical system (if appropriate) and lists the descriptions of each variable in the equation.

Physical Constants Library—if your equation requires constants, like gravity or the speed of light, the HP 48SX will place them where you want them—no more cumbersome reference tables!

Periodic Table of Elements—you will press a key to view atomic weights, numbers and densities—you may never have to find tables in a book again!

Includes Owner's Manual and ROM card that plugs into one of the two compartments inside your HP 48SX.

Stock #82211B [Equation Library ROM card] List \$100 .....\$79.95



### VERBB Circuit Analysis Software for the HP 48SX

#### MicroNation

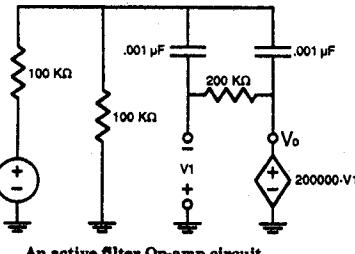
Analyze any arbitrary linear circuit. Enter circuits by drawing them directly onto the HP 48SX screen using the cursor and menu keys. This makes entering circuits easy—you won't waste time making Spice-like net lists.

Quickly derive exact s-domain transfer functions from any linear circuit. Solve for the AC or DC response. Derive input or output impedance equations. Perform frequency analysis—plot up to ten decades of both magnitude and phase Bode plots. Plot time domain response of circuits to seven different input functions with eleven variable parameters. Plot to screen or send data to a larger computer.

Uses about 40 bytes of memory per component, so you can analyze fairly large circuits with only 32K of RAM.

VERBB comes on a 128K ROM card. The instruction manual contains many tutorial examples and a quick reference card that fits the calculator's case.

Stock #2693 (VERBB, ROM card) List \$135 .....\$124.95

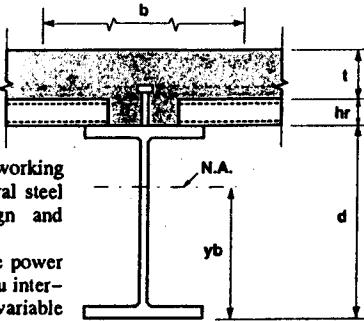


An active filter Op-amp circuit.

### Structural Engineering Equation Card for the HP 48SX

#### SMI

Brand New



Analysis and design tools for the working engineer—covers topics in structural steel design, reinforced concrete design and general structural analysis.

Equations for each topic, plus the power of the HP SOLVE function, give you interactive solutions for any unknown variable when you have the other data.

Stock #2876 (HP 48 Structural Eng Equation, card) .....\$134.95

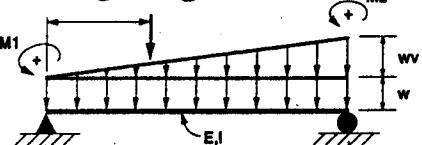
### Attention: Club Secretaries!

Let us know what your calculator club is doing—EduCALC will spread the word! Call (800)677-7001 and ask for Deanna Beck.

### Structural Engineering Program Card for the HP 48SX

#### SMI

Brand  
New



Aids and tools for your design work—7 user-interactive programs and a database (for 415 AISC 9th edn shapes).

Programs analyze beams and columns, column base plates, single-span beams, rigid rectangular spread foundations, cantilever retaining walls, pile groups for rigid pile caps, rectangular concrete beams.

Stock #2875 (HP 48 Structural Eng Programs, card) .....\$134.95

### EduCALC News Line (714)582-3976

Phone EduCALC any time for weekly reports on the latest products and activities for handhelds and palmtops. Updates are made each Tuesday. Topics include new products or services, special offers, novel applications, and news about the activities of user groups.

# HP 48

## Software continued

### HP 48SX

### Engineering Mathematics Library including MATHLIB, a ROM card with 715 new commands

by John Holland

Academic  
Press

- ✓ quick analyses for the professional
- ✓ worked examples for students

Complete, with statistics, linear algebra and digital signal and data processing. Over 300 tabulations of complex math functions, most to 10-digit accuracy.

Single-button plotting of all HP 48, MATHLIB, and all real and complex user-defined functions stored in the VAR directory—linear, semi-log and log-log plots with titles and labeled axes. 36 user-friendly menus. Vector and matrix language, so you can manipulate arrays without dealing with the elements. Over 100 statistical operations and tests. Over 50 statistical probability distributions and their inverses. Over 100 data and signal processing operations.

Series, rational, polynomial and least-squares approximations. Over 200 vector and matrix commands plus 50 symbolic commands. Evaluation of complex contour integrals, residues, symbolic inverse Laplace and Z transforms. Runge-Kutta numerical and symbolic solutions for scalar, vector and simultaneous DEs.

Symbolic and numerical solutions of state space matrix differential and difference equations. Over 200 algebra operations, including 3 powerful complex-coefficient polynomial root-solvers. Over 50 data editing, sorting, windowing, clipping, and peak and valley analysis commands. Numerical differentiation and integration.

*Believe this: it solves a 40 × 40 system of linear equations in under 4 minutes!*  
Stock #2694 (Eng/Math Lib, 632 p hrdbnd hndbk & crd) .... \$139.95

### HP 48SX Math Library General Application Programs

by John Holland

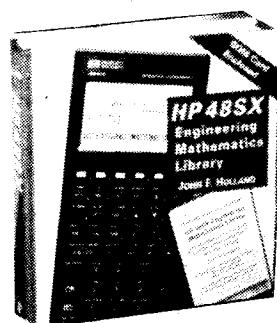
Academic  
Press

*An introduction of Symbolic and Complex Computation with Applications*

$$\begin{aligned} x[n] &= \sum_{n=0}^{\infty} x[n'] \delta_{nn'} \\ &= \frac{1}{m} \sum_{n=0}^{m-1} x[n'] \sum_{n=0}^{m-1} \sum_{n'=0}^{m-1} \bar{a}_{n,n'} a_{n,n'} \\ &= \frac{1}{m} \sum_{n=0}^{m-1} \sum_{n'=0}^{m-1} a_{n,n'} \sum_{n=0}^{m-1} \bar{a}_{n,n'} x[n'] \\ &= \frac{1}{m} \sum_{n=0}^{m-1} \sum_{n'=0}^{m-1} a_{n,n'} c_n' \end{aligned}$$

- 370 examples from the MATHLIB manual that show how to apply MATHLIB to your specific applications
- moments and evaluation of over 40 probability distributions, including even Bose-Einstein, Dirac Delta, Kolmogorov-Smirnov, Maxwell, etc.
- 13 advanced distributions including joint distributions and some from Non-linear Control Theory
- 200 symbolic function definitions
- 17 Weierstrass elliptic function programs
- a detailed tutorial on Wavelets and related engineering topics including the M-band case—over 70 programs on this hot research topic, rich with symbolic and numerical algorithms and techniques
- advanced plotting, continued fractions, polynomial GCD, simulation of difficult computations, large integer arithmetic and various symbolic tricks
- comprehensive 160 page manual plus programs on ROM card or else 3½" disk for downloading

Stock #2902 (HP 48 Application Programs, 3½") ..... \$59.95  
Stock #2903 (HP 48 Application Programs, card) ..... \$99.95

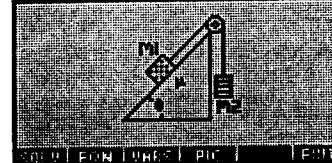


### HP 48SX/GX Application Cards for ME, EE, Gen Chem, and Math

Sparcom  
CORPORATION

There are two types of these "Pocket Professional" software cards for each field. The Applications Pacs are designed for undergraduate students—each contains hundreds of equations with diagrams, charts and tables, analyses and reference tables in easy-to-use menu-drive format. No need to program, manage units or find constants—the solutions are built in, ready for use in class or lab, office or field.

The Reference Pacs have thousands of data entries, so you have calculator and handbook combined, with no programming needed!

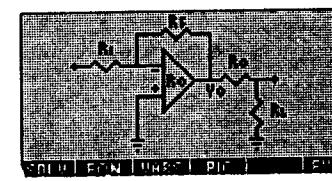


ME Applications Pac—over 350 equations from fluid mechanics, heat transfer, gases, beams, stress analysis, machine design and more. Analysis sections include inclined plane, steam tables and thermocouples. Uses SI units.

Stock #2290 (ME Applications, card) List \$100 ..... \$89.95

ME Reference Library—over 3000 entries from nine subject areas; including properties of solids and liquids, composition of metals, refrigerants, fuels and combustion, thermal properties, saturated gas properties and more.

Stock #2291 (ME Reference, card) List \$100 ..... \$89.95



EE Applications Pac—over 300 equations in circuit elements, DC circuits, RL and RC circuits, RLC circuits, OpAmp circuits, solid state devices and more. Analysis sections include simple AC circuits, Fourier and Laplace transforms, ladder network analysis and two-port networks.

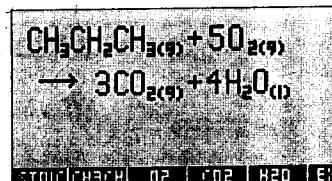
Stock #2292 (EE Applications, card) List \$100 ..... \$89.95

EE Reference Library—over 3000 entries from seven subject areas; covering properties of Silicon, digital specifications, properties of lasers, III-V and II-V compounds, standard component values, wire gauge, and dielectric and magnetic properties.

Stock #2293 (EE Reference, card) List \$100 ..... \$89.95

General Chemistry Applications Pac—over 150 equations from kinetics, acids/bases, gases, precipitation and more. Plot pH titration curves and radial functions. Periodic Table includes 14 properties of each element. A chemical-equation writer that calculates theoretical yields, limiting reagents, and checks balance. Molecular weight calculator.

Stock #2294 (Chem Applications, card) List \$100 ..... \$89.95



Chem Reference Library—over 3000 entries in eleven subject areas; elements, solids, acids/bases, thermodynamics, complexes, solubilities, electrochemistry, water and bonds.

Stock #2295 (Chem Reference, card) List \$100 ..... \$89.95

Mathematics Applications Pac—easy access to algebraic utilities: cubic/quartic solver, combinations/permuations, base conversions, LCM/GCD/prm factors. Trig includes graphs and definitions for trig and hyperbolic function plus equations and identities. Calculus: derivative and integral tables with electronic search, vector analysis and Laplacian in polar, rectangular and spherical coordinates. Fourier, Laplace and Z transforms.

Stock #2324 (Math Applications, card) List \$100 ..... \$89.95



# HP 48

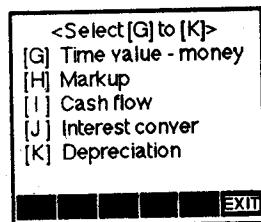
## Software continued

### TDS 48SX/GX Financial Functions Library

TDS

Pop this card in the slot and turn your 48 into a powerful HP financial calculator.

Time Value of Money, Markup, Cash Flow, Interest Rate Conversions, Depreciation. Stock #2482 (Financial Functions, 48 card) List \$95 ..... \$79.95



### Structural Analysis Card for the HP 48SX

Structural Engineers and their students find these menu and screen-driven plug-in programs easy to learn, easy to use.

General Beam, Plane Frame, Concrete Column, and Steel Column and Beam Analysis programs. User's Manual includes sample problems and a short list of references with each program.

Stock #2487 (Structural Analysis, 48 card) List \$125.....\$109.95

### TFR48 File Transfer and Conversion Software

Transfer raw data, point lists and coordinate files back and forth from your office PC to and from your HP 48SX with Survey Card—edit your raw data in the PC, process new coordinates from the edited data, and convert the data format to be compatible with any one of two dozen other surveying and CAD based software packages.

For example, back in your office you discover that your rod man changed the rod height during the job, but neglected to make the change in the 48, so elevations are all wrong from that point on. No problem—you can edit in your PC using TFR48! Context-sensitive HELP is always available at the touch of a key.

You'll need a PC or AT running DOS 2.11 or greater, 512K RAM, plus the 48-to-PC Serial Cable (#F1015A).

Stock #2278 (TFR48 PC Program, 3 1/2") List \$250.....\$224.95

### TDS-48 PC Software Program

Completely emulates all TDS Survey Card menus, screens, and functions—so they look and work on your office PC just as they would in an HP 48 SX. Also contains other functions from the TDS-500 Surveying Field Computer, like spiral curve routines, earthwork computations, control files, and offsets.

Powerful interactive graphics allow you to draw any operation of the Survey Card on the PC screen, then send graph to plotter with one keystroke.

Requires an AT with 640K and a hard disk; supports Hercules graphic display and will use color on CGA/VGA/EGA. You will need the TFR48 program if you wish to transfer data files from your 48/Survey Card to this program. Adaptable for English or Metric units.

Stock #2279 (TDS-48 PC Program, 5 1/4") List \$495.....\$429.95

Stock #2280 (TDS-48 PC Program, 3 1/2") List \$495.....\$429.95

### TDS-PC Plus Software Program

Contains every program of #2279/80 above, plus: Contouring, 2 new Curve Functions and Street Intersection Layout. Also includes TFR File Transfer and Conversion programs and communicates directly to your Total Station. Take this to the field in your laptop!

Stock #2477 (TDS-PC Plus, 5 1/4") List \$745 ..... \$629.95

Stock #2478 (TDS-PC Plus, 3 1/2") List \$745 ..... \$629.95

### Pocket Professional Software for the HP 48SX may now be used on the FE Exam in most states

**Sparcom**  
CORPORATION

#### Spice48

A self-contained circuit analysis tool used to calculate and view the complete response of linear circuits—you'll describe your circuit easily with a menu-driven browser format. The size of the circuit that you can analyze is determined by available memory, number of circuit elements, and nodes. You can store files in your desktop computer.

When you've entered your circuit, you can analyze quiescent operating points, steady-state small signal response, transfer function at any two nodes, do a circuit response to a frequency sweep, or transient response.

Spice48 is an adaptation of the work carried out by the CAD group at the University of California. In the past 15 years SPICE has become the standard circuit simulation tool around the world.

Stock #2589 (Spice48, card) List \$100 ..... \$89.95

#### Physics Pac

Equation library with over 300 equations in Angular Mechanics, Electricity, Forces/Energy/Work, Gravitation, Linear Mechanics, Magnetism, Optics, Oscillatory Motion, Special Relativity, and Waves.

Special functions section includes binomial and Taylor function definitions, coefficients, and expansions.

Vector Analysis programmable functions, including dot, cross, del, gradient, divergence, curl, and Laplacian.

Integral table, Polynomial Solver, and Linear Algebra section are included. You'll quickly access reference data and formulas along with a whole library of constants.

Stock #2599 (Physics Pac, card) List \$100 ..... \$89.95

#### Statistics Pac

All the stats tools students and professionals want close at hand, with Sparcom's easy-to-use interface—Central Tendency, Standard Error, 14 Probability Distributions, Regression Analysis and 5 different plotting functions.

Perform 8 kinds of Hypothesis Tests. Supply raw data and specific population parameters such as  $\mu$ ,  $\sigma$  and  $\alpha$  to get  $z$ ,  $z_{\alpha/2}$  and P-values. Run 7 different Confidence Interval Tests. Estimate Sample Size needed before an experiment begins.

Enter and store raw data with Matrix Manager, then transform it to grouped data with a few keystrokes. Move large data sets from PC to calculator and back to PC with automatic translation.

Stock #2743 (Statistics Pac, card) List \$100 ..... \$89.95

#### Solid State Electronics Pac

Over 200 equations commonly used by students and professionals in solid state electronics. Categories covered include Physics, PN Junctions, MOS electronics and devices, JN transistors, microwave devices, and IC technology.

Use this Pac to compute Fermi level, Hall effect voltage, Franz-Keldysh effect, MOS device properties and inverter delay, step junction capacitance, short channel effect on threshold voltage, reduce bipolar transistor data to a small signal model, rf power of Read or Gunn diode, thickness of  $\text{SiO}_2$  grown in 60 minutes, or temperature effects on device performance parameters.

Find the total number of complete die on a wafer, or find the product yield based on Murphy's defect density model.

Get quick reference access to properties of Silicon including donor and acceptor levels. GaAs, many common III-V and II-VI compounds, properties of silicon dioxide and silicon nitride films.

Stock #2590 (Solid State Electronics, card) List \$100 ..... \$89.95

## Software continued

### OptionTrader

Mycroft

Make your HP 48 into a financial number-cruncher you can pop in your pocket!

A complete, menu-driven library of financial formulas — integrated and automated so you can make decisions on-the-go.

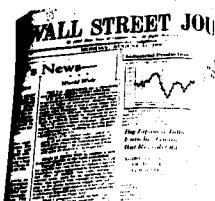
Evaluates dividend-adjusted American or European Black-Scholes call and put values for  $1 \times 1$  (1 exercise at 1 contract expiration), or  $3 \times 3$ , or both. Computes delta, gamma, kappa and theta risk measurements for calls and puts,  $1 \times 1$ ,  $3 \times 3$ , or both.

Computes Market Implied Volatility (MIV) and historical volatilities (daily, weekly, monthly, yearly) by Extreme Value Method. Constructs spread, hedge or combination positions for 2 to 6 securities and then monitors exposure and status. Computes delta or gamma neutral position adjustment.

Automatically enters your position data, computes and enters expiration months, days to expiration or ex-dividend, etc.

Larry McMillan, reviewing it in his *Option Strategist* newsletter, says, *Overall, I found this to be an excellent product... especially if portability is a consideration.*

Stock #2692 (OptionTrader, 128K ROM card) List \$295 ..... \$274.95



## Personal Information Manager

Application Card instantly makes your HP 48SX/GX into a Business Informator

**Sparcom**  
CORPORATION

- Interactive calendar serves as your entry point for all functions.
- Appointment book allows you to enter appointments, meetings, or birthdays; set reminder alarms; and create reports of any or all entries.
- Notepad allows you to list any type of data as memos, including to-do lists.
- Phone directory permits you to store, sort and retrieve up to nine fields of information for each entry, including name, company, address, home phone, business phone, and fax numbers.
- Expense accountant permits you to enter, describe and compile expenses under customizable account names.
- Time clock documents time spent working on projects or accounts.
- Report generator compiles itemized lists from the data stored by each function. Reports may be sent to the HP 48SX screen, a file, an IR printer, a PC or another HP 48.

Stock #2323 (Personal Information Mgr, card) List \$100 ..... \$89.95

## The HP 48 Database

Donnelly

A compact, powerful, easy-to-use database engine for the HP 48 — supports eight different data types, including number, text, time, date, remote file all lookups, calculations fields.

The HP 48 Database is easily customizable. Searching, selecting, sorting, reporting, and data import/export features allow you to get the most out of your stored data. Written in highly efficient machine code with commands that let you access database information from your own programs.

The manual clearly documents how everything works with examples. Comes on a disk for either the PC or the Mac, so you'll need a serial cable to download the code to your HP 48.

Stock #2648 (Database, PC disk, 3 1/2") ..... \$24.95

Stock #2649 (Database, Mac disk) ..... \$24.95

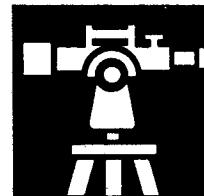


## ASTRO\*CARD

Computes accurate astronomic azimuth. Contains extremely accurate internal ephemeris generation for Sun and Polaris observation through the year 2010. Stock #2749 (ASTRO\*CARD) ..... \$174.95

## Surveyor's Software ROM Cards for the HP 48

SIMI



Basic Coordinate Geometry Surveying Card stores up to 1200 points by point number, easy field book entry, curves, intersection, translate, rotate. Comes with keyboard overlay and manual. Stock #2296 (Basic COGO, card) List \$105 ..... \$91.95

Standard Coordinate Geometry Surveying Card contains all features of #2296 plus sunshot, elevations, stake program; will give GO and COME, CUT and FILL, predetermined area. Stock #2298 (Standard COGO, card) List \$330 ..... \$269.95

Advanced COGO Surveying Card contains all features of #2296 and 2298; store any size point description; send data to PC in various formats. Includes two point resection, offset from a series of lines, CRIS compass rule (including side shots) and perpendicular offset (determines perpendicular distance of a point from a line). Comes with overlay and manuals. Stock #2299 (Advanced COGO, card) List \$550 ..... \$469.95

Data Collection plus Advanced COGO Card — all features of #2296, #2298 and #2299, plus manual and electronic data collection.

Automatically collects data from Leitz, Nikon Top Gun, Topcon, Wild and Zeiss Electronic Total Stations. Cable not included.

Stock #2470 (Data Collection & COGO, card) List \$1100 ..... \$895.00

Civil Engineering Card includes vertical curves, horizontal curve layout, earthworks, hydrology programs for designing various open-channel ditches, pipe sizes for storm and sanitary sewer.

Stock #2297 (Civil Engineering, card) List \$105 ..... \$91.95

State Plane & UTM Coordinate System plus Geodetic Forward & Inverse based on C&G Survey Publication 62-4 and on papers by T. Vincenty, as adapted to take advantage of the computing power of your HP 48SX.

Stock #2645 (48 State Plane, card) List \$150 ..... \$129.95

Construction 1 works with manual or automatic total stations in field-construction operations to do slopestaking, cross sectioning and stakeout based on station and offset configurations. Use for highways, dams, pipelines, topographic surveys, etc.

Stock #2646 (Construction 1, card) List \$350 ..... \$289.95

## E.Z. Math

HP 48SX/GX

### Application Card

E. Z. Software

MAIN MENU

1. Sets
2. Sets of numbers
3. Operations
4. Open phrases
5. Open sentences

Pick a number

STK KILL

OFF

■ Students   ■ Teachers  
■ Bankers   ■ Business Men

Throw away your HP Manual—with this card your HP 48SX becomes simple, straightforward and intuitive—E.Z.!

You'll have E.Z. graphical analysis of nearly 200 families of equations, covering HS algebra through college calculus.

You get E.Z. time-value-of-money functions, to figure out loan payments, rates, etc., as well as repeated deposits into a savings account.

You'll have E.Z. arithmetic of fractions, plus LCMs, GCDs, prime factorizations and binomial coefficients.

In every problem, all of your original input is repeated along with the answer, so you can be sure. Comes with 150-page manual of its own.

Stock #2443 (E.Z. Math, 128K ROM card) List \$130 ..... \$109.95

## E. Z. Arithmetic

Basic elementary-school or remedial course — strongly reinforces computational skills to make arithmetic a snap.

Stock #2576 (E.Z. Arithmetic, 128K ROM card) List \$130 ..... \$99.95

# HP 48

## Software continued

### Lo-Cost Surveying Software for the HP 48SX/GX

**D'Zign**

All D'Zign software features **free** updates and unlimited **free** support for users. You may program as many calculators as you like with it—merely buy additional manuals at about \$20 each to register for the freebies (and to conform to U.S. copyright law, and to give the workman his due).

Each program package comes to you on both 5 1/4" and 3 1/2" PC disks—so you'll need a PC and a #F1015A Serial Cable to download programs to your HP 48 (this way, you save memory space by downloading only the programs you need to use). Each package includes Owner's Manual.

#### HP 48SX Surveying Packet #1 version 3.0

**Full Coordinate Geometry**, including rotation, predetermined areas, intersections and inverse traverse by point numbers for areas. Field layout programs include the best version of our Alignment/Offset programs to date and fast radial inverting. Also has Triangle and Circular Curve solutions and an easy-to-use file system.

**Leveling Field Book** with 3-wire and trig-leveling options is something new to handhelds. Use the calculator as a field book and print out or automatically adjust the level run later.

New version 3.0 has spiral curves, resection, A.L.T.A. remote slope staking, topographic pickup, end area volumes, and foot-inch/fraction conversion. Manual included.

Requires HP 48GX with 128K RAM Card installed.  
Stock #2606 (48 Survey Pack #1 v 3.0, 5 1/4" & 3 1/2") .....\$275

### NAVCOM 48SX/GX Marine Navigation

*Brand New*

**AP Systems**

The most advanced celestial computer available—bar none! Over 50 integrated functions to meet your professional or recreational navigation needs. Tested and refined for over 2 years and 30,000 miles at sea. 128K ROM card does not lose programs even if batteries fail. Completely menu-driven, the interaction personal computer style screen makes NAVCOM simple to use. All Prompts, answers, and help screens are displayed in plain English.

#### Piloting Features

- Electronic, Celestial, Radar, and Visual Fixes
- Maintains Continuous Dead Reckoning Position
- Distance-to-Go/Heading to Steer/ETA/Speed Required to a Waypoint

#### Route Planning Features

- Complete Voyage Plans from Custom Voyage/Waypoint Catalog
- Rhumbline/Great Circle/Composite track planning
- Automated track plotting to charts

#### Celestial Features

- Almanac: Sun, Moon, Planets, Aries, 58 Nav Stars
- Automatic Sight Timing (internal chronometer)
- Automatic Sextant Corrections
- Finds/Solves Known or Unknown Celestial Sights
- Plots Celestial Fixes on screen or to a Printer
- Computes Lat/Lon Fix from sights
- Precomputes Best Stars
- Local Apparent Noon/Time of Rise/Set of any Celestial Body

Stock #2772 [NAVCOM 48] List \$160 .....\$149

### Calculator Bulletin Board System

This is an HP service where users and developers can exchange software and information. It operates at 300/1200/2400 baud, full duplex, no parity, 8 bits, 1 stop bit; the phone number is (503)750-4448. This service is **FREE**; you pay only the long-distance telephone charge. The HP BBS is the best source for programs.

### HP 48 Goodies Disks Public-Domain Software Programs

**EduCALC**

- **High Density Disks for PCs; 1.2M 5 1/4" or 1.44M 3 1/2"** (sorry, there are no Apple or Mac versions as yet)
- **Lo-Lo-Cost, Donated Programs — provided as is, without support from EduCALC, HP or anyone else** Each disk comes with descriptive notes. These may also be ordered separately — see Index on page 4 for our 'Technical Notes'.

No. 1: We have Joseph K. Horn to thank for this: 272 files and 989,337 bytes on one high-density PC disk, mostly downloaded from HP's Corvallis BBS.

Running analog clock, Finds hex address of any object, Picture of Alfred E. Newman, Intro to 48 assembly language, the game of Blackjack ("21"), HP 48 bugs & version fixes, Graphic calendar maker w/alarms, Differential Equation solvers, HP 41CV Emulator comments, Animated rotating world globe, Play real music w/samples, All about the hidden directory, Tetris video game, much more.

No. 2: We have Derek S. Nickel to thank for this: it contains Voyager V1.0-6, which will allow you to interactively disassemble the contents of the HP 48SX ROM and other 48 programs. There are also HP 48SX Internals, Voyager Reference Manual and Saturn Instruction Set.

No. 3: A continuation of No. 1, also from Joe Horn: 1,012,072 bytes in 264 files—games, utilities, programming hints and aids, fractals and other graphics, numerical routines, hardware secrets, etc.

No. 4: Prepared by HP but not supported or warranted by them: tools for use by a System Level RPL programmer on a PC platform to create HP 48 applications, with documentation. Includes approx. 2000 supported (frozen addresses) system objects.

No. 5: Joe Horn has done it again: many new video games with hi-quality graphics; a TV IR Remote learning program, latest Hacker Tools, Flight Planning, Black Body Emissions, Internal Messages, Planetary Positions, more.

No. 6: More animation! Boy, Man, Horse, Eye, Bouncing ball, Life "Game", tank battle. Video Games; Pac Man, Chess, Tetris, Space Invaders. Program Search & Replace, cut redundant RPL, Least Squares, and exact Polynomial Curve Fit, all factors of x, Quick Editor, Turbo IR, Pocket Planetarium, Address Book, 3D Graphing Suite.

No. 7: New! Complete index of GD1 — GD7 and a Global File-Finder by name, keyword, or author (FETCH). Tetris, HP Unassembler, Pacman, Tiny Biorythm, 6 color Mastermind, Super fast FFT, Super fast Poly Roots, 3-D Surface Plotter, 7 Level stack, To-Do List, X & Y Modem, Bonds.

No. 8: Improved index/FETCH GD1 — GD 8, <-LIB->, <-RPL->, Golf, Mastermind, TRONII, HP's Programs, DiffEq, Weighted Mean SDEV, 15 good articles, Fast List Sort, William Tell, etc. in TUNES, 19,200 baud IR SEND & REC., Celestial Nav., Trip calculator, Hi Acc. parallel Res.

Stock #GD1A (HP 48 Goodies disk, No. 1, 5 1/4" HD).....	\$4.95
Stock #GD2A (HP 48 Goodies disk, No. 2, 5 1/4" HD).....	\$4.95
Stock #GD3A (HP 48 Goodies disk, No. 3, 5 1/4" HD).....	\$4.95
Stock #GD4A (HP 48 Goodies disk, No. 4, 5 1/4" HD).....	\$4.95
Stock #GD5A (HP 48 Goodies disk, No. 5, 5 1/4" HD).....	\$4.95
Stock #GD6A (HP 48 Goodies disk, No. 6, 5 1/4" HD).....	\$4.95
Stock #GD7A (HP 48 Goodies disk, No. 7, 5 1/4" HD).....	\$4.95
Stock #GD8A (HP 48 Goodies disk, No. 8, 5 1/4" HD).....	\$4.95
Stock #GD1B (HP 48 Goodies disk, No. 1, 3 1/2" HD).....	\$4.95
Stock #GD2B (HP 48 Goodies disk, No. 2, 3 1/2" HD).....	\$4.95
Stock #GD3B (HP 48 Goodies disk, No. 3, 3 1/2" HD).....	\$4.95
Stock #GD4B (HP 48 Goodies disk, No. 4, 3 1/2" HD).....	\$4.95
Stock #GD5B (HP 48 Goodies disk, No. 5, 3 1/2" HD).....	\$4.95
Stock #GD6B (HP 48 Goodies disk, No. 6, 3 1/2" HD).....	\$4.95
Stock #GD7B (HP 48 Goodies disk, No. 7, 3 1/2" HD).....	\$4.95
Stock #GD8B (HP 48 Goodies disk, No. 8, 3 1/2" HD).....	\$4.95

## Software continued

### HYDRAtools solves pipe-flow problems

#### RAMSS

An easy-to-use full screen menu driven software application for either the HP 48SX or the HP 48S. Provides quick solutions to full and part-full PIPE flow problems, performs calculations for the hydraulic design and analysis of channels having TRAPEZOIDAL, TRIANGULAR, RECTANGULAR or PARABOLIC cross sections; computes the capacity and depth of GUTTER flows for inlet design, and solves the equations for ORIFICE and WEIR flows. Comes on a 5 1/4" disk with a reference manual.

Stock #2904 (HYDRAtools, 5 1/4") ..... \$49

HYDRAtools				
RAMSS				
STORM	1	2	5	10
SPIN	2.50	3.10	4.00	5.00
IMP	0.18	0.14	0.11	0.10
UP	775.49	787.21	84.19	819.46
UNOFF	1.00	1.46	2.20	3.00
PERM-C	36.76	54.92	84.75	113.22
MORE	TYPE H	STORM	TYPE	EXIT

Stock #2904 (HYDRAtools, 5 1/4") ..... \$49

HYDROmate hydrology software for the HP 48SX

Features easy-to-use pull-down menus for performing SCS TR-55 computations and report preparation. Calculates storm runoff volumes and the peak rate of discharge for the 1, 2, 5, 10, 25, 50 and 100 year storms using multiple rainfall data. Interfaces with electronic planimeters and PCs. HYDROmate also includes HYDRAtools. Comes on a 128K ROM card with a reference manual—requires a 32K or 128K RAM card.

Stock #2905 (HYDROmate, card) List \$249 ..... \$219

### HP 48SX Survey Card

#### TDS

- easy to use
- quick to learn

A plug-in software card for Data Collection, Stakeout, COGO, Curves, and much more — displays curves graphically.

Uses full HP 48SX capability — you move around the screen with cursor keys, use menus and softkeys for quick access to surveying functions. With RAM card installed you can collect field data up to 12,000 points, including Northing, Easting, elevation and 16 character point descriptors. InfraRed Interface squirts data to printer or to another HP 48SX.

You can develop a descriptor code table and designate control files. The points or lines of an active job can be displayed on the screen of your 48.

Optional spring-clip Tripod Bracket holds your HP 48SX as you work. Choose correct cable to fit your brand of total station.

Stock #2239 (TDS Surveying card) List \$495 ..... \$429.95

Stock #2261 (TDS Tripod Bracket) List \$75 ..... \$69.95

Stock #2253A (TDS Cable, Lietz/Topcon) List \$75 ..... \$69.95

Stock #2254A (TDS Cable, Nikon/Top Gun) List \$75 ..... \$69.95

Stock #2255A (TDS Cable, Zeiss) List \$75 ..... \$69.95

Stock #2256 (TDS Cable, Pentax) List \$95 ..... \$89.95

Stock #2257A (TDS Cable, Geodimeter) List \$75 ..... \$69.95

Stock #2258 (TDS Cable, Kern) List \$95 ..... \$89.95

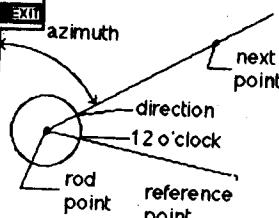
Stock #2260 (TDS Cable, Wild) List \$95 ..... \$89.95

Stock #2266 (TDS CoGo only, card) List \$125 ..... \$109.95

Stock #2269 (Surveying card Demo, 3 1/2" disk) deposit ..... \$35.00

Stock #2775 (TDS Surveying card for 48GX) List \$550 ..... \$459.95

Where is Next Point  
Rod pt.: 0  
Next pt.: 0  
Reference pt.: 0  
Direction: 12 O'clock  
Horiz. dist.: 0.000  
Azimuth: 0.0000  
SOLVE ADV EXIT

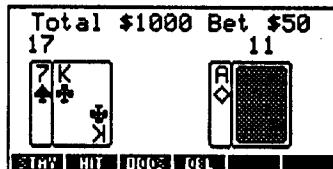


Thank you for your order!

## Games48

### Sparcom CORPORATION

Brand New



Take a break! Test your reflexes with Diamonds. Solve strategic puzzles in Sokoban. Transform your HP 48SX into a pocket arcade! Includes software on ROM card and manual; 1-yr warranty.

Stock #2757 (Games 48, card) List \$80 ..... \$69.95

### Casino 48 Application Card

Preston Brown Labs



Get all your favorite casino games with great graphics and animation: you'll walk over to a playing table and start the fun.

At the Blackjack table you get the usual choices to hit, stay, double down or split pairs. Plus Casino 48 will make you a blackjack expert; just press the recommend key and the 48 will analyze your situation and recommend the best strategy—and provide the rule you should remember. There is also advice on splitting and doubling down. Back in the Casino you can walk over to the animated Slot machine, Roulette table or the Video Poker machine.

As an added bonus you can create your own card games with commands for drawing cards on the screen. Slide this card into a slot in your HP 48SX and enjoy. Stock #2259 (Casino 48, card) List \$65 ..... \$56.95

### Celestial Navigation Pac for the HP 48SX

### Sparcom CORPORATION



Become an expert celestial navigator—and enjoy it!

Route Planning — Great circle course, distance, and position; even calculate way points along the way! Rhumb-line course, distance, and position.

Almanac — Access the perpetual almanac to find position of the sun, planets, or the stars. Even choose between a short or long list of stars.

More goodies—sight reduction, dead reckoning, time of fix, running fix, accuracy of fix, plotting line of position. Messier objects, sextant error, height of eye, atmospheric conditions, time zone and watch error.

Comes on a ROM card; includes manual with examples.

Stock #2636 (Celestial Navigation Pac, card) List \$100 ..... \$89.95

### Flight Navigation System

Bringslid



Dead Reckoning on a card for your HP 48SX—weight and balance calculations plus flight plans that are easy to edit (with change of parameters) and reversible.

Landing Pattern has Magnetic Headings and timing for help during touch-and-go training. Procedure Turns with Mag Heading and Tracks for more accurate flying. View The Route plotted into a grid chart before flight, plus useful options accessible during flight.

Stock #2831 (Flight Navigation, card) ..... \$119.95

# HP 48

## Software continued

### HP 48 File Manager

Donnelly

Superconvenient file exchange program eases data transfer between the HP 48 and your PC. The File Manager lets you browse through the directories right in the HP 48 display! Push a menu key to transfer one or more files or archive your HP 48. Other menu commands let you create directories, rename files, purge files, and much more. This efficient machine-language utility is a must for anyone who saves HP 48 programs and data on a PC. Manual included; does NOT work with Macintosh or with CMT disk drive.

Stock #2474 (HP 48 File Manager, 5 1/4") ..... \$15.95

### HP 48 Regression Analysis Package

- Nonlinear regression fits data to an arbitrary function
- One or two dimensional multiple linear regression
- Implements statistical and instrumental data weighting
- Calculates probable errors for solution coefficients
- Plots both data and the solution function
- Solves for up to 16 fit parameters
- Number of Data points limited only by available RAM

The most powerful curve fit package available for any calculator, and runs in only 11K. Also included: a library of 124 physical, astronomical and mathematical constants and a Time Value of Money program.

Stock #2774 (Regression Analysis, 3 1/4") ..... \$39.95

Brand New

### Programming Aids

#### HP 41CV Emulator Application Card for the HP 48SX

Sale

Use the 82242A InfraRed Module to copy programs or data from an HP 41 to your HP 48, or type HP 41 programs or data into the HP 48 (keyboard overlay included).

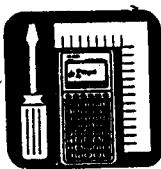
Those programs will now run on your HP 48; you can even invoke 41 programs from 48 programs or 48 programs from 41 programs, or exchange data between these two environments.

Card does not support HP-IL, graphic printer or HP 41CX Extended or Time functions (although you will have some alternatives).

Stock #82210A [41/48 Emulator, card] List \$100 ..... \$39.95

### HP 48 MLDL - Machine Language Development Library ROM Card

Jan Brittenson



A set of commands helpful to professional developers of HP 48 machine language programs and to a student of the machine's assembler and system ROM.

Contains a disassembler which permits you to print and examine both your own and system ROM machine language programs.

There is also a debugger so you can single-step programs, examine memory and registers and set break points. You can work locally on your HP 48 or remotely over the serial line, using either a dumb ASCII terminal or emulator. Support is built in for running debugger as a slave from an intelligent front-end, using windowing systems and symbol data from the assembler.

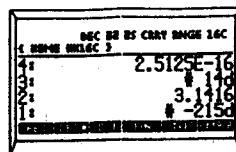
Though the MLDL programs are also available on our Goodies Disks #3, this ROM card has none of the limitations of the RAM library. Comes with extensive 106-page manual full of specs, examples and reference tables.

Stock #2359 (MLDL, ROM card) ..... \$89.95

### HP 16C Emulator Library

Schwartz-  
Grevelle

New



makes your 48 into a *Computer Scientist*

Over 50 functions of integer arithmetic, base conversion and bit manipulation. This is a complete and beautiful emulation, with many functions positioned on the same keys as on the original HP 16C keyboard and no emulator functions more than 2 keystrokes away.

Comes on 3 1/2" disks for downloading, with keyboard overlay and comprehensive user manual.

Stock #2870 (16C Emulator, 3 1/2") ..... \$39.95

Stock #2773 (16C Emulator card for HP 48) ..... \$74.95

### Port your HP 41 applications to the HP 48SX/GX and see them run faster!

Grepilite



Grepilite's GL41X emulator for the HP 48SX is an expansion of HP's 82210A HP 41CV emulator designed specifically for the porting of ROM module and EPROM-based HP 41 applications to HP 48SX PROM cards.

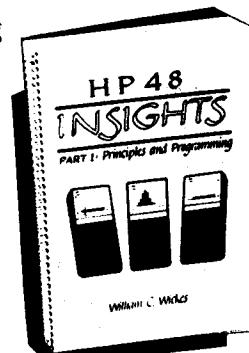
Your HP 41 applications are loaded on the same PROM card as the emulator with pre-compiled XEQs and GTOs for *full speed* operations and negligible RAM overhead!

Any HP 41 application (other than one using HP-IL, the Barcode Wand or the Card Reader) can be ported. This includes applications using HP 41CX extended functions and even custom HP 41 Mcode functions!

Write today for your *free* copy of the GL 41X fact sheet and find out about Grepilite's *low cost* porting service.

Stock #2532 (GL 41X fact sheet) ..... NO CHARGE

### 48 Insights, Part I & II Principles and Programming by William Wickes



If you do serious programming on the HP 48, this book is for you

We are in luck, for sure—the world-expert on the HP 48, Dr. Wickes, is also an excellent expositor. He writes clear and complete explanations that you can quickly understand and put right into your own programming.

Look at these chapter titles:

1. Introduction	5. Storing Objects	9. Programming
2. Understanding RPN	6. Methods	10. Display Optns/Graphics
3. Objects and Execution	7. Customization	11. Arrays and Lists
4. The HP 48 Stack	8. Problem Solving	12. Program Development

Part II covers the applications: SOLVE, PLOT, ALGEGRA, TIME, STAT and UNITS with the same thorough "insights" as Part I.

Stock #2322, 48 Insights, Part I, 381p wirebound ..... \$25.95

Stock #2358, 48 Insights, Part II, 340p ..... \$24.95

Thank you for your order!

## Programming Aids cont.

### The HP 48 Handbook 2nd Edition The ultimate programmer's how-to and reference book

by James Donnelly

New 2nd edition  
Covers System Programming

If you intend to make your 48 dance and sing, this is for you. It condenses over 1400 pages HP manuals into a portable collection of concise, convenient tables, tips and facts. Many new example programs illustrate the power of the HP 48/GX with an emphasis on interactive programming and graphics.

The HP 48 Handbook covers objects/names/constants, memory organization, graphics, statistics, data transfer, menus, user keys, programming, printer control, units, message tables, character codes, flags.

A huge new chapter on System Programming provides a superb introduction to the internals of the HP 48—objects you can use with SYSEVAL! HP manuals don't tell you what's "under the hood", but this chapter does! Any HP 48 owner can get a lot more from their machine with a little knowledge about System Programming!

An expanded Command Reference (over 85 pages) lists the complete stack diagrams for all commands and functions, including notes, related flags, and keystroke access.

Stock #2900, The HP 48 Handbook 2nd Ed., 340p coilbnd.....\$19.95

## The HP 48 Programmers Toolkit

James Donnelly

Turbo charge your own programs with this library of machine-code subroutines—more than 60 new commands for high-speed stack operations, list and string utilities, sorting, graphics, data calculations, meta-object utilities and directory searching—for example, create a 10K character string in one second, or reverse the order of 1000 stack items in two seconds.

Two browser engines provide a front end for your application program (they do the hard work yet leave the fun part for you). Includes editor for building menu-label graphics (for your custom menus).

Everything is clearly documented with examples in the Manual. Comes on disk for PC or Mac, so you'll need an HP Interface Cable to download these programs to your 48.

Stock #2283A (Toolkit, PC Pgms, 3½").....\$24.95

Stock #2284 (Toolkit, Mac Pgms, 3½").....\$24.95

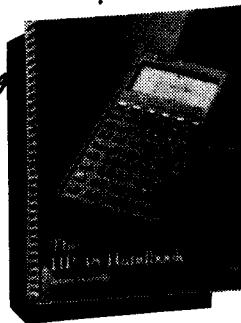
## SmartRom for HP 48SX

FORCALC

130 new commands for symbolic matrix handling, data sorting/searching/replacing, easier editing of programs, enhanced string and list manipulation, graphics management, meta-object and stack handling, and system access.

Comes on 32K ROM card. Package also contains a PC disk of application routines like fast Fourier transform, perpetual calendar, cross reference generator, user-defined font manager for handling custom characters, BARPLOT program using shaded patterns, effective compiler/decompiler for RPL internal language, more. 200-page User's Manual included.

Stock #2574 (SmartROM for 48).....\$99.95



## 48 Application Card Programming Service

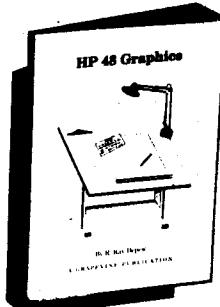
EduCALC

Let us make your own 48SX/GX Application Cards for you—just send us your program on a RAM card, and we will duplicate it on an OTP card. Select stock # for quantity pricing. Prices per each card.

Stock #2285A [1 card: 128K OTP, Programmed] .....\$49.95  
Stock #2285B [2 to 8 cards: 128K OTP, Programmed] .....\$44.95  
Stock #2285C [9 or more cards: 128K OTP, Programmed] .....\$41.95  
Stock #2286A [1 card: 32K OTP, Programmed] .....\$39.95  
Stock #2286B [2 to 8 cards: 32K OTP, Programmed] .....\$29.95  
Stock #2286C [9 or more cards: 32K OTP, Programmed] .....\$28.50

## HP 48SX Graphics

GRAPEVINE PUBLICATIONS, INC.



Use the full potential of that big display on your HP 48SX—learn how to build "GROBS" (graphics objects) and how to put them into your own custom diagrams, pictures and plots.

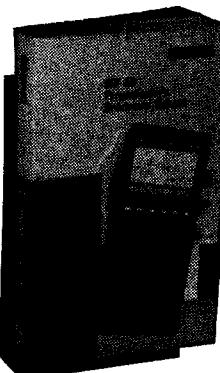
You'll start with an in-depth review of the built-in PLOT and SOLVER graphics tools and how to use them well.

Then you walk through the process of building your own GROBS to produce some very impressive graphics, right on your own HP 48SX—don't miss it!

Stock #2417, HP 48SX Graphics, 272p softbound.....\$19.95

## HP 48 Programmer's Reference Manual

HEWLETT  
PACKARD



A "must have",  
for reference and for study

The Command Dictionary for every serious HP 48 user—summarizes each programmable operation, one page per function. Gives usage, syntax in a stack diagram, flags affected, related commands and helpful remarks.

Appendices contain Tables of Error and Status Messages, Units, System Flags, and Reserved Variables.

Stock #2289, HP 48 Pgmr's Ref Manual, 504p softbound.....\$19.95

## HP 41/HP 48 Transitions

by William Wickes



Shows you how the HP 41 evolved logically into the HP 48 and how many of the 48's actions are natural extensions and enhancements of familiar 41 operations—so you'll see just how to adapt your HP 41 procedures and methods to the HP 48SX, including stack manipulations, storing and retrieving data, programming, and program conversions.

Dr. Wickes is the author of two other widely-used standard works, *HP 28 Insights* and *Synthetic Programming on the HP 41C*.

Stock #2288, HP 41/HP 48 Transitions, 149p.....\$16.95

# HP 48

## Programming Aids cont.

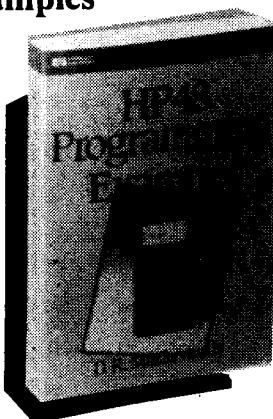
### HP 48 Programming Examples

by D.R. Mackenroth

- requires no expertise
- fun programs—music, games, health
- detailed step-by-step procedures
- applications for calculus, statistics, business
- hints, tips and in-depth explanations
- graphics—shows you how to draw pictures

150 usable example programs with enough details so anyone with an HP 48 can easily understand them. Complete program listings and comprehensive discussions so experienced programmers can readily modify programs.

Written by a former HP Learning Products Engineer who has authored numerous owner's and service manuals for HP calculators.  
Stock #2577, 48 Programming Examples, 341p softbound ..... \$29.95



## Bookware

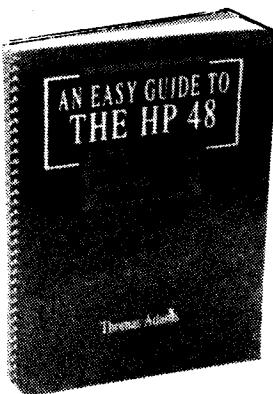
### An Easy Guide to the HP 48

by Thomas Adams

For non-mathematicians, non-statisticians, non-computer scientists—here's the help that will get you through those first difficult hours after you open the box—and into a comfortable competence.

No math skill is assumed beyond basic algebra. This book will take you step-by-step through learning the keyboard by way of basic equation—solving, statistics and programming. You'll end up knowing programming strategies with loops and decisions and how to use the flags.

Stock #2866, Easy Guide to HP 48, 186p spiralbound ..... \$24.95



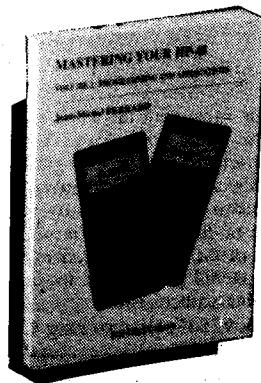
### Mastering Your HP 48: Vol. 2: Programming & Applications

by Jean-Michel Ferrard

Translated from the best-selling French book of ready-to-run math programs (Vol. 1 has not been translated). There's a lot here—if you key them all in they take up 42K. Each program is given with details and diagrams plus an example with run time. The style is easy to copy and to understand.

Program Directories useful to everyone include Arithmetic, Real or Complex Numbers, Polynomials, Fractions, Finite Series and Matrices. Businessmen and students preparing for exams will find Probabilities and Statistics Directories essential. Analysis Techniques and Differential Geometry will be useful in preparing for engineering school exams. Other programs cover Geometry, Graphs, Large Integers and Databases.

Stock #2390, Mastering your HP 48, 277p softbound ..... \$29.95



### Learning about the HP 48 a 100 minute Official VIDEO GUIDE



#### LearnKey



Let Nathan Meyers, HP design team member, teach you the advanced capabilities of the HP 48SX.

He'll show you your calculator *in action*—starting with the basics. You'll quickly become a power user, with numeric math, plots, user-defined functions, units, time & dates, alarms.

HP SOLVE and Symbolic Math get special emphasis as this expert guides you to your easy power with the HP 48!  
Stock #2695 (Learn the HP 48, Video Tape) List \$35..... \$19.95

### Using MS-DOS Kermit, 2nd edn

by Christine Gianone

#### How to connect your HP 48 to the World, step-by-step

Say *hello* to Compuserve, Dow Jones, MCI Mail, BBS, DIALOG, Telenet, TYMNET—*hello* to your desk PC, to your corporate mainframe.

"Now MS-DOS Kermit has the book it deserves... for the average PC user—a person who doesn't care how Kermit works, but who simply needs results... Useful examples appear on nearly every page, so you can build your confidence and skill... Once the material is mastered, the book remains a thoughtfully organized and valuable reference... the tables alone are worth the price of the book." Frank da Cruz, *Columbia University*.

"Covers all the topics needed to start new users easily, and it does it in a natural progression... The pace is a lot faster than readers will realize, mostly because the writing is skillful... often entertaining and always to the point. This is a terrific book!" says Joe Doupnik, *Utah State University*.

5 1/4" disk bound into book, plus coupon to send for 3 1/2" disk—includes HELP, latest updates for version 3.11, graphics and printer routines and several automated DEMOs.

Stock #2448, MS-DOS Kermit, 2nd edn, 345p, 5 1/4", sftbnd... \$34.95

Did you know that Kermit, in addition to naming a TV frog, is the Celtic word for "free" (which this program is)?

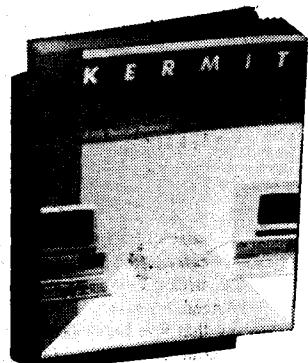
### Kermit

by Frank da Cruz

Learn about the file-transfer protocol that's built into your HP 48SX—here's the definitive book, written by one of the original codesigners, published by DEC, with a Forward by Donald Knuth.

Covers everything from History of Kermit and an explanation of what a file transfer protocol does, plus detailed instructions for its use, to an informal description of the protocol itself (in C). Case studies guide you in coping with your own computer and data.

Stock #2240, Kermit, 372p softbound..... \$26.95



*In a hurry? Use our UPS 2ND DAY AIR.  
A Big Hurry? UPS OVERTIME AIR!*

## Bookware continued

### Quick Guide to the HP 48 Super Calculator

by Thomas Dick

You get a fast track guide to using the world's most advanced calculator. This 87 page road map will get you up and running in less than an hour and will serve as a valuable reference course as well.

Stock #2730, Quick Guide, 87p softbound.....\$14.95

### Introduction to RPL

by Namir Shamma

**Is this an introduction?** When Chapter 9 shows you how to turn your HP 48 into a pocket database that stores phone numbers and addresses?

Yes, but with a difference—this is by the Shamma who writes all those books that teach computer languages, BASIC and Pascal and C. He assumes you're familiar with either the HP 41C or BASIC, and he skillfully assists you in becoming comfortable programming in RPL.

Contains abundant examples of programs, plus tips, tricks, hints, etc., just where you need them.

Stock #2454, Introduction to RPL, 216p softbound.....\$21.95

### Fractals on Hewlett-Packard's 28 and 48

by Yves/Nievergelt

Make math come alive with Julia sets and von Koch snowflakes on your HP 28 or 48! Everything you'll need is here, right up to suggestions for undergraduate research projects.

You'll get all the definitions and program algorithms, plus explanations and proofs, exercises (with solutions), term projects and research problems. You'll need calculus at least, to make sense of it. You'll learn some complex analysis, real analysis and topology, all in the best possible way, on your calculator.

Wadsworth Preliminary Edition, typeset but stapled.

Stock #2435, Fractals on HP 28 & 48, 74p stapled .....\$13.95

### Calculus with the HP 48

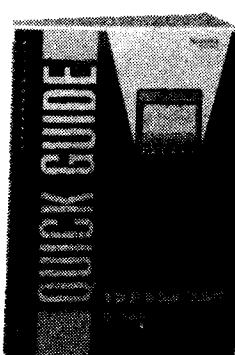
2nd edn.

by Lynn Garner

Get the most out of your calculus course and your calculator! Here are the tutorial helps, tips, tricks, explanations and programs that you'll need.

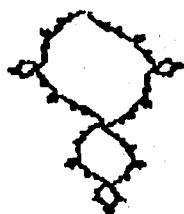
Let's say that you know how to do the calculus 'by hand' and are looking for a way to speed up the process with your calculator—you'll find that here, for all the standard topics of a three-semester course, in their standard order.

Stock #2434, Calculus with the HP 48, 127p softbound.....\$16.95

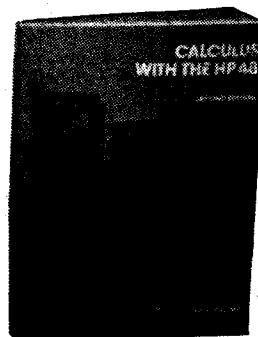


#### The HP48SX Data Types

- 11 Overview
- 11 Name That Type
- 11 Real Numbers
- 12 Complex Numbers
- 14 Strings
- 14 Real Arrays
- 18 Complex Arrays
- 19 Lists
- 20 Global and Local Names



#### CALCULUS WITH THE HP 48



### The HP 48 Pocket Book

by James Donnelly

*Brand New*



This handy pocket sized (3 1/4" x 6") reference for the HP 48 goes where you go! Covers flags, program structures, menus, and much more. Contains an abbreviated reference to all commands in the HP 48G/GX. The perfect handy reminder that doesn't fill your backpack or purse.

Stock #2901, The HP 48 Pocket Book, 54p softbound.....\$6.95

### An Easy Course in Using the HP 48SX

GRAPEVINE PUBLICATIONS, INC.

Your fast, easy way to get up-to-speed on the 48!

First you'll get a tour of the keyboard, stack, menus, etc., and find out how to build and use each of the different kinds of objects in the HP 48:

- Real Numbers
- Complex Numbers
- Arrays (Matrices)
- Binary Integers
- Characters & Strings
- Tags
- Algebraic Objects
- Programs
- Units
- Flags
- Vectors
- Lists
- Names
- Directories

Then you'll learn how to apply these objects in:

- Math
- Directory Structuring
- Statistics
- Algebra
- Building Equations
- Plotting
- Customizing Menus
- Assigning Keys

You'll get a working example of every command and concept you need, plus reviews and summaries, so you can learn at your own speed how to calculate like a pro!

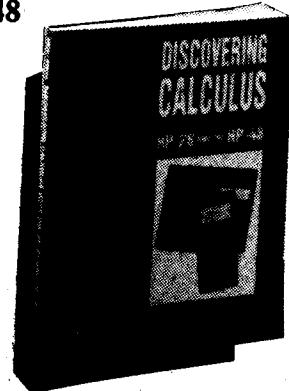
Stock #2416, Easy HP 48SX, 392p softbound .....\$19.95

### Read our mail from California—

The HP 48SX is really a wonderful educational tool. Thank you for providing it and for the very professional manner EduCALC treats its customers. James F. Gordon, Los Angeles

### Discovering Calculus with the HP 28 and the HP 48

by Smith/Minton



"Sit down with this book and your calculator and learn calculus with the fresh approach of a new technology."

No experience with graphing calculators is needed—this book starts from scratch. Most of the discussion is self-contained, with all the realistic exercises you'll need, but you will want to refer to your first-year calculus textbook some.

Stock #2647, Discovering Calculus, 277p softbound .....\$17.95

*We guarantee everything we sell. You may return it to us in new condition within 30 days for a full refund, no questions asked.*

# Math Software & Bookware

## Dictionary of Science and Technology

Academic Press

### Put excellence in your office!

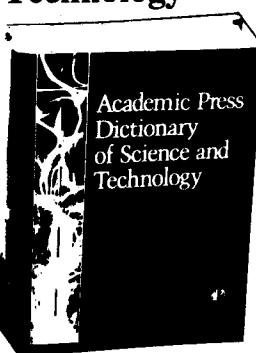
A new standard, for your reference collection—the most complete, authoritative single source available, in a single 8½ x 11 volume.

124,000 entries, complete coverage of 124 fields, including essays by such prestigious scientists as Michael DeBakey, Stephen Jay Gould, Linus Pauling, Roger Revelle, and Jonas Salk.

Up-to-date in such dynamic fields as Robotics, Artificial Intelligence, and Biotechnology. More coverage of subfields of Medicine, including Oncology, Radiology, Hematology, Cardiology, and Toxicology.

Pronunciation guides, etymologies, examples of current use, abbreviations, proper names, table of data and weight/measures, illustrations plus 24 pages of color plates. Includes a special Chronology of Science.

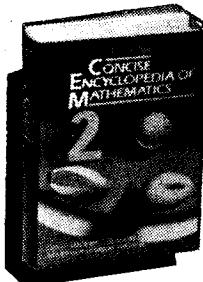
Stock #2832, Science/Technology Dictionary, 243 hrdbnd.....\$89.95



## VNR Concise Encyclopedia of Mathematics 3rd edn

edited by  
Gellert/Gottwald/  
Hellwich/Kästner/Küstner

*New  
3rd edition*



- Check for exact definitions and facts
- Review math that you once knew
- Fill out a gap in your knowledge
- Find easy access to specialist literature

Your best buy—the all-in-one, popular, standard reference. Over 1,000,000 copies of the First Edition have helped readers in 4 languages.

It's quick and clear, with colors—definitions and formulas are in yellow, examples in blue, theorems in red—so you always know right where you are. Helpful red arrows guide you through complicated calculations.

Second Edition adds sections on Game Theory, Perturbation Theory, Pocket Calculators, Microcomputers—there's even a 5-page introduction to BASIC! Has 1000 diagrams, charts, graphs, photographs, drawings and color plates.

Stock #2203, Math Encyclopedia, 776+p hrdbnd.....\$29.95

## Calculus Refresher for Technical People

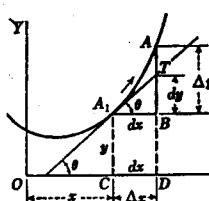
by Albert Klaaf

### ■ for self-study (not a text)

Here's your refresher, with its unique method—the 768 questions you'll want to ask, each with an easy-to-follow answer.

Covers differential and integral calculus, from GO through multiple integrals. 50-page section applies it all to specific problems of civil and nautical engineering, electricity, stress and strain, elasticity, industrial engineering, etc. Lots of problems test your progress. Constants and formulas for reference.

Stock #2171, Calculus Refresher, 431p softbound.....\$7.95



## Read our mail from Georgia —

"We have been using EduCALC for many years now for our HP needs and we have never taken the time to thank you for your prompt and courteous service." Ross A. Lynn, Associate V.P., Keck & Wood, Inc., Atlanta

## Beginning Technical Mathematics Made Easy

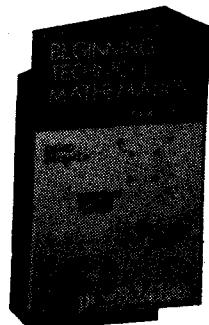
by David Brianza

Now you can learn how to do arithmetic, algebra, geometry, and more, on your own!

You'll like physicist Brianza's methods—he teaches without jargon and takes nothing for granted—this is math the way it should be taught.

Demystifies equations, theorems, scientific notation, logarithms, graphing . . . Lots of examples and exercises—use them to learn, or just to brush up!

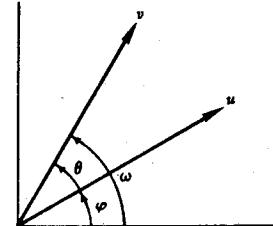
Stock #2243, Technical Math, 130p softbound .....\$8.95



*Thank you for your order!*

## Introduction to Linear Algebra

by Marcus/Minc



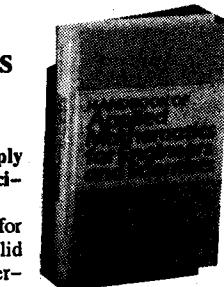
An introduction, for math and science majors as well as statistics students—written especially for those who have only a college algebra background.

Vector spaces and linear transformations, linear equations and determinants, characteristic roots.

Stock #2058, Intro Linear Algebra, 261p softbound .....\$6.95

## Handbook of Applied Mathematics for Engineers and Scientists

by Max Kurtz



Solutions-oriented to guide you as you apply current math techniques to engineering and science problems—on the job at the computer.

Time-saving calculation procedures to use for algebra, plane and spherical trig, plane and solid analytic geometry, matrix algebra, statistical inference and regression analysis . . . and calculus.

Lots of details on topics like Boolean algebra, permutations, computer graphics—plus extensive tables of integrals, derivatives and normal probability distributions. Sample problems to illustrate, and hundreds of graphs and diagrams.

Exactly what you want in a handbook.

Stock #2618, Handbook of Applied Math, 589p hardbound....\$69.95

## HPHH = "High-Powered HandHelds" International Electronic Conference

The international FidoNet computer bulletin board system, "gateways" to the Usenet academic and corporate network, carries a conference (or "echo"), with contributors world-wide, dedicated to High Powered Handhelds, particularly HP.

Anyone with a computer and modem may join the conference, in which many new programs and techniques are posted and discussed.

For information on how to link in, contact (up to 2400 baud, 8N1):  
in the Americas: Terrapin Station BBS (1:115/678) +(708)657-9543  
in Europe & the Middle East: No Zone BBS (2:253/159) +44-81-905-1245  
in the Pacific & Asia: Sentry BBS (3:711/401) +61-2-428-4687

# Math Software & Bookware

## The Calculus Explorer

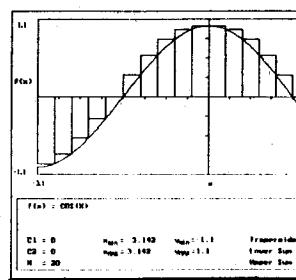
Academic  
Press

Your practical tool for self-study, free exploration or problem solving.

Covers 2D and 3D graphing, roots, series, integration (including double integrals!), DEs, fields, limits, continuity and complex number calculations.

Menu-driven, so it's quick to start and easy to use. Requires PC/compatible with 256K, DOS 2.1, CGA/EGA/VGA; 512K RAM and hard disk recommended.

Stock #2690 (Calculus Explorer, 3 1/4") ..... \$24.95



To get a FREE HP 41/71 Accessories Catalog, call (800)677-7001, ext 134.

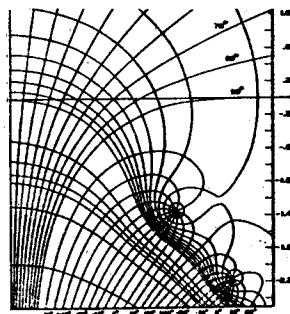
## Handbook of Mathematical Functions

by Abramowitz/Stegun

Easily the most computational math for your money! This is a cooperative effort of the National Bureau of Standards, National Science Foundation, MIT, et al. Formulas, graphs, and mathematical tables for elementary and many special functions. Math and physical constants and conversion factors. Abundant computational formulas and techniques.

This may be the most quoted, most useful math science book there is.

Stock #356, Math Functions, 1046p softbound ..... \$21.95



## Statistics at your Fingertips

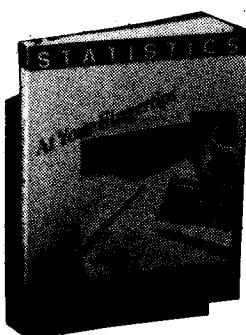
by Mark Finkelstein

### ■ use your calculator to learn statistics fast!

Even if you've never done statistics before, you can master the ideas and techniques needed to calculate practical statistics. All you'll need is this book, a pencil and a calculator.

- accurate, accessible coverage of most commonly used statistical techniques (through 2-way ANOVA)
- detailed step-by-step explanations with lots of exercises that allow you to work as fast (or as slow) as you like
- informal language that makes often confusing topics (such as confidence intervals and contingency tables) easy to understand and apply
- a guide to choosing the right statistics to use in a particular situation, plus two helpful glossaries that define symbols and formulas.

Stock #2608, Statistics at Fingertips, 312p softbound ..... \$24.95



**We guarantee everything we sell. You may return it to us in new condition within 30 days for a full refund, no questions asked.**

## Technical Notes

by Richard Nelson

Have a technical question? We may have the answer all ready for you—send us a 29 cent stamp for each stock number you request.

Stock #TN11, Video Monitors and Handheld Calculators.

Stock #TN12, Connect PCs & HP Handhelds via HP ILs.

Stock #TN13, Programming 'Languages' on the HP 41.

Stock #TN14, Static Electricity and my Calculator.

Stock #TN15, Emulating Register Storage on the HP 48S/SX Calcs

Stock #TN17, HP 41 MCODE Programming.

Stock #TN18, Off-Line Storage for my HP 41

Stock #TN19, HP 41 Glossary of Terms.

Stock #TN20, Factoring Large Numbers on the HP 16.

Stock #TN22, What is HP IL?

Stock #TN23, Calculating with Fractions.

Stock #TN25, Currency Conversions on HP 12C.

Stock #TN26, Swap Disk Service Description & Details.

Stock #TN27, Personal Data Base Applications.

Stock #TN28, HP 48 Goodies Disk #1 Description.

Stock #TN29, HP 48 Goodies Disk #2 Description.

Stock #TN30, HP 48 Goodies Disk #3 Description.

Stock #TN31, HP 48 Goodies Disk #4 Description.

Stock #TN32, HP 48 Goodies Disk #5 Description.

Stock #TN33, HP 48 Goodies Disk #6 Description.

Stock #TN34, HP 48 Goodies Disk #7 Description.

Stock #TN35, HP 48 Goodies Disk #8 Description.

## Numerical Methods for Scientists and Engineers

2nd edition

by Richard Hamming

Well-known mathematician Richard Hamming ("the Hamming code," "the Hamming distance," and "Hamming window," etc.) suggests that the purpose of computing is insight, not merely numbers.

You'll get that insight in this comprehensive reference-text, together with the numbers you need. Introductory fundamentals are covered, and algorithms, then a complete survey of classical methods (including Differential Equations, Chebyshev Approximation, etc.)

Modern numerical methods are covered too, including the Fourier Transform and the Laplace Transform, plus Eigenvalues and Eigenvectors.

Stock #492, Numerical Methods, 721p softbound ..... \$14.95

## Numerical Methods That usually Work

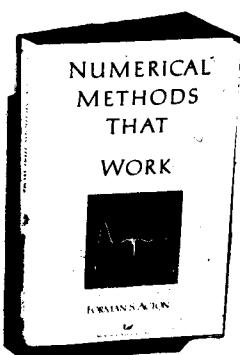
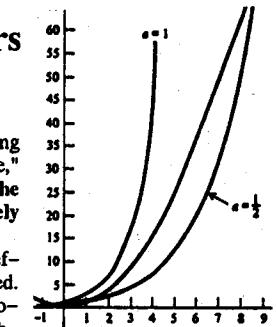
by Forman Acton

"A first-rate book which can be used either as a text or a reference." *Choice*

Efficient methods for the solution of equations—algebra, transcendental and differential—with computer. The reader is expected to be motivated by the physical world, to want answers to 'real' problems.

You'll need an introduction to the calculus and differential equations. You'll get a sense of power in being able to solve problems that your math courses seem to have ignored.

Stock #2530, Numerical Methods Work, 549p softbound ..... \$19.95



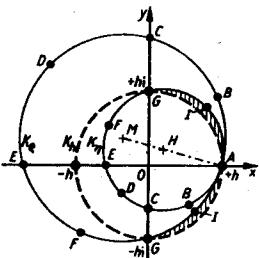
# Math Software & Bookware

## Mathematical Methods in Physics and Engineering 2nd edn

by John Dettman

An algebraically based approach to college-level applications of math—you'll learn about linear algebra, Hilbert spaces, calculus of variations, boundary-value problems, integral equations, analytic functions, integral transforms.

Stock #2033, Math Meth Phys/Eng, 428p softbound .....\$8.95

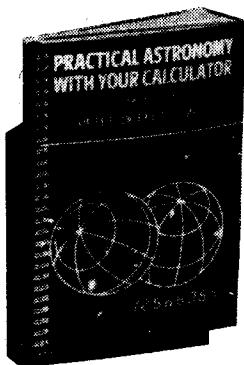


## Practical Astronomy with your Calculator 3rd edition

by Peter Duffett-Smith

All you need is this practical handbook, your scientific calculator, pencil, and paper—you can predict important astronomical phenomena. Theory is kept in the background so detailed instructions can be followed blindly for conversion of time systems and coordinate systems, calculations of planetary positions and phases, motion of the sun and moon, even prediction of eclipses.

Stock #83, Astronomy with Calculator, 185p wirebnd .....\$16.95



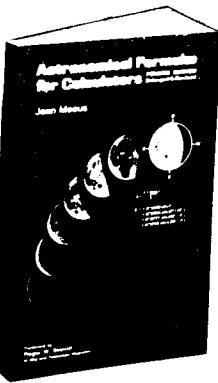
## Astronomical Formulae for Calculators 4th edn

by Jean Meeus

A helping hand for the amateur astronomer who wants to do calculations—by an author so esteemed for his books and articles that asteroid 2213 Meeus was named in his honor.

He has studied the classic treatises to select the main perturbations from among a multitude of smaller effects. 'Secular' terms are included here, so the formulae in this book may safely be used in serious historical investigations.

Stock #2675, Astronomical Formulae, 218p softbound .....\$14.95



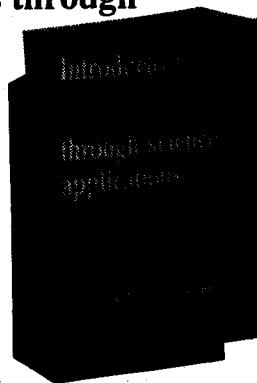
## Introductory mathematics through science applications Cure your math education yourself!

If you feel cheated out of math by your own college education, here's your fix—a new text from England with a physical point of view.

It has so many realistic and important, worked-out examples that you can re-study 2 years of college math by yourself—or rather, with your calculator.

5 chapters describe functions and their uses, then 3 chapters each for differentiation and integration. Substantial, intuitive coverage of ordinary and partial differential equations, probability and statistics.

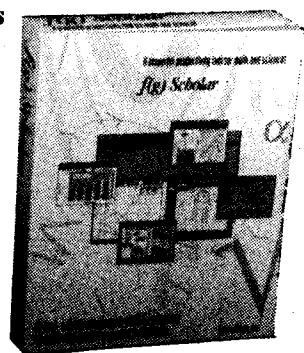
Stock #2242, Math through Science Apps, 547p softbnd .....\$29.95



**f(g) Scholar**  
fully integrated math and graphics software for your PC

Future Graph

*Brand New*



- calculator—over 300 built-in math functions from statistical analysis and matrix algebra to calculus, including vectors and curve-fitting. Extensive business and financial functions
- spreadsheet—WYSIWYG output. You'll use the calculator functions and combine text, graphs, drawings, dozens of fonts and graphical objects, all in one document.
- graphing package—scatter, line, area-fill, complex area-fill, polar, histogram, step, needle, bar and stacked bar vertical (vertical or horizontal), and pie with exploding slices. 3-D graphs.
- drawing package—scalable, with lines, curves, flow-chart symbols, etc. You'll add flair to your graph, spreadsheet or document.
- easy-to-use programming language—develop customized demonstrations or courseware.

Requires DOS 3.3 or later, or OS/2 or MS Windows.

Stock #2906 (f(g) Scholar, 3½") .....\$199

Stock #2907 (f(g) Scholar, 3½") Student Price .....\$99

## PC Macsyma applied math PC-software for scientific and engineering computing

**Macsyma**

$$\lim_{n \rightarrow \infty} \left| \int_C \left[ f(z) - \sum_{k=0}^n a_k z^k \right] dz \right| = 0$$

The newest PC program—evolved from the power and reliability of a quarter-century's leadership in mainframe software.

- Algebra—rational functions & trig with simplification, matrices & linear algebra, equation solving, summation, recurrence, special functions and pattern matching. Fast factoring of large integers.
- Calculus—limits, indefinite & definite & contour integrals, Taylor series, Laplace & Fourier Transforms, vectors & tensors, optimization.
- Differential Equations—twice as many as any competing products, including 96% of the linear, 2nd order ODEs in Kamke's book.
- Integral Equations—1st & 2nd kinds.
- Scientific Graphics—2 & 3D, including colored surfaces, contours, hidden-line removal, window with rotate and zoom.
- Languages—powerful programming, compilers for user-generated functions; generates Fortran, C and TEX.
- On-line Help—1,400 descriptive entries in separate window. Also has 600 executable demonstrations and examples.

Requires PC 386/486 with coprocessor, 8 to 12 MB RAM, 20MB on hard disk, Super VGA, VGA or EGA; dot-matrix, PostScript, LaserJet or DeskJet printer; MS-DOS 5.0 or DR-DOS 6.0, Windows 3.1

Stock #2834 (Macsyma 417.125, 3½") List \$349 .....\$289

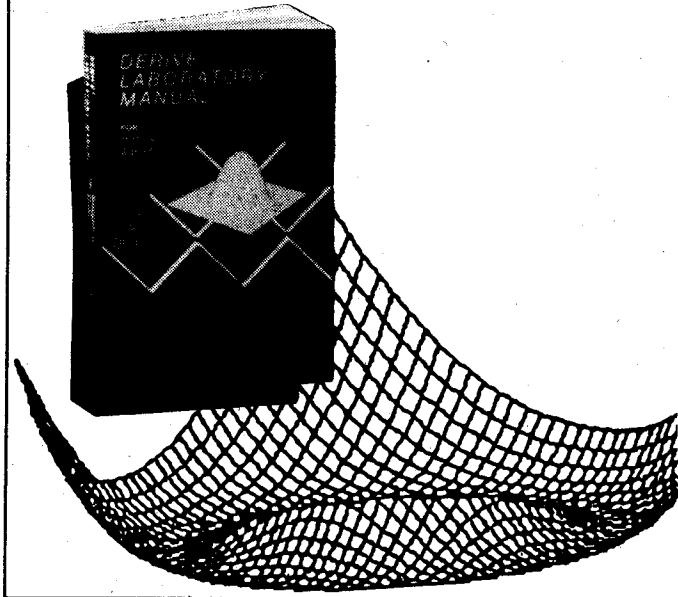
## Read our mail from Ohio—

"... Again, many thanks. It is great dealing with someone who knows what he is talking about, and who can take the proper action when called for." Robert H. Green, Cleveland

# Math Software & Bookware

Want to learn  
some math  
with Derive?

Get it right  
with a book —  
that's the easy way!



## Exploring Math from Algebra to Calculus with Derive

by Jerry Glynn

A dedicated teacher shares his examples, explorations and demonstrations—suitable for use by first and second graders up to calculus students.

Plenty of step-by-step instructions and pictures of the screen at each step. Anyone can use this to learn math and have fun doing it.

Stock #2208, Exploring Math with Derive, 144p softbound.....\$16.95

## Calculus and the Derive Program 2nd edn

by Gilligan/Marquardt

22 lab experiments on your computer with Derive 2.0—a tutorial and a workbook, for the program and for the mathematics, whether or not you're a student. (This is the calculus lab manual mentioned in the Derive Manual, p 224.)

Stock #2479, Calculus and Derive, 148p softbound .....\$16.95

## Derive Lab Manual for Differential Equations

by David Arney

Shows you how to use Derive to solve the problems from a course in DEs—its core is a set of 18 carefully worked-out examples, one of each type.

The idea is for you to work through these examples while seated at your computer, with this book open—it gives details of commands and keystrokes, plus pictured readouts from the Derive display as the work proceeds.

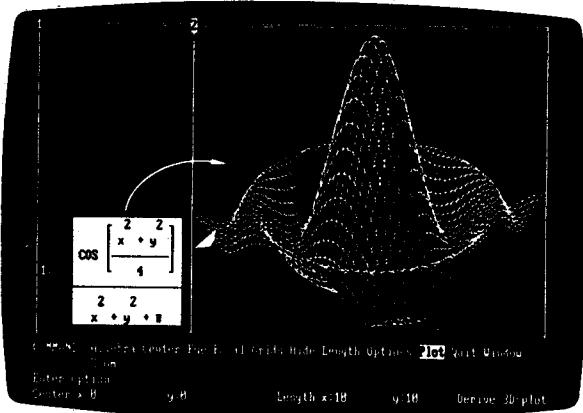
Manual begins with an introduction to the Derive program; it includes many completely solved exercises for you to practice on.

Stock #2360, Derive Lab Manual for DEs, 255p softbound .....\$23.95

## DERIVE 2.56

PC computer algebra, graphics and numerics  
the *Fun-for-the-Mind PC-Calculator program*  
that simplifies BIG algebraic expressions for you

*New Version  
It's Programmable  
with iterative or recursive functions plus  
400 tutorial screen images, examples and  
exercises. More on-line HELP and new functions.*



■ Symbolic, exact algebra, including derivatives, antiderivatives, vectors, matrices, trig, quadratics, cubics, and quartics; integer factors

■ Calculator functions—log, trig, hyperbolic, statistical, financial, complex arithmetic and functions, probability—all to thousand-digit precision if you like

■ SOLVE and INTEGRATE to any precision

■ Finite and infinite limits, sums and products

■ 2D plots with zoom and color; 3D plots with wire frame, perspective and hidden-line removal, zoom, scaling, more

Has attractive 2D screen displays of formulas—you can highlight and extract subexpressions, rearrange or remove or edit, save to file or print. Executes DOS commands from within, generates FORTRAN and Pascal-compatible files. Menu-driven with on-line HELP and examples right on your disk to study.

Runs fine on PC compatibles—on my AT it inverted a 5 by 5 matrix in 4 sec and founds its eigenvalues in 6 sec.

Requires 512K, supports monochrome or color graphics; only the HP 95 version supports printers. Manual included.

PC versions come on 3½" or 5¼" disk and will not work properly in an HP 95. The ROM card version is for the HP 95, yet it also will upload to a PC and automatically adapt to 80-column CGA, EGA or VGA graphics.

DERIVE XM (Extended Memory)—for power users who do large symbolic math problems. It operates identically to the original DERIVE and can use up to 4 gigabytes of extended memory. Requires a 386 or 486 PC with 2MB or more of extended memory.

Stock #2101 (Derive, 5¼") List \$250 .....\$219.95

Stock #2202 (Derive, 3½") List \$250 .....\$219.95

Stock #2563 (Derive, ROM card for HP 95) List \$289 .....\$249

Stock #2748 (Derive XM, 3½") List \$375 .....\$249

*Check out anything you want  
without risking a penny. At EduCALC  
you get a 30 day return privilege.*

# Math Software & Bookware

## MathEdit

Equation Editor for Derive

K-TALK

*Brand  
New*

$$f(x) = \int_0^x e^{-t^2} dt$$

$$\int_0^{0.4} e^{-t^2} dt \approx 0.4 - \frac{0.4^3}{3 \cdot 1!} + \frac{0.4^5}{5 \cdot 2!} - \frac{0.4^7}{7 \cdot 3!} + \frac{0.4^9}{9 \cdot 4!} = 0.3796528708$$

See your equation in its true format as you enter it—complete with greeks, integrals, subscripts, exponents, plus giant radicals and parentheses.

Works as a stand-alone, or as an alternative input to Derive. Prints typeset quality directly or through WordPerfect, Word, most other WPs.

Stock #2882 (MathEdit, 3 1/2") List \$104.....\$98.95

## Scientific Word

a Windows-based front-end to LATEX *Special!*

TCI

$$iB_r [\tilde{a}_{kl}] \equiv \frac{1}{2} (h_{n-1} + h_n) \int_0^R 2\pi r dr [\rho_k^n(r)] \frac{d}{dr} [\Psi_l^n(r)],$$

$$[D_{r,kl}^n]^{-1} \equiv \int_0^R 2\pi r dr \int_{z_n - \frac{1}{2}h_{n-1}}^{z_n + \frac{1}{2}h_n} [\rho_k^n(r)] [D^{-1}(r, z)] [\rho_l^n(r)],$$

$$\psi = -\frac{\kappa\omega\omega'}{4\pi} \int_0^{2\pi} \frac{\cos(\theta - \theta') d\theta}{\sqrt{(x - x')^2 + \omega^2 + \omega'^2 - 2\omega\omega' \cos(\theta - \theta')}}$$

*Special!*

$$1/f(x) = \frac{1}{c_0} \left[ \frac{1}{1 + \left( \sum_1^{\infty} + \sum_{-\infty}^{-1} \right) \frac{c_n}{c_0} e^{inx}} \right]$$

A full document processor—you enter text and math on a continuous screen—no popping in and out of equation boxes. No special codes, just familiar math notation.

Menus and commands for working with files and basic editing are the same as for Windows Write and other WPs. The display on a color monitor is spectacular—math is in red to distinguish it from text.

"*Scientific Word* does an excellent job of combining an intuitive Windows interface with the power of LATEX . . . it is likely to become the scientific word processor of choice for PC users." *Notices of the American Math. Soc.* (Oct. '92).

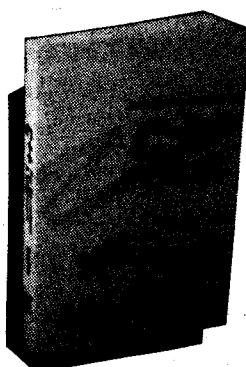
Requires PC 386/486 with 4MB, mouse, Windows 3.0 or higher, 10MB on hard disk; PostScript, LaserJet, DeskJet, Epson 24 or 9-pin.

Stock #2833 (Scientific Word) List \$595.....\$359

## C++

for Scientists and Engineers

by James Smith



Construct your own software tools for numerical analysis—here's a simple approach to algorithm implementation that uses C++ object-oriented programming techniques.

See just how to allow the code to match the precise math formulations of the algorithms. Clear descriptions of math concepts lead to parallel C++ implementations. Plenty of examples to guide you and to illustrate inherent approximation errors and limitations.

Stock #2617, C++ for Sci & Engineers, 322p softbound.....\$32.95

## Calculator Owner's Manuals

 HEWLETT  
PACKARD

Stock #2107, HP 10B Owner's Manual.....	\$10.00
Stock #717, HP 11C Owner's Manual.....	\$10.00
Stock #718, HP 12C Owner's Manual.....	\$10.00
Stock #2108, HP 14B Owner's Manual.....	\$10.00
Stock #719, HP 15C Owner's Manual.....	\$15.00
Stock #720, HP 16C Owner's Manual.....	\$10.00
Stock #2109, HP 17BII Owner's Manual.....	\$10.00
Stock #2732, HP 18C Owner's Manual.....	\$12.95
Stock #2110, HP 19BII Owner's Manual.....	\$10.00
Stock #2111, HP 20S Owner's Manual.....	\$10.00
Stock #2178, HP 21S Owner's Manual.....	\$10.00
Stock #2112, HP 22S Owner's Manual.....	\$10.00
Stock #2113, HP 27S Owner's Manual.....	\$10.00
Stock #2349, HP 28S Owner's & Reference Manuals.....	\$35.00
Stock #2771, HP 32S Owner's & Reference Manuals.....	\$12.95
Stock #2116, HP 32SII Owner's Manual.....	\$10.00
Stock #90526, HP 41CV Owner's Manual, Basic Operation.....	\$10.00
Stock #90531, HP CV Owner's Manual, Operation in Detail.....	\$15.00
Stock #90474, HP 41CX Owner's Manual, Vol I.....	\$15.00
Stock #90492, HP 41CX Owner's Manual, Vol II.....	\$15.00

For other HP 41-related manuals, see our HP 41/71/IL catalog.

Stock #2069, HP 42S Owner's Manual.....	\$10.00
Stock #2250, HP 48SX Owner's Manuals.....	\$24.95
Stock #2251, HP 48 Equation Library Owner's Manual.....	\$9.95
Stock #2331, HP 95LX Owner's Manual.....	\$24.95
Stock #2103, HP 82240B InfraRed Printer Owner's Manual.....	\$10.00

## Accessories for Older-Model Calculators

For the HP 31E, 32E, 33E/C, 34C, 37E, 38E/C:

Stock #82109A [Rechargeable Battery Pack].....	\$14.95
Stock #82087D [Recharger].....	\$19.95
Stock #82110A [Soft Vinyl Case].....	\$4.95

For the HP 35A, 45A, 55A, 70A, 75 C/D, 80A:

Stock #82001B [Rechargeable Battery Pack].....	\$14.95
Stock #82002C [Recharger] not for HP 75 C/D.....	\$34.95
Stock #82059D [Recharger] HP 75 C/D.....	\$18.95
Stock #82066B [Recharger, 220 volt].....	\$22.95

For the HP 65A, 67A:

Stock #13143 [80 Magnetic Cards].....	\$42.95
Stock #82001B [Rechargeable Battery Pack].....	\$14.95
Stock #82002C [Recharger].....	\$34.95

For the HP 97A, 91A, 92A:

Stock #82045A [6 rolls blue Thermal Paper].....	\$9.95
Stock #13143 [80 Magnetic Cards].....	\$42.95
Stock #82033A [Rechargeable Battery Pack, HP 97A only].....	\$24.95

For the HP 10A/19C:

Stock #82051A [6 rolls blue thermal paper].....	\$11.95
Stock #82052A [Rechargeable Battery Pack].....	\$29.95
Stock #82059D [Recharger].....	\$18.95

For the HP 21A, 22A, 25A/C, 27A, 29C:

Stock #82019B [Rechargeable Battery Pack].....	\$14.95
Stock #82041C [Recharger].....	\$21.95

For 82143, 82162 Printers & 82161 Disk Drives:

Stock #82033A [Rechargeable Battery].....	\$24.95
Stock #82095D [Recharger].....	\$18.95

HP 9114 Disk Drive Supplies

Stock #92191Q [Desk Top File, 25 disks].....	\$19.95
Stock #88014B [Rechargeable Battery] List \$65.....	\$58.95

# HP Calculator/Computer/Plotter Supplies

Foreign-Language  
Owner's Manuals  
for HP Calculators

**HEWLETT  
PACKARD**

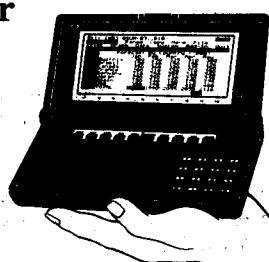
**ENTER** Ingresa la  
copia del número  
en el registro X,  
al registro Y. Se  
utiliza para  
separar números.

Stock #2370D, HP 10B Owner's Manual (Danish) .....	\$19.00
Stock #2370F, HP 10B Owner's Manual (French) .....	\$19.00
Stock #2370G, HP 10B Owner's Manual (German) .....	\$19.00
Stock #2370I, HP 10B Owner's Manual (Italian) .....	\$19.00
Stock #2370S, HP 10B Owner's Manual (Spanish) .....	\$19.00
Stock #2370SW, HP 10B Owner's Manual (Swedish) .....	\$19.00
Stock #2371D, HP 12C Owner's Manual (Danish) .....	\$19.00
Stock #2371DU, HP 12C Owner's Manual (Dutch) .....	\$19.00
Stock #2371F, HP 12C Owner's Manual (French) .....	\$19.00
Stock #2371G, HP 12C Owner's Manual (German) .....	\$19.00
Stock #2371S, HP 12C Owner's Manual (Spanish) .....	\$19.00
Stock #2371SW, HP 12C Owner's Manual (Swedish) .....	\$19.00
Stock #2372F, HP 17BII Owner's Manual (French) .....	\$19.00
Stock #2372G, HP 17BII Owner's Manual (German) .....	\$19.00
Stock #2372S, HP 17BII Owner's Manual (Spanish) .....	\$19.00
Stock #2373F, HP 19BII Owner's Manual (French) .....	\$19.00
Stock #2373G, HP 19BII Owner's Manual (German) .....	\$19.00
Stock #2373S, HP 19BII Owner's Manual (Spanish) .....	\$19.00
Stock #2374F, HP 28S Owner's Manual (French) .....	\$19.00
Stock #2374G, HP 28S Owner's Manual (German) .....	\$19.00
Stock #2374S, HP 28S Owner's Manual (Spanish) .....	\$19.00
Stock #2375F, HP 32SII Owner's Manual (French) .....	\$19.00
Stock #2375G, HP 32SII Owner's Manual (German) .....	\$19.00
Stock #2375S, HP 32SII Owner's Manual (Spanish) .....	\$19.00
Stock #2376F, HP 42S Owner's Manual (French) .....	\$19.00
Stock #2376G, HP 42S Owner's Manual (German) .....	\$19.00
Stock #2376S, HP 42S Owner's Manual (Spanish) .....	\$19.00
Stock #2377F, HP 48SX Owner's Manual (French) .....	\$30.00
Stock #2377G, HP 48SX Owner's Manual (German) .....	\$30.00
Stock #2377S, HP 48SX Owner's Manual (Spanish) .....	\$30.00
Stock #2378F, HP 95LX Owner's Manual (French) .....	\$35.00
Stock #2378G, HP 95LX Owner's Manual (German) .....	\$35.00
Stock #2378S, HP 95LX Owner's Manual (Spanish) .....	\$35.00
Stock #2380G, HP 14B Owner's Manual (German) .....	\$19.00
Stock #2380S, HP 14B Owner's Manual (Spanish) .....	\$19.00
Stock #2381F, HP 21S Owner's Manual (French) .....	\$19.00
Stock #2381G, HP 21S Owner's Manual (German) .....	\$19.00
Stock #2382I, HP 1L Owner's Manual (Italian) .....	\$25.00

## SNAP Glass & Plastic Cleaner

### Mist Products

• Safe—eliminates static charges	
• Clean—repels dust, dirt, smears and water	
The only cleaner recommended by HP for cleaning computers and calculators—used also by Ernst Leitz for pre-assembly cleaning of optical surfaces and by Mt Palomar Observatory.	
Stock #2490 [SNAP G&P Cleaner, 1 oz] .....	\$1.95
Stock #2491 [SNAP G&P Cleaner, 8 oz] .....	\$4.95



### Floppy Disks

Stock #92192A [3 1/2" 710K 2-sided; box of 10] List \$19	\$12.50
Stock #92192X [3 1/2" 1.42M 2-sided; box of 10] List \$42	\$27.00
Stock #92190A [5 1/4" 360K 2-sided; box of 10] List \$11	\$7.50
Stock #92190X [5 1/4" 1.2M 2-sided; box of 10] List \$19	\$12.95

### DATA TECH/BASF Floppy Disks—high reliability and low cost

Stock #1351 [3 1/2" 710K 2-sided] List \$4	ca \$1.99
Stock #1352 [5 1/4" 360K 2-sided] List \$2	ca \$1.99
Stock #1353 [5 1/4" 1.2M 2-sided] List \$3	ca \$1.49

### Data Cartridges

Stock #88140LC [67 Mbyte Tape Cart., formatted] List \$219	\$169.00
Stock #88140SC [16 Mbyte Tape Cart., formatted] List \$169	\$129.00

### PC Accessories & Cables

Stock #35177C [Print Cache software, all HP printers, 3 1/2" & 5 1/4"] List \$149	\$96.00
Stock #92203E [EZ Queue 1000] List \$585	\$350.00
Stock #92215N [HP-to-AppleTalk on PhoneNET cable] List \$43	\$28.50
Stock #92215S [HP-to-Apple Macintosh cable] List \$22	\$15.95

### LaserJet 2000 Toner

Stock #92282A [LaserJet 2000 Toner, 1 kg] List \$93	\$78.95
---	---------

*Check out anything you want without risking a penny.  
At EduCALC you get a 30-day return privilege.*

### Read our mail from Mississippi

Thank you for your quick response and help. Glad to see that EduCALC is still one company who has the best interest of their customers in mind. I have repeatedly recommended your company to many friends who have purchased items from you. They also received quick and courteous service. Ron Burnham, Biloxi

# HP Calculator/Computer/Plotter Supplies



**HEWLETT  
PACKARD**



## Fiber-Tip Pens

Find your stock number and color below; then fill in order blank like sample here:

Stock #xxxxxx [Fiber Tip Pens, (color), 5 pen package] List \$7.....\$5.25

Transparency Pens	Paper Pens	Color
0.3 mm	0.6 mm	0.3 mm
#17725T	#17726T	#17825P
#17727T	#17728T	#17827P
#17729T	#17730T	#17829P
#17731T	#17732T	#17830P
#17733T	#17734T	#17832P
#17735T	#17736T	#17833P
#17737T	#17738T	#17835P
#17739T	#17740T	#17837P
#17741T	#17742T	#17838P
		#17841P
<b>Multi-color, 5 pen package</b>		
#17744T	#17843P	#17844P
#17745T	#17746T	#17845P
#17747T	#17748T	#17846P
#17749T	#17750T	#17847P
		#17848P
		#17849P
		#17850P
		Red-Violet
		Bl/R/B/G/Y
		Bl/B/A/G/Y
		R/O/Br/Y/Rv

## Media and pen compatibility

Use the guide below to select the right type of plotter pen for your application.

Media type		Fiber-tip pens		Drafting pens	
	Paper	Transparency	Refillable	Disposable	Rollerball pens
Plotter paper	•			•	•
Transparency film		•			
Glossy paper	•	•			
Tracing bond					•
Vellum			•	•	
Polyester film			•	•	

## Disposable Drafting Pens for vellum or paper

Find your size and color in chart below—you'll see 2 stock numbers in the corresponding box. The upper, 6-character stock number is correct for the newer SurePlot version; both pen versions come 4 to a package at the same price—please fill in your order blank like the sample here:

Stock #xxxx-xxxx [Drafting Pens, (size & color); 4 in pkg] List \$22.....\$13.95

Color	0.25mm	fine .35mm	med .50mm	wide .7mm
Black	#17762V	#17763V	#17764V	#17765V
	#5061-7619	#5061-7562	#5061-7620	#5061-7572
Blu/R/G/Blk	#17932V	#17933V	#17934V	#17935V
				#5061-7576
Or/Ye/Br/Vi	#17942V	#17943V	#17944V	#17945V
		#5062-1559	#5062-1572	#5062-1573
Blue	Green	Red		
Single Color Packages of 4	#17773V	#17783V	#17793V	
available in 0.35mm only	#5061-7563	#5061-7564	#5061-7565	
Multi-width Package of 4,	0.25/0.35/0.50/0.70		#17760V	
available in Black only			#5062-1556	

## Disposable Drafting Pens for polyester film, 2 pens in pkg

Stock #5062-1592 [0.25mm, Black] List \$22.....	\$15.95
Stock #5062-1593 [0.35mm, Black] List \$22.....	\$15.95
Stock #5062-1594 [0.5mm, Black] List \$22.....	\$15.95
Stock #5062-1595 [0.7mm, Black] List \$22.....	\$15.95
Stock #5061-7578 [Disposable-Pen Adapters & Caps, 4 in pkg] List \$8.....	\$6.50

## Rollerball Pens, 0.3mm (narrow), 4 pens in package

Stock #5061-5033 [Rollerball Pens, Black, 0.3mm] List \$14.....	\$9.95
Stock #5061-5034 [Roller Pens, Red, 0.3mm] List \$14.....	\$9.95
Stock #5061-5035 [Roller Pens, Green, 0.3mm] List \$14.....	\$9.95
Stock #5061-5036 [Roller Pens, Blue, 0.3mm] List \$14.....	\$9.95

## Refillable Drafting Pens—long body, points

Stock #9260-0579 [0.7mm] List \$25.....	\$17.95
Stock #9260-0588 [0.35mm] List \$25.....	\$17.95
Stock #9260-0741 [0.25mm] List \$29.....	\$21.95
Stock #9260-0742 [0.18mm] List \$32.....	\$21.95
Stock #9260-0743 [1.0mm] List \$25.....	\$17.95
Stock #9260-0744 [0.5mm] List \$25.....	\$17.95
Stock #07580-60025 [Pen, long body, adapter & cap] List \$10.50.....	\$7.95

## Refillable Drafting Pens—short body, points

Stock #9300-0956 [0.25mm] List \$29.....	\$24.50
Stock #9300-0957 [0.35mm] List \$25.....	\$19.95
Stock #9300-0958 [0.50mm] List \$25.....	\$19.95
Stock #9300-0959 [0.70mm] List \$25.....	\$19.95
Stock #5061-8119 [Drafting Pen, short body, adapter & cap] List \$18.....	\$12.95

## Pen Organizers, Acrylic—save desk space

Stock #92177T [Short Organizer, 30-60 pens] List \$43.75.....	\$28.50
Stock #92177U [Long Organizer, 30-60 pens] List \$46.75.....	\$29.95
Stock #92177V [Personal Organizer, 33 pens] List \$34.75.....	\$22.95

**Plotter Paper and Film — Glossy Paper:** use with HP-7220, 7221, 7225, 7470, 7475, 7550, Color-Pro printers & with transparency pens  
Stock #17900G [A-size, 8 1/2" x 11"; 100 sheets] List \$16.....\$13.45  
Stock #17902G [B-size, 11" x 17"; 100 sheets] List \$28.....\$22.95

**Non-Glossy Paper:** for all HP plotters; use paper pens.

Stock #17800P [A-size, 8 1/2" x 11"; 50 sheets] List \$5.50.....	\$4.50
Stock #17801P [A-size, 8 1/2" x 11"; 250 sheets] List \$13.....	\$9.95
Stock #17803P [A4 Metric size; 250 sheets] List \$13.....	\$9.95
Stock #17804P [B-size, 11" x 17"; 50 sheets] List \$10.....	\$7.95
Stock #17805P [B-size, 11" x 17"; 250 sheets] List \$26.....	\$18.95

**Transparency Film — A-size, 8 1/2" x 11", 50 sheets, for plotter listed below**

Stock #17700T [HP-7470, ColorPro Plotters] List \$50.....	\$33.95
Stock #17702T [7220, 7221, 7225, 7475, 7550, 9872] List \$50.....	\$33.95

**Vellum, 100% rag with coated surface**

Stock #9280-0602 [B-size 11" x 17"; 150 sheets] List \$30.....	\$21.95
--	---------

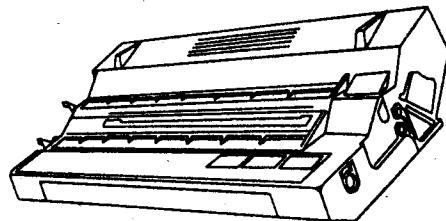
**Polyester Film, 3-mil coated translucent media**

Stock #9280-0607 [B-size 11" x 17"; 50 sheets] List \$32.....	\$22.95
---	---------

# HP Printer Supplies



HEWLETT  
PACKARD



**"No one ever got fired for buying  
genuine HP Toner Cartridges."**

## LaserJet Toner Cartridges

Stock #92285A [LJ Ser. I Toner, black]	List \$125	\$91.95
Stock #92295A [LJ Ser. II, III, IID & IID Toner, black]	List \$125	\$91.95
Stock #92275A [LJ Ser. IIP, IIP+, IIP Toner, black]	List \$95	\$69.95
Stock #92291A [LJ III Si Toner, black]	List \$169	\$124.95
Stock #92282A [LJ 2000 Toner, 2.5 kg]	List \$93	\$64.95
Stock #92298A [LJ4 Toner, 6000 pages]	List \$150	\$119.95

## LaserJet Memory

Stock #33474B [1MB board; LJ IIP, III, IIIP/D]	List \$230	\$154.95
Stock #33475B [2MB board; LJ IIP, III, IIIP/D]	List \$390	\$289.95
Stock #C2063A [1MB SIMM, LJ III Si]	List \$169	\$124.95
Stock #C2065A [4MB SIMM, LJ III Si]	List \$499	\$333.95

## LJ Scalable Typefaces—Disk Coll. & Indiv., 3½" & 5¼"

Stock #C2050A#D80 [Distinctive Documents I]	List \$159	\$109.95
Stock #C2050A#D82 [Brilliant Presentations I]	List \$159	\$109.95
Stock #C2050A#D84 [Decorative Words I]	List \$159	\$109.95
Stock #C2050A#D03 [Decorative I]	List \$99	\$67.95
Stock #C2050A#D05 [ITC Zapf Dingbats]	List \$99	\$67.95
Stock #C2050A#D06 [CG Century Schoolbook]	List \$99	\$67.95
Stock #C2050A#D08 [ITC Avant Garde Gothic]	List \$99	\$67.95

## LaserJet Transparencies and Labels

Stock #92296T [LJ Transparencies, 50 each]	List \$25	\$19.95
Stock #92296A [LJ Labels 1" x 2-5/8", 3000 each]	List \$32	\$27.95
Stock #92296B [LJ Labels 1-1/3" x 4", 1400 each]	List \$32	\$27.95
Stock #92296C [LJ Labels 1" x 4", 2000 each]	List \$32	\$27.95
Stock #92296F [LJ Labels 1-1/2" x 1-3/4", 8000 each]	List \$32	\$27.95
Stock #92296J [LJ Labels 1-1/2" x 4", 1200 each]	List \$44	\$37.95

## LaserJet Bitmapped Font Cartridges

Stock #92286T [LJ Font Cart; Tax 1]	List \$195	\$169.95
Stock #92286PC [LJ Font Cart; Pro Collection, 65 fonts]	List \$300	\$208.00
Stock #92286IC [LJ Font Cart; International Collection]	List \$325	\$225.00
Stock #C2053A#C01 [LJ Font Cart; Word Perfect]	List \$195	\$169.95
Stock #C2053A#C02 [LJ Font Cart; Microsoft]	List \$195	\$169.95
Stock #C2053A#C03 [LJ Font Cart; Polished Worksheets]	List \$195	\$169.95
Stock #C2053A#C04 [LJ Font Cart; Persuasive Presentations]	List \$195	\$169.95
Stock #C2053A#C05 [LJ Font Cart; Forms, Etc.]	List \$195	\$169.95
Stock #C2053A#C06 [LJ Font Cart; Bar Codes & More]	List \$195	\$169.95
Stock #C2053A#C07 [LJ Font Cart; Text Eqns, Mth Symbols]	List \$195	\$169.95
Stock #C2053A#C08 [LJ Font Cart; Global Text, Int'l Chrcrs]	List \$195	\$169.95
Stock #C2053A#C09 [LJ Font Cart; Pretty Faces]	List \$195	\$169.95

## LaserJet Soft Fonts

Stock #33412DC [Presentation/Letter Gothic, 5¼"]	List \$200	\$174.95
Stock #33412EA [Prestige Elite Family, 5¼"]	List \$200	\$124.95

## Thermal Paper

Stock #82931A [Blue, box of 2; for HP 85]	.....	\$39.95
Stock #82954A [Black, box of 3; for HP 85]	.....	\$39.95

## LaserJet Paper Trays and Feeders—U.S. Sizes

Stock #92285B [LJ I Letter Paper Tray, 100 sheets]	List \$59	\$40.50
Stock #92285C [LJ I Legal Paper Tray, 100 sheets]	List \$59	\$41.95
Stock #92295C [LJ II Legal Paper Tray, 200 sheets]	List \$79	\$52.95
Stock #92275B [LJ IIP Letter Paper Tray, 250 sheets]	List \$69	\$46.95
Stock #92275F [LJ IIP Envelope Feeder, 20 envelopes]	List \$89	\$59.95
Stock #92291B [LJ III Si Letter Paper Tray, 500 sheets]	List \$129	\$79.95
Stock #92291C [LJ III Si Legal Paper Tray, 200 sheets]	List \$129	\$79.95
Stock #92297B [LJ II, IID, III, IIP Letter Tray, 200 sheets]	List \$69	\$43.95
Stock #92297C [LJ II, IID, III, IIP Legal Tray, 200 sheets]	List \$79	\$43.95
Stock #92297F [LJ II, IID, III, IIP Env Tray, 15 envelopes]	List \$89	\$43.95
Stock #92211Z [LJ fax stand, all II, all III]	List \$94	\$62.95
Stock #33472A [LJ IIP, IIIP Lower Cassette, 250 sheets]	List \$195	\$137.95

## PaintJet & PaintWriter Supplies

Stock #51606A [PJ Ink Cartridge, black]	List \$30	\$24.95
Stock #51606C [PJ Ink Cart, red/grn/blue]	List \$35	\$28.95
Stock #51630P [PJ Fanfold Paper, 250 sheets]	\$21	\$17.95
Stock #51630Q [PJ film w/sleeves, 50 sheets]	\$65	\$48.95
Stock #51630Y [PJ Cu Paper, 200 sheets]	\$21	\$17.95
Stock #51606B [PJ/PW XL Cyan Ink Cartridge]	List \$30	\$24.95
Stock #51606R [PJ/PW XL Magenta Ink Cartridge]	List \$30	\$24.95
Stock #51606Y [PJ/PW XL Yellow Ink Cartridge]	List \$30	\$24.95

## ThinkJet Supplies

Stock #92261A [TJ Printhead Cartridge]	List \$11	\$8.95
Stock #51604A [TJ Printhead Cartridge, Plain Paper]	List \$11	\$8.95
Stock #51605B [TJ Printhead Cartridge, Blue]	List \$13	\$9.95
Stock #51605G [TJ Printhead Cartridge, Green]	List \$13	\$9.95
Stock #51605R [TJ Printhead Cartridge, Red]	List \$13	\$9.95
Stock #92261N [TJ Paper, 2500 sheets]	List \$75	\$65.00
Stock #51630A [Jetpaper, Z-fold, 500 sheets]	List \$22	\$17.95
Stock #51630D [Jetpaper, Wide Z-fold, 2500 sheets]	List \$90	\$64.95
Stock #92250V [TJ Dust Cover]	List \$19	\$13.95

## DeskJet, DJ PLUS, DJ500 & DeskWriter Supplies

Stock #51608A [DJ Ink Cartridge, black]	List \$20	\$16.95
Stock #51626A [DJ Ink Cartidge, high top]	List \$32	\$28.95
Stock #51625A [DJ Tri Color Ink Cartridge]	List \$35	\$31.95
Stock #22706B [DJ Prestige Elite Font]	List \$79	\$59.95
Stock #22706C [DJ Letter Gothic]	List \$75	\$59.95
Stock #22706M [DJ Presentations (ASCII) Font Card]	List \$79	\$59.50
Stock #22706R [DJ Times Rom Font Card]	List \$89	\$66.50
Stock #22706T [DJ Helvetica Font Card]	List \$89	\$66.50
Stock #22706W [DJ WordPerfect Carts (2)]	List \$140	\$99.95
Stock #22707B [DJ 256K RAM Cartridge]	List \$175	\$129.95
Stock #22707F [DJ PLUS/500 Epsom Emulation Cart]	List \$79	\$59.95
Stock #22707L [DJ Landscape Letter Gothic Font Card]	List \$79	\$59.95
Stock #22708C [DJ Times Rom ASCII]	List \$79	\$59.95
Stock #22709A [DW Soft Font Collection]	List \$195	\$139.95
Stock #C2109B [DJ 500 Global Text Font Cart]	List \$79	\$59.95
Stock #C2109C [DJ 500 Garamond Text Font Cart]	List \$79	\$59.95

## Impact Printer Supplies—inc. Rugged Writer 2235A/B/C/D

Stock #92154B [Print Head for 293X Printer]	List \$175	\$108.00
Stock #92156S [RW Ribbon, 3 in box]	List \$41	\$32.95
Stock #12235A [RW Font Cartridge]	List \$150	\$106.00

(Fonts are Prestige Elite, Letter Gothic, TMS Roman PS, Helv. 10 & 16K RAM)

## Printer Ribbons (black, for printers listed below)

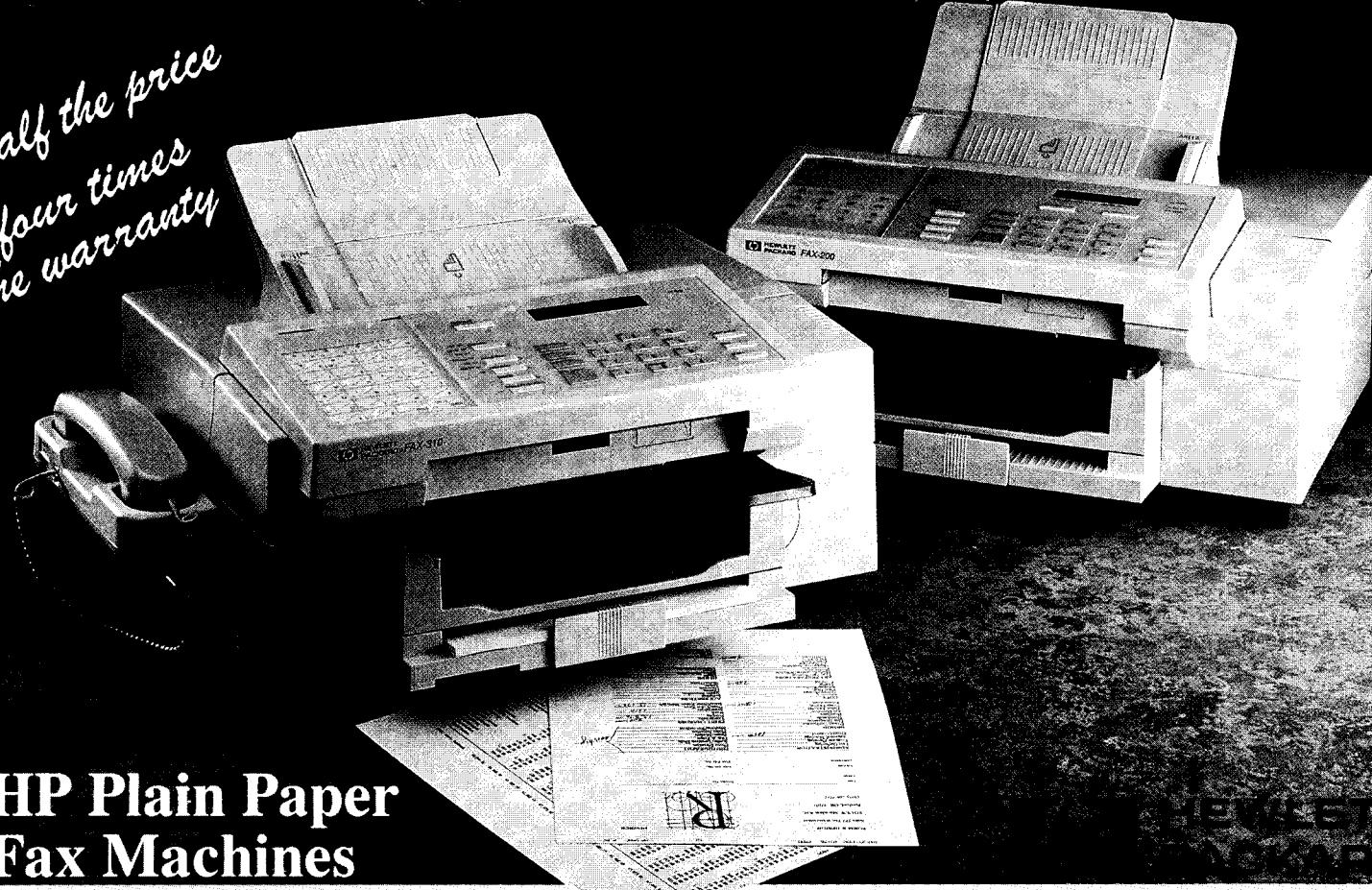
Stock #92155A [for 2631A/B, 2635A/B, 2639A; box of 3]	List \$56	\$43.95
Stock #92155B [for 2631G; box of 3]	List \$57	\$47.50
Stock #92155L [for 2932/33/34A; box of 3]	List \$66	\$51.95
Stock #92156A [for 82905A/B, 82906A; box of 2]	List \$15	\$10.50
Stock #92162A [for 2608A/S; box of 3]	List \$69	\$49.50
Stock #92162M [for 2562C; box of 3]	List \$70	\$42.50

*In a hurry? Use our UPS 2ND DAY AIR*

*A Big Hurry? UPS OVERNITE AIR!*



half the price  
four times  
the warranty



HEWLETT  
PACKARD

## HP Plain Paper Fax Machines

*Why didn't you get one in the first place?*

*Are you tired of curly, greasy faxes now?*

*What if you could get a plain-paper fax  
machine for \$999?*

I mean real HP quality, with rock-solid specs plus goodies like auto-feeding.

These new Hewlett-Packard machines use the unique HP inkjet printing system, the same technology as in the DeskJet and DeskWriter printers—so your faxes are dark, crisp and readable, and so your machine is extraordinarily reliable. So reliable, in fact, that it carries a 1-year warranty, something you'll be hard-pressed to find in other fax products (that's the kind of protection you deserve—the kind you expect from HP).

There are two models, the power-user's top-of-the-line HP FAX-310 and the beauty-on-a-budget HP FAX-200. They both have a 1-year warranty with overnight exchange, can share a line with telephone and answering machine and receive with a 12-page out-of-paper memory (28 pages expandable for the 310).

They both broadcast sequentially to 50 locations (100 for the 310), auto-dial and redial and delayed-dial and speed-dial, plus they have one-touch dial keys.

Both models feature automatic document reduction, copier function, and 20-page automatic document feeding.

They both have 32 levels of greyscale, accept letter or legal or A4 paper, require 120 V AC-60 Hz power, measure 20 x 15 x 9 inches, transmit at 12 sec/page, at 9600/7200/4800/2400 bps with auto-fallback.

The two big differences in these models are memory and transmission resolution. The 200 has 256K standard memory, while the 310 has 512K and is expandable. Both can transmit at standard and at fine, 200 dpi resolutions, and both receive full 300 dpi images as well. But the FAX-310 can also transmit at 300 dpi, so the world can play catch-up to your technology for a while.

Do you want fuzzy, floppy, fading faxes? Or faxes you can actually read, write on and work with? Here's your solution—at this breakthrough price you can't afford not to have one.

Stock #C2135A [HP FAX-200] List \$1500.....\$999  
Stock #C2136A [HP FAX-310] List \$2000.....\$1329.....\$1309

### Why plain-paper faxes?

- ✓ plain paper **lies flat**—no curls, no tubes
- ✓ plain paper **loads easily**—just drop a hundred sheets of paper into the front tray; no threading of rolls
- ✓ plain paper is **permanent**—printed with water-resistant ink that doesn't break down and fade
- ✓ plain paper is **signature ready**—document quality, for contracts, orders, reports
- ✓ plain paper is **writable**—you can make notes or highlights on it; pens and pencils don't slide around on it and colors don't change as you write
- ✓ plain paper is **readable**—black text and graphics pop off of bright white paper, so you won't have to squint, angle the paper just right or call the sender to read you the fax
- ✓ plain paper is **colorful**—you can use blue, buff, etc., stock paper to color code your faxes.

### Can this machine pay for itself?

Sure. The cost of plain-paper faxes is about 4 cents a page, for both paper and ink cartridge. Thermal paper costs you maybe 7 cents a page, for a 3 cent difference. Furthermore, many offices routinely put thermal faxes through the copier before they are delivered to their addressee or to a file.

Let's suppose you receive 100 faxes a day (the numbers seem to increase steadily) and that you copy half of them. Then you will save \$3 on thermal paper plus another \$2 for not copying 50 pages at 4 cents. That's \$5 every day, and there are 250 business days in a year. This projects to \$1250 savings, just during your 1-year warranty. That's enough to pay for your HP fax machine right there—you'll show a profit every future year, and the convenience and the good looks will be free!



Scan Copyright ©  
The Museum of HP Calculators  
[www.hpmuseum.org](http://www.hpmuseum.org)

Original content used with permission.

Thank you for supporting the Museum of HP  
Calculators by purchasing this Scan!

Please do not make copies of this scan or  
make it available on file sharing services.