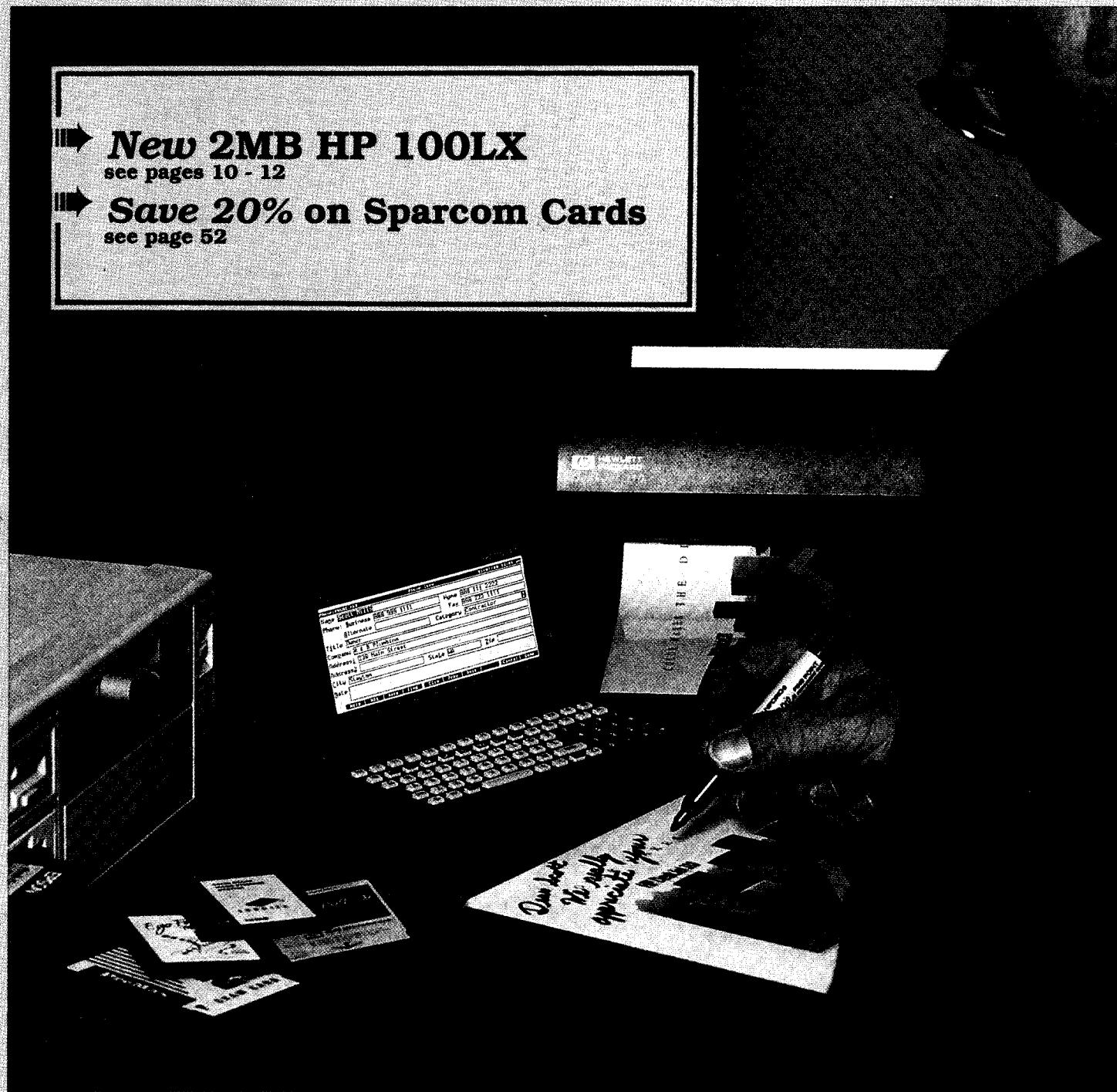


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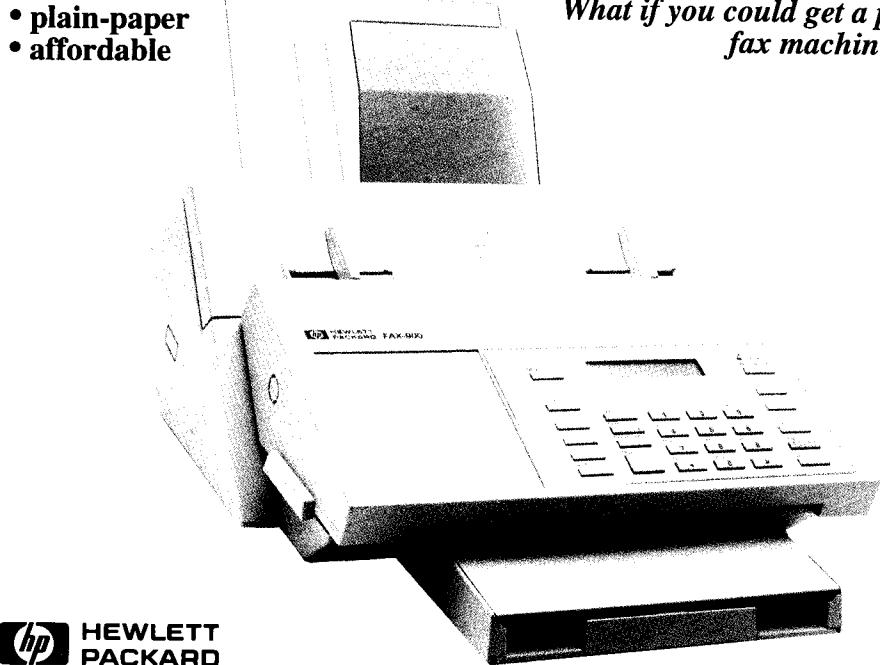


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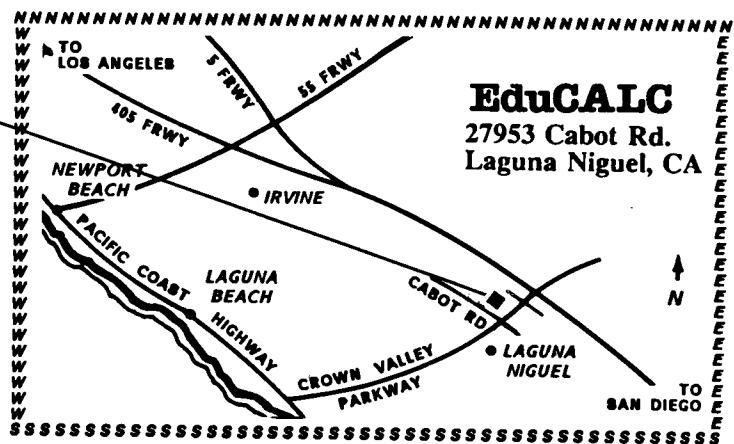
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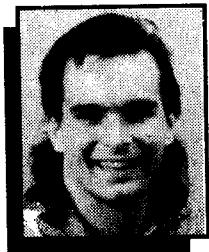




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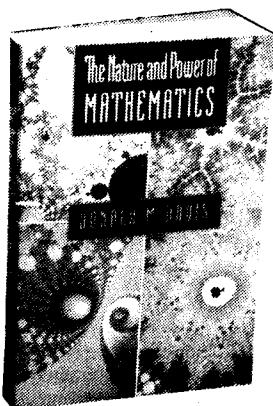
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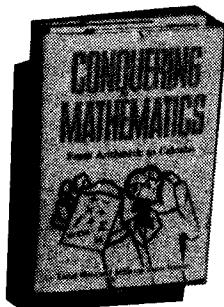
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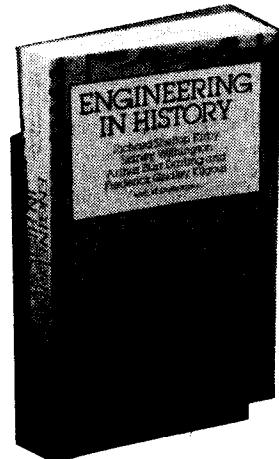
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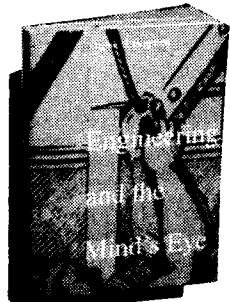
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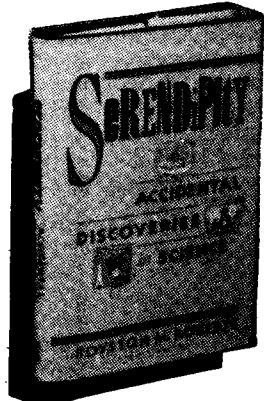
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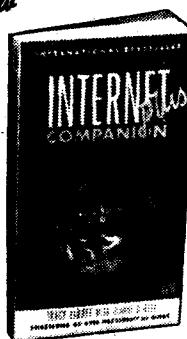
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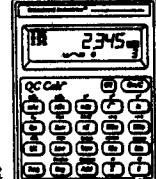
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Stock #C1QC [QC Calc] List \$80 . . . . . \$69.95

## INCH-MATE

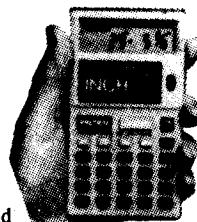
### The affordable Foot/Inch/Fraction Calculator

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

+, -,  $\times$ ,  $\div$ , 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



## The Digital Book System DBS-2

Franklin

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

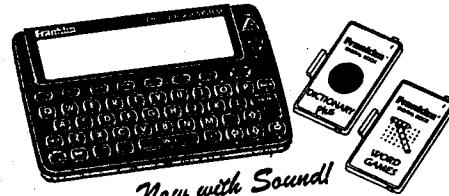
The system comes to you with 2 plug-in books. One is the *Merriam-Webster Dictionary Plus*, with a quarter-million definitions, a half-million synonyms and nearly a hundred thousand spelling-checks. The other plug-in book is *Word Games*, ten games such as Hangman, Anagrams and Jumble, Letter Poker,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

DBS-2 system comes with earphones, so your books will be enhanced with the added dimension of sound—a trumpet blast, a bell alert, pronounced words, animal and bird sounds, music—all bring the words to life!

Two Digital Books can be plugged in at once (see options below). DBS-2 also has a serial port, for up to 19,200 BPS interfacing with a PC, laptop, modem, etc. Soft carry-case, lithium batteries, demo cartridge, earphones included.

Stock #DBS21 [DBS-2 & Dictionary & Games] List \$200 . . . \$169.95



Now with Sound!

**Personal Organizer**—plugs into DBS-2 with 128K memory, stores thousands of phone/address entries, appointments, more. Includes scheduler, phone/address book, calendar, world-time clock, calculator, clock with day & date.

Look up entries by First or Last Name, City & State, or do combination searches using several criteria. Card has battery to protect data when removed from DBS. Instant back-up can be easy with second Organizer card.

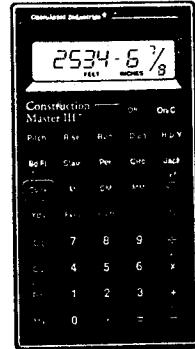
Stock #IC107 (DBS Personal Organizer) List \$130 . . . . . \$99.95

**Concise Columbia Encyclopedia, 2nd edn**—the entire text! You'll use several key words to do a full text search—searches by word, article type, subject, time period, geographic location, more. Includes search thesaurus and built-in phonetic spelling correction.

Stock #IC114 (DBS Encyclopedia) List \$100 . . . . . \$79.95

## 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

## Wizard OZ9500 Pocket Communicator

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

*Brand New*

- integrated FAX software
- write or draw on screen
- touch-screen menus/icons

Use new Graphical User Interface (GUI) to enter/access data—just touch the screen with stylus or finger to activate menus or get on-line help.

Large screen and keyboard that is 60% of standard size let you create documents easily—reports, memos, letters, even your business schedule.

Send/receive/print email or FAX with built-in software (modem optional) right from your hotel room. Built-in organizer software including word-processor. Infrared links you to other 9000 Series Wizards, PC or printer.

OZ 9500 has 256K memory (about 2000 Names and Numbers). Software Card Port compatible with most 8000-series IC cards, plus RAM cards for more workspace or back-up. Runs about 2 months on 2 AAA batteries (optional AC adapter #EA11E).

Stock #OZ9500 [Wizard, 256K RAM] List \$590 . . . . . \$419

## Wizard OZ-9600II

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

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

*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

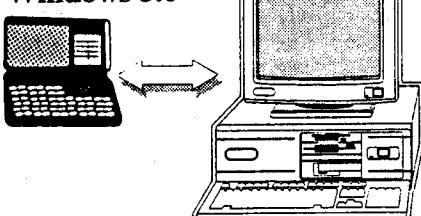
Stock #OZ9600II [Wizard] List \$650 . . . . . \$499

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

Stock #3002 [Utilitarian Belt Holster] . . . . . \$19.95

## Link your Wizard to a PC running Windows 3.0

IntelliLink



Transfer, translate and reconcile Tel, Schedule, ToDo, Business Card, Memo and Outline between a Sharp Wizard (5/7/8/9000 series as well as YO-600 and YO-610) and your desk PC applications such as Sidekick 2.0, Excel, Organizer, 1-2-3, dBASE, Paradox, AmiPro, Word, WordPerfect, Commence, Current and PackRat.

Requires Serial Interface Cable.

Stock #2758 [IntelliLink 2.5, 3.5" & 5.25"] List \$100 . . . . . \$89.95

Stock #2925 [OZ-9600 Serial Cable, BSE] . . . . . \$49.95

## 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 . . . . . \$399

## Wizard OZ-9000 Series Optional Accessories

Pocket FAX/Modem CEFM1 2400 data/9600 send fax requires CE137T. Series Link for PCs (Windows OZ990W; DOS OZ990D) and OZ 993 Series Link for Macintosh requires either the CER2 wireless interface (plus a standard PC cable) or any previous Wizard Link cable. FAX/Modem Adapter CE137T converts Wizard serial port into both a 9-pin RS232C (PC) and 8-pin RS422 (Mac) port to connect to standard PC modem or CEFM1. Wireless Interface CEIR1 goes directly to PC printer (BJ-10, LQ, FX, Proprietary, LaserJet). Wireless Interface CER2 connects Wizard to PC or Mac via infrared (for use with Link Options listed above).

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]	...	\$134.95
Stock #OZ784 [RAM Card, 512K] List \$250	...	\$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 #CEFMI [Fax/Modem, 9500 only] List \$200	...	\$179.95
Stock #OZ990W [Windows PC Link] List \$90	...	\$79.95
Stock #OZ990D [DOS PC Link] List \$90	...	\$79.95
Stock #OZ993 [Mac Link] List \$90	...	\$79.95
Stock #CE137T [Fax/Modem Adapter, 9500 only] List \$80	...	\$69.95
Stock #CEIR1 [Infrared to printer]	...	\$124.95
Stock #CER2 [Infrared Interface to PC] List \$120	...	\$104.95
Stock #CE315L [Dubbing Cable]	...	\$69.95
Stock #EA11E [AC Adapter]	...	\$5.95

# PDAs

## Series 3a

Psion

*the pocket computer for  
word processing and programming*

*Infoworld's #1 palmtop  
Best of Comdex, Fall '91  
1991 Byte award of distinction*



The new Series 3a is a **double-strength PDA**—it was already the *Editor's Choice*, but now it can *talk*, too!

► **Screen doubles its width and doubles its length**—so it can now show you a full page, 80 columns × 17 lines

► **Resolution quadruples**, to CGA, so it gives you full gray-scale graphics, wonderful graphics fonts, and an easy-to-use windows-like graphics interface

► **RAM doubles** size, to 256K, and **CPU doubles** its speed, to 7.7 Mhz, so it does twice as much for you, twice as fast

► **Speaker doubles** in size, so you can do Voice Recording with the *digital audio system* and built-in mike—so when you're away on business, *you can wake up to the sounds of your own children*

► **Built-in ROM more than doubles**, to 1 Meg, to bring you upgrades on every PIM program

► **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*.

Now has full-page *Print Preview* (to view entire document), new fonts so you can see the full paper width and password protection with date encryption. 18 printer drivers.

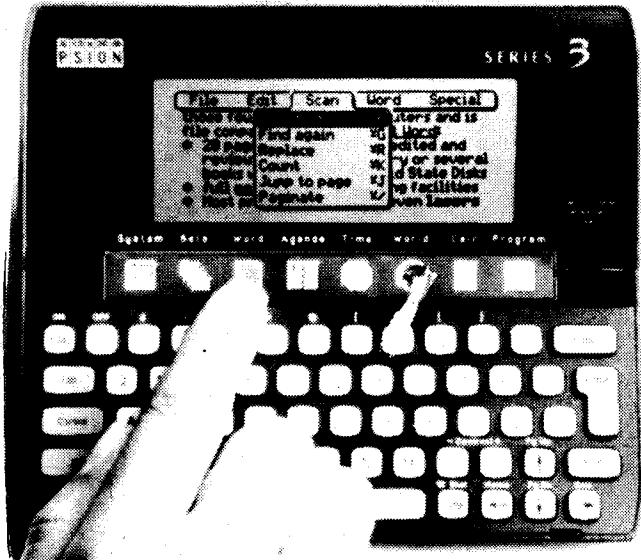
► **built-in Graphic Programming Language**—OPL/w is BASIC-like and structured, has more than 200 statements, commands and functions, plus it handles graphics, windows and menu control. Programs are compiled and run from the program editor and can be added to the main display system with their own icons,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

Now has *hot-keys* for 6 viewing modes (day, week, year and anniversary screens, plus full calendar year). You can customize and view multiple To-Do lists at once on screen.

► **built-in Spreadsheet**—1-2-3 compatible, and you can now view an entire 12 month/year at a glance. Password and encryption.

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!



■ **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, peizzo buzzer; Epson and IBM Proprinter printer drivers (and compatibles)

■ **Specs**—2 proprietary card slots, for memory or additional software. Runs for months on 2 AA cells. Pocket-sized, weighs 11 oz; 1 yr warranty. Optional Serial Links include complete 3a-programming for your desk unit; Serial Printer and Modem Adapters require a Link; all Links should be used with AC Adapter. Stock #2963 [Series 3a Pocket PC] List \$595 . . . . . \$479

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 #2763 [Delux Leather Organizer] . . . . . \$57.95

Stock #2964 [Serial PC Link] List \$120 . . . . . \$92.95

Stock #2965 [Serial Mac Link] List \$120 . . . . . \$92.95

Stock #2966 [Parallel Printer Link] List \$60 . . . . . \$45.95

Stock #2967 [Serial Printer Adapter] List \$25 . . . . . \$19.95

Stock #2968 [Modem Adapter] List \$25 . . . . . \$19.95

Stock #2969 [AC Adapter] List \$20 . . . . . \$17.95

**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

Stock #2970 (Spell-Checker & Thesaurus) List \$100 . . . . . \$89.95

Stock #2971 (Psion Games 1) List \$100 . . . . . \$89.95

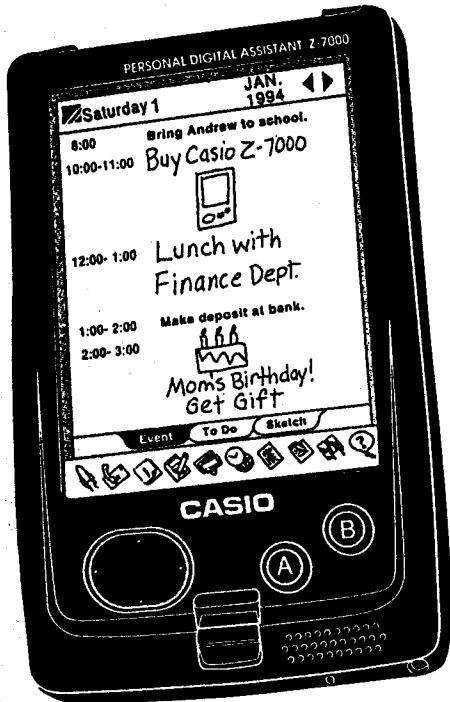
Stock #2972, First Steps Programming Guide . . . . . \$19.95

Be sure to check out our surplus HP 71B offer on page 61.

## Z-7000 PDA

personal digital assistant

**CASIO.**



**Intuitive, user-friendly and full of nice little surprises for you—it's simply a better way . . . to do it all!**

**Pen-based**—you'll like the way it recognizes your last name on the first try. If you print XYZ Company, that is what will appear recognized on the screen. Z-7000 requires no training, so you can pass it around to impress your friends.

**Abundant built-in PIM software**—all the usual stuff, like *Date, Address and Note Books, To-Do Manager, Calculator, Home and World-Time Clock*.

But this baby has 4 megs of ROM in it, so you get *Quicken*, the world's number 1 software for complete personal and business financial management. Nice surprise? How about a 60,000 word Dictionary with 100,000 *Spell Checker* and 650,000 synonym *Thesaurus*—plus a 1000-word *Translator* for 26 languages? Bonus surprises include almanac info like Area Codes, Travel Data, even birthstones and flowers, plus more.

**America Online**—software to use with an optional modem to access AOL email and gateway to Internet, ASCII text fax and U.S. Mail gateway, wire services and encyclopedia access, EAASY Sabre Travel Service, stock quotes, message boards, program downloading.

**Games and On-Line HELP**—through the GEOS object-oriented, multithreaded, multitasking operating system with its graphical user interface (GUI) that recognizes your handwriting.

Runs on 3 AA batteries for 70-90 hours; AC adapter optional. Has *infrared port* for data transfer at 9600 bps, plus *infrared switching output* for standard-device remote control. There's a *serial port* with sub-mini 10-pin D connector, cable optional. One 2.5mm sub-mini *headphone jack*. One *PCMCIA Type II slot* for memory, software or accessories. There's even a built-in *speaker* plus square-wave tone generators and a digital to analog converter. It weights a pound and fits in your pocket (with its flip-lid protective cover).

**Stock #Z7000 [Casio PDA]** List \$800 . . . . .  
**Stock #2962 [Palm Connect]** List \$130 . . . . .  
**Stock #2961 [AC Adapter]** List \$50 . . . . .  
**Stock #SB92 [PC/Printer Cable]** List \$25 . . . . .  
**Stock #SB82 [Modem Cable]** List \$25 . . . . .

## PI-7000 Expert Pad Newton PDA Personal Digital Assistant

**SHARP.**



**Want the fun of having a smart palmtop?  
So smart that it figures out what you mean?**

Well, here it is! It has no keys. Instead you write your data directly on the display—script or printing, diagrams or computations, maps or sketches . . . anything you want, just where you want it. Newton will change your handwritten words into typewritten characters and make your graphic input into neat diagrams and geometric forms. It stores all data instantly, so you can organize or refer to it later.

Sure, it makes mistakes—but it learns from them. Its artificial intelligence (AI) gets better and better at recognizing your handwriting and knowing your work habits. **This has to be experienced!**

It actually anticipates what you want to do and intelligently guesses what your next command will be. Then it guides you through various data-handling jobs with new natural commands for quick editing.

**PIM functions**—Name File handles names and addresses, fax and phone numbers. Data Book schedules events, to-do memos and alarms. In-Box and Out-Box store e-mail, beam, print or fax (out only)—plus Newton communications with MACs or PCs and Sharp OZ/IQ. Clock. Financial Calculator. New functions like Find that searches documents to make you a cross-reference list—everything you expect from Sharp to organize your affairs.

Newton has 4 interfaces—the most unusual is a 1-10 KHz speaker with software controllable volume. An infrared eye beams to/from another PI-7000 or an OZ/IQ-9000 up to a meter distant. A card slot accepts applications or RAM memory on PCMCIA Type I or II cards. A standard RS-422 (serial) port runs up to 230 Kbps through its 8-pin mini-DIN connector to drive Apple printers.

Options include e-mail Starter Kit (modem reqd.) and LINK software for data transfer to/from MACs and PCs. To send faxes you'll need a fax/modem.

**Specifications**—Newton is smaller than a video cassette and weighs less than a pound. It runs on 4 AAA batteries for about 24 hours—an AC adapter or Ni-Cd battery is optional. Its CPU is an ARM 610 32-bit RISC Processor running at 20 MHz, and it has 4MB of ROM and 640K RAM.

There's a Newton in your future! Get yours now and start enjoying it—you'll have the extra fun of showing it off when you're first.

**Stock #PI7000 [Newton PDA]** List \$899 . . . . .  
**Stock #EA46E [AC Adapter]** . . . . .  
**Stock #CEFM1 [Fax/Modem]** List \$200 . . . . .



## HP 100LX— the PC that goes *in your pocket*

Put the world's most portable workplace in your pocket. Bring along Quicken, Microsoft Project, or hundreds of other off-the-shelf PC applications. Connect with your electronic mail! Track your calendar and assignments. And manage your information with the most productive and well-integrated system of organizer software and core business tools available anywhere.

You simply touch one of 8 special keys to access this software—then switch to another program with one key-touch. *These 8 special keys will make the HP 100LX your favorite computer at any size! at any price!*



It's a portable electronic mailbox. You'll *keep in touch* with a built-in cc:Mail Remote for the HP 100LX. With a modem, check your cc:Mail post office and *exchange messages* with any cc:Mail user in the world. Handle messages with cc:Mail Remote Inbox, Outbox and Saved Message folders.

Receive news, weather, and stock reports automatically. Using HP 100LX terminal emulation, built-in data communications software, and a modem, *access e-mail* and information services such as CompuServe.

With HP 100LX communications accessories, connect with devices like the Skystream wireless messaging receiver, modems, and global positioning systems.

Here's how you'll use built-in cc:Mail and Data Communications:

- With a modem:
  - Write text messages
  - Batch or interactively transfer messages
- VT-100, ANSI and tty terminal emulation
- Kermit, ASCII text, and X, Y, & Z MODEM file transfer capability
- Capture file capability to save data received from information services

**123**

Don't leave the office without it! Now you can download spreadsheets from the big PC to your HP 100LX. 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 are 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 2.4 of Lotus:

- Large worksheets—cells available from 1 to 256 columns and 1 to 8,192 rows
- Graphics
- Database commands
- Macro creation and execution
- File linkage
- @ functions from @ABS to @YEAR



Sure, your HP 100LX will do the same timely chores that a Wizard or a BOSS will... to help you with appointments, schedules and priorities.

But the HP 100LX is itself a PC, so it has a big Appointment Book program, with all the frills 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 **F6** to get the *background information* (including a 1-2-3 spreadsheet, if that's what you need).

Set repeating appointments 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? 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:

- Week-at-a-glance, month-at-a-glance, and six-month calendar
- Daily schedule with appointment alarms
- Daily, weekly, monthly, and yearly repeating appointments and events
- To-do list with automatic carryover of past-due items
- Archive feature for appointments and lists
- Local and worldwide time for over 450 cities
- World map and custom city list
- Timer and stopwatch



Your HP 100LX will have *all the goodies* that go with a big PC Phone Book and Database program done by Lotus, plus *its giant*

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

- Alphabetical list of names and numbers
- Contact information cards
- Search and sort on any field
- Custom database capability



You won't want to type a book into your HP 100LX — that's what desk PC's and secretaries are for. But you could *edit* a book on

your 100, 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:*

- Text entry and editing including block cut/copy/paste, search and replace, bold, and underline
- ASCII file format for reading and editing
- Basic outliner with promote and demote
- Database of notes, indexed by title
- Title, categorize, search, and edit capabilities



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

But your HP 100LX 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:

- General and technical math functions
- Time-value-of-money calculations
- HP Solve equation-writing capability plus equation plotting
- Links to Lotus 1-2-3 including: Backsolve to a desired result  
Store/recall numbers to a worksheet  
Send amortization schedule to a worksheet

- Currency and other unit conversions
- Choice or algebraic or RPN data entry
- Cash flow analyzes (IRR, NPV) and statistics functions, both with plotting

That's what the 8 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

## HP 100LX—the specs

### HP 100LX Palmtop PC includes:

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

### Software built into ROM

- cc:Mail Remote for the HP 100LX
- Data Communications
- Lotus 1-2-3 Release 2.4
- MS-DOS 5.0
- Appointment Book
- Phone Book
- HP financial calculator
- Memo editor with outliner
- Notetaker • Database • Filer
- World time and Stopwatch
- Application manager
- System macros
- Setup utility

### Optional PC-compatible Software

- The HP 100LX will run a wide variety of DOS software. (Software must be DOS-based, CGA screen compatible, and fit available memory.) The following examples have been tested for compatibility by Ingram Laboratories: Flight Simulator 4.0  
Harvard Project Manager 3.02  
Microsoft Project 4.0  
Norton Commander 3.0, Quicken 5.0

### Physical Specifications

- 16 x 8.64 x 2.54 cm (6.3 x 3.4 x 1 in)
- 312 g (11 oz) with batteries

### Memory

- 2-MB ROM • 1-or 2-MB RAM
- PCMCIA version 2.0, Type II industry-standard plug-in card slot allows memory capacity to expand up to 32 megabytes



• Read and write to flash disk cards

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

- IBM PC-XT architecture
- Intel 80C186 CPU running at 7.91 MHz

### Display

- CGA-compatible FTN liquid crystal
- 80 columns by 25 rows; 640 x 200 pixels
- Zoom feature

### Keyboard Layout

- Familiar typewriter-like QWERTY layout
- Separate numeric keypad • 10 function keys • 8 application access keys

### Input/Output

- Built-in 9-wire serial interface for connection to RS-232 devices
- Built-in infrared transmitter/receiver up to 115K bps for HP 100LX to HP 100LX and other wireless communication
- Built-in printer drivers supporting these printer types: HP LaserJet, Epson FX-80, IBM ProPrinter
- PCMCIA version 2.0, Type II plug-in card slot for running PC software and expanding I/O memory; optional HP 5-MB and 10-MB flash disk cards available
- Optional HP F1021A Connectivity Pack for file transfer between an HP 100LX and a DOS-compatible PC

### Power

- Two 1.5-V AA main batteries
- One 3-V CR2032 coin cell backup battery
- Optional 1.5-V AA rechargeable batteries
- Optional adapter: HP F1011A available in worldwide configurations for powering unit and recharging NiCd batteries



# HP 100LX

## still undecided? HEWLETT PACKARD

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. cc:Mail Remote is built-in, so you can carry your electronic mailbox wherever you go. 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	• 1 or 2 Megabytes of RAM
Memo editor	• MS-DOS 5.0
HP financial calculator	• 3.7 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 80 column x 25-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 100LX, now? This is exactly the way you've always known computers should be. So it's no wonder that the HP 100LX 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 100LX and the HP 100LX2MB. There's just one difference, but it's a big one—one has 1MB of RAM memory, while the other has a full 2 Megabytes of internal RAM. Having the extra memory is like having a second card slot with a 1MB RAM card permanently installed in it (and everyone seems to want more memory).

**You'll have EduCALC's 30-day warranty**, for a no-questions credit or refund. You can try out your HP 100 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.

**Live technical support** is available 5 am - 5 pm (Pacific time) Monday - Friday. You pay only for the call. (503)757-2004.

**Express Exchange Coverage for 1 year**—so if your 100 fails you merely call for a replacement, which arrives next day! Then just send back the old unit (full 3-year coverage optional).

Scientists 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. Fits into Accessory Cradle.

Offer includes PC, Quick Start Guide, User's Guide, nameplate, batteries and Interface Box; 1 yr Express Exchange warranty.

**Stock #VAR100 [HP 100LX Palmtop PC]** . . . . . \$529

**Stock #VAR102 [HP 100LX2MB Palmtop PC]** . . . . . \$719

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

**Stock #H5465A [Express Exchange - 3 yr]** . . . . . \$85

We still have a few new HP 95s in stock, too.

**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 100. 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 100 Custom Nameplate]** . . . . . Free

**T - L - P**

## Save even more—

**TRADE IN** your used HP 95LX. Just send it to us, insured, in working order, with all its Manuals. Take CREDIT on your Order—\$200 CREDIT for an HP 95LX 1MB and \$140 CREDIT for an HP 95LX. Put the order and your check right in the box.

If you prefer to keep your old instrument until your new HP 100 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.

## Upgrade Announcement

For a limited time only, HP is providing HP 100LX customers with an express upgrade from the 1MB to the 2MB version for \$297 plus local sales tax. Available in the US only through July 1, 1994. The form explaining all of this can be obtained by calling Corvallis Technical Support at (503)757-2004 or the Corvallis Fax Back number, (800)-443-1254.

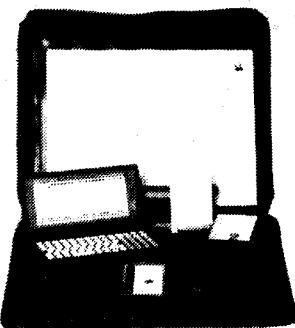
## here's where you find...

accessories	12
bookware	15
cables / interfaces	16
peripherals	18
software	22
programming aids	26

## accessories

### At last, the perfect Computer Briefcase—

a black leather beauty for HP 95/100/OmniBook/PDA/Organizer



You'll have a place for everything in this truly beautiful briefcase—your palmtop and/or subnotebook PC, memory and software cards, modem, cables, books . . . the works.

Our Executive version has 2 discrete pockets on the outside (for tickets, etc.), and its springy handle detaches with brass clips. Inside there is one big pocket (for documents or books) and a couple of pen loops. But everywhere there are velcro patches, so you can arrange things exactly as you want them. Leather accessories include a PCMCIA card pouch and a pen case (also for batteries, paperclips, etc.). Velcro stickers are included to attach your PC, paper, . . . and 8 velcro straps to hold your cellular phone, cables, . . . , whatever.

Deluxe Accessory Kit contains Post-it folder, business-card holder, passport/cable/ticket wallet and shoulder strap (brass clips), all made of the same handsome black leather and built to stay in place for you.

**Stock #2983 [Executive Leather Briefcase]** . . . . . \$119

**Stock #2984 Deluxe Accessory Kit** . . . . . \$39

# HP 100LX

## Accessories continued

### the Leather Desk our best organizer for the executive's HP 95/100

#### EduCALC

Sumptuous black napa leather cradles your 95/100, 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 100 Leather Desk] . . . . . \$64.95

### black leather Wallet for your HP 95/100

#### EduCALC

- impress softly—with premium wallet leather
- hold it all—a pen, cards, notes and checks as well as your 95/100
- protect and cushion—you'll even have shiny brass corner guards

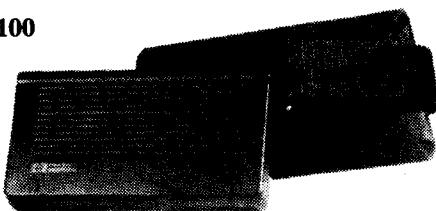
Half the fun of having a palmtop! Pocket for notes or checkbook. 6 slots organize your software or memory cards and business or credit cards. Velcro strap adjusts to hold the load snug.

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

### The Pouch for your HP 48/95/100

#### 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

### The Belt Holster for your HP 48 or HP 95/100

#### Ripoffs

The very best belt clip we've ever seen, on a double-stitched black nylon holster with velcro closure and foam padding—good design at the right price!

Stock #3000 [Belt Holster] . . . . . \$14.95

## Carrying Cases for the HP 95/100

#### Palmtree

Look good being safe! This handsome zippered pouch will protect your 95/100 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.

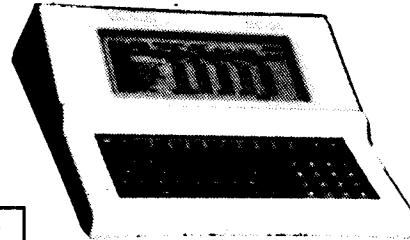
Stock #2665 [Naugahyde Carry Case, black] List \$30 . . . . . \$23.95

Stock #2519 [Nylon Carry Case, black] List \$25 . . . . . \$19.95

Stock #2520 [Leather Carry Case, black] List \$40 . . . . . \$27.95

### EC-95 Aluminum Environmental Case

*Brand New*



#### Corvallis Surveying Systems

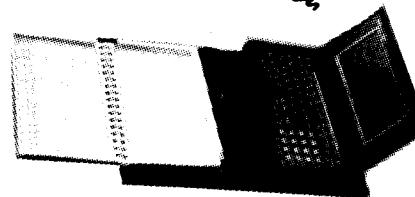
Waterproof and shockproof for hostile environments, with built-in rechargeable power supply.

Stock #2776 [95 Environmental Case] . . . . . \$395

### TimeBoss Leather Case from Europe for HP 95/100

*Sale*

#### TimeBoss



Top-grain leather surrounds your HP 95/100, 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.

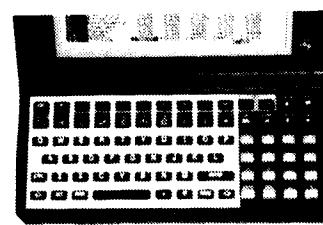
It's convenient, too—use your HP 95/100 right in the case. Your sense of organization will thank you.

Stock #2750 [Leather Organizer] List \$100 . . . . . \$59.95

~~\$69.95~~

### Hot Key Overlay for HP 95/100

#### Girard



Label the keys the way you want them—you may even erase them later.

Stock #2921 [Hot Key Overlay] . . . . . \$3.95

# HP 100LX

## accessories continued

### 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.

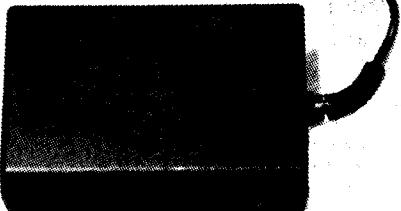
Stock #F1011A [AC Adapter for USA, Canada] List \$40 . . . . . \$34.95

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

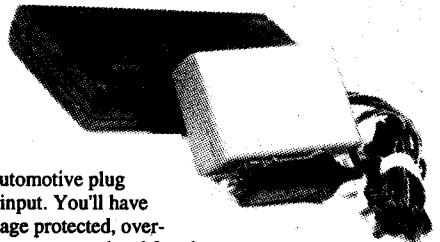
Stock #F1011ABQ [AC Adapter for So. Africa] . . . . . \$34.95



*EduCALC has lots of items  
you can't find in a store*

### Cigarette-lighter Adapters for the HP 95/100 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 #2783 powers the HP 95/100 or the HP InfraRed printer. #2862 powers  
HP 95/100, IR printer, or the Canon Bubble Jet/HP DeskJet printers. #2863 powers  
HP 95, IR printer or the Kodak Diconix printer.

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

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

Stock #2783 [Cigarette-lighter Adapter] List \$40 . . . . . \$34.95

### Plug-in Flash Cards

*the hot new  
high-capacity memory  
for your HP 95/100/  
Omnibook*

**Better than a hard disk on a card**—with flash memory chips and a built-in solid-state controller. It slides into the PCMCIA slot of your instrument 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-compression routines (Stacker LZS 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.

#### Two Types, I and II

There are two types of flash cards. Type I fits in a PCMCIA 1.0 slot and accepts either a 5 v or a 12 v input—these work in the HP 95 or 100 or 300. (Type I cards fit in Type II slots as well.)

Type II cards fit into a larger, PCMCIA 2.0 slot and must have a 12 v input—these are faster than Type I cards, and they require no software installation, but they work only in the HP 100 or 300 (not in the HP 95).



#### for HP 95/100

 HEWLETT  
PACKARD

Type I. Comes with driver routine, utilities and bonus "Stacker Anywhere" compression software on both 3.5" and 5.25" disks—requires a PC and connectivity kit for installation; 1-yr warranty.

Stock #F1018A [5/10MB compr HP Flash Cd, 5v] List \$525 . \$359

Type II—for HP 100LX or Omnibook 300/425.

Stock #F1012A [5MB/10MB compr. FlashCard for 100] . . . . . \$379

Stock #F1013A [10MB/20MB compr. FlashCard for 100] . . . . . \$599

Stock #F1014A [20 MB/40MB compr. FlashCard for 100] . . . . . \$959

#### Type I—for HP 95/100

**SUN DISK**

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

Stock #2822 [2.5 MB SunDisk, 5 volt] . . . . . \$359

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

Stock #2824 [10 MB SunDisk, 5 volt] . . . . . \$739

Stock #2826 [2.5 MB/5MB compressed SunDisk, 5 volt] . . . . . \$379

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

Stock #2828 [10 MB/20MB compressed SunDisk, 5 volt] . . . . . \$789

Type II—SunDisk for HP 100/Omnibook. 1 yr warranty.

Stock #2779 [20MB SunDisk for 100, 12 volt] . . . . . \$1249

Stock #2780 [20MB/40MB compr SunDisk for 100, 12 volt] \$1289

#### for HP 95/100/Omnibook

**EPSON**

Type II—Epson reliability, with 2 yr warranty, data-compression for HP 95/100/300/425. HP 95 requires a driver routine which is included on 3.5" disk.

Stock 2917 [2.5 MB/5 MB compr Epson Flash, 5 volt] . . . . . \$345

Stock 2918 [5 MB/10 MB compr Epson Flash, 5 volt] . . . . . \$349

Stock 2919 [10 MB/20 MB compr Epson Flash, 5 volt] . . . . . \$539

Stock 2920 [20 MB/40 MB compr Epson Flash, 5 volt] . . . . . \$949

## accessories continued

### Plug-in RAM Cards

for HP 95/  
Omnibook

- 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.



**hp** HEWLETT  
PACKARD

- simply the best!

Stock #F1003A [512K RAM card] List \$300 . . . . . \$249.95

### PreMax

Dual lithium batteries that beep you when they're low. 1 yr warranty.

Stock #2987 [512K PreMax RAM Card] . . . . . \$99

Stock #2988 [1 MB PreMax RAM Card] . . . . . \$139

Stock #2989 [2 MB PreMax RAM Card] . . . . . \$249

### 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. Our Epson 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

### Chaplet

Ego RAM cards are preformatted, preloaded with software utilities. 2 yr warranty with free battery replacement for 5 years.

Stock #3007 [1MB Ego RAM card] . . . . . \$159

Stock #3008 [2MB Ego RAM card] . . . . . \$279

### ACE

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 3.5" disk is also included with duplicate program). Free card batteries for 5 years, too; reassuring lifetime warranty.

Stock #2595 [512K/1MB compressed ACE DoubleCard] . . \$123

Stock #2596 [1MB/2MB compressed ACE DoubleCard] . . \$189

Stock #2598 [2MB/4MB compressed ACE DoubleCard] . . \$319

## bookware

### Lotus in Minutes on the HP 95LX Palmtop PC

GRAPEVINE PUBLICATIONS, INC.

LOTUS In Minutes



for the  
HP 95LX Palmtop PC

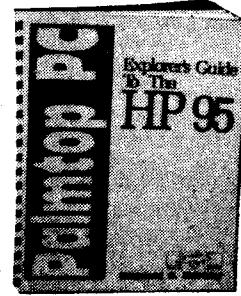
An easy, plain-English tutorial and quick reference for the essential commands and procedures of Lotus 1-2-3 in the 95, including global commands, formulas, macros and databases.

Examples cover real-world situations, common mistakes and all, so you see first-hand how problems come up and how to correct them.

Stock #2469, 95 Lotus in Minutes, 124p softbound . . . . . \$8.95

### Explorer's Guide to the HP 95

by Richard Harvey



- Introduces DOS, redirection and piping file and directory management, TSRs.
- Program compatibility, customizing and optimizing the HP 95.
- Shows you how to use programs like CHKDSK, DEBUG, Hearts&Bones and the other version of TigerFox.
- Lots of tables, charts, sample programs and helpful hints.

Stock #2534, Explorer's Guide to HP 95, 112p combbind . . . \$17.95

### The Answers You Need for the HP 95LX Palmtop PC

GRAPEVINE PUBLICATIONS, INC.

*A must-have reference*



The Answers You Need

for the  
HP 95LX Palmtop PC

Friendly, quick answers to those questions everyone asks at first:

- How do I use the SOLVER with Lotus 1-2-3?
- How can I transfer data with the clipboard?
- Plus common questions about Lists, Macros, Printing, Plotting and Charting, Notes, Memos, Appointments, Files, Directories and Sub-directories, Downloading and Uploading Files, and much more.

Stock #2468, Answers for the 95, 112p softbound . . . . . \$8.95

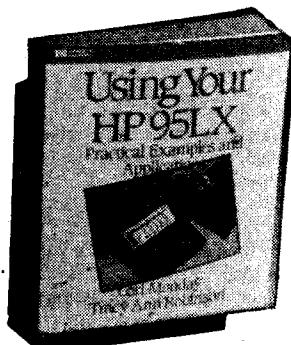
### Using Your HP 95LX Practical Examples and Applications

by Monday/Robinson

Read this and you'll be able to automate your business and carry it in your pocket! You'll see in more than 150 real-life examples, tips and suggestions how to use your 95 to manage your time and money — how to schedule and plan meetings, send and receive e-mail, take 1-2-3 worksheets with you, calculate loans and project budgets.

This guide is written by experts: Lori Monday is the former HP engineer who edited the *HP 95LX Owner's Manual*, and Tracy Robinson was lead writer for the *Lotus 1-2-3 Release 2.3 At Work*.

Stock #2564, Using Your HP 95LX, 380p softbound . . . . . \$24.95



# HP 100LX

## bookware continued

Subscribe now to  
The HP Palmtop Paper  
for HP 95/100

Thaddeus Computing

- Be an insider
- Be an expert
- Be fully up-to-date

You'll find out about the hidden features of your 95/100—how to access secret utilities—even hidden games!

You'll have how-to tips and tricks that make your work easier—solve your problems—even give you impressive new powers!

You'll read comparative brand-by-brand surveys of the software and programming languages that work best in your 95/100—plus consumer's advice on peripherals like RAM cards and drives.

Think of it as a giant (50 pages average) supplement to your EduCALC catalog—a new issue will come every other month, packed with the latest information—focussed right where you want it, on your HP 95/100.

**Extra BONUS** . . . each year's subscription comes with a copy of the Subscriber Disk for that year—the 1992 disk contains 34 free programs (no shareware), fully documented and easy to use utilities, games, templates and programmer's aids (8 of these are system-compliant).

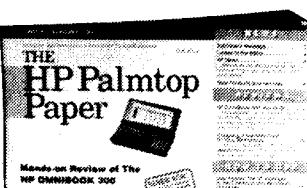
**FREE Issue** . . . this subscription starts with the current issue, and you'll also get an extra back-issue—that makes 7 issues in all, plus your bonus Subscriber's Disk of programs.

(Allow 4 to 6 weeks for your subscription to start.)

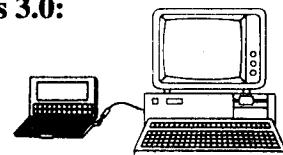
Stock #2676, HP Palmtop Paper, 1 year to U.S. address . . . . . \$39

Stock #2839, HP Palmtop Paper, 1 yr air to Canada/Mexico . . . . . \$45

Stock #2840, HP Palmtop Paper, 1 yr air, foreign . . . . . \$57



Connect your 95/100 to your PC  
this software runs with the following  
applications under Windows 3.0:



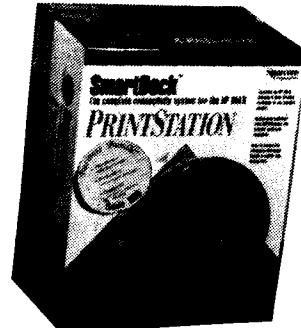
- IBM Current including mainframe PROFS
- Borland Sidekick 2.0 (under Windows 3.0)
- Asymetrix Toolbook and Daybook, with memos
- MS Word for Windows & AmiPro & Excel
- Paradox database (maps PHONE and MEMO fields)
- Q + E support for dBASE and SQL Server
- Windows 3.0 Clipboard • Lotus 1-2-3 for Windows

Direct imports/exports to/from Windows applications at the field level with a few simple clicks of the mouse! Requires HP 95/100 with Serial Cable and PC running MS Windows 3.0 (IntelliLink is HP New Wave aware).

Stock #2517A (IntelliLink 3.0, 5.25" & 3.5") List \$100 . . . . . \$89.95

**SmartDock docking-station connectivity  
for your HP 95 or HP 100**

**Sparcom**  
CORPORATION



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

When you click the HP 95 or 100 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 or 100 instantly connects your 95 or 100 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 95 or 100 connects your 95 or 100 to any parallel printer, as well as to a PC — has built-in series/parallel converter, comes with DOS/Windows connecting software on 3.5" disk.
- ComStation 95 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 3.5" 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)] . . . . . \$89.95

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

Get your PrintStation95 or ComStation95 now and you'll save many dollars off our already discounted prices. But, best of all, you'll also get (with either docking station) two free programs—Podium Pal (#2684) for presentations and Games 95 (#2687) for fun (see the HP 100LX Software Section in this catalog for complete software descriptions).

Stock #3004 [PrintStation95, #2684 & #2687] List \$280 . . . . . \$165

Stock #3005 [ComStation95, #2684 & #2687] List \$510 . . . . . \$295

Station 100 is available with or without DataExchange software (DOS or Windows) included on 3.5" disk (same as for PrintStation100).

Stock #3022 [Station 100] List \$80 . . . . . \$74.95

Stock #3021 [Station100 + software] List \$100 . . . . . \$89.95

Stock #3023 [PrintStation100 + software] List \$200 . . . . . \$179.95



**HEWLETT  
PACKARD**

## Connectivity Pack HP100LX to desktop PCs

Seamlessly transfer files and worksheets directly or via modem, with a convenient split-screen filer interface. Includes desktop PC versions of most of the built-in PIM applications of the 100LX (and they are fast). Also has 2 other PC programs — one merges, synchronizes or translates Phone Book or Appointment Book files, and the other lets your 100 treat the PC's drives as its own.

Includes a cable and adapters to connect your 100 to a 9- or 25-pin PC serial port, a modem or a printer, or to an HP 95LX or HP 48SX.

PC must have 286 processor and EGA or better; software will run as a DOS application under Windows.

Stock #F1021A [100 Connectivity Pack, 3.5" & 5.25"] . . . . . \$109.95

Stock #F1015A [48/95/100 to DB 9- pin Serial Cable, 6'] . . . . . \$24.95

# HP 100LX

## cables / interfaces continued

### Dual-Purpose HP 95 Serial Cable

EduCALC

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

### 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 - 95LX, 6'] . . . . . \$15.95

Stock #3003 [Unterminated Serial Cable - 100LX] . . . . . \$16.95

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

Stock #2793 [HP 100 to 9- pin Serial Cable] . . . . . \$22.95

### JetEye InfraRed to LaserJet

Printer Interface  
for the HP 95/100/Omnibook

Extended  
Systems®



A point and shoot printer interface you can install 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.

Model #ESI9500A works with HP 95LX and also the HP 48 series. #ESI9510A is for the HP 100LX or the Omnibook 300.

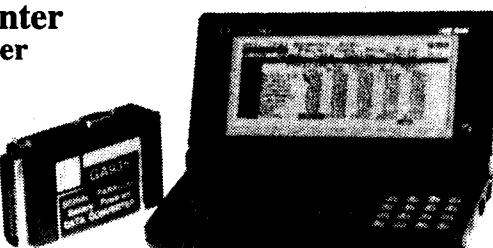
Supports LaserJet, DeskJet and any other parallel (Centronics) printer. Multiple-page printing requires driver software (included) for your computer and optional Serial Interface on your PC to install it. InfraRed reception distance 8 inches. 2 yr warranty.

Stock #ESI9500A [JetEye Interface for HP 95] List \$129 . . . . . \$99.95

Stock #ESI9510A [JetEye Interface for HP 100] List \$159 . . . . . \$144.95

### Battery-powered HP 95/100 to Parallel Printer Data Converter

Greenwich  
Instruments



Get beautiful printout—now your HP 95/100 can drive a portable parallel printer (such as the Canon BJ-10e Bubblejet).

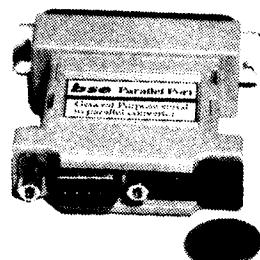
You connect this serial-to-parallel converter to any PC via a serial cable, and send its output to any parallel printer via a 'Centronics' 36-lead cable. Up to 250 hours on one 9v battery (not included).

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

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

The Parallel Port  
connects HP 48/95/100 to  
parallel printer or peripheral  
BYTE User's Choice Award 1992

—bse—



Just plug in this tiny (1.2 oz) converter to your serial cable — it's self-powered and bidirectional.

No switches, no configuration or software drivers, and no problems — compatible with any PC, application software, printer or hard drive. 9600 Baud to printer via 36-pin Centronics male connector.

Stock #2816A [Parallel Port w/o serial cable] . . . . . \$79.95

Stock #2609 [48/95 to 9- pin Serial Cable, 6'] . . . . . \$22.95

Stock #F1015A [48/95/100 to 9- pin Serial Cable, 6'] . . . . . \$24.95

### Connectivity Products for HP 95

HP HEWLETT  
PACKARD

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 5.25" and 3.5" disks and a brief manual.

Stock #F1001A [HP 95 Connectivity Pack] List \$100 . . . . . \$79.95

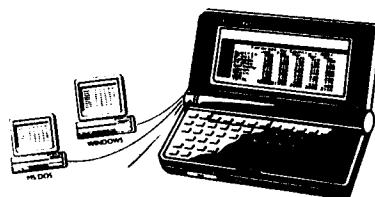
Stock #F1015A [48/95/100 to DB9 Cable] . . . . . \$24.95

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

Stock #F1016A [Mac/Apl to HP 95/100 Serial Cable only] . . . . . \$24.95

### Connectivity Kit between PC and HP 95

Nuvotech



Transfer and translate  
Lotus spreadsheets, word-  
processing text or Hyper  
card 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, Owner's Manual.

Stock #2556 [95-PC Connectivity Kit, 3.5" & 5.25"] List \$99 . . . . . \$49.95

### 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 100LX

cables / interfaces continued

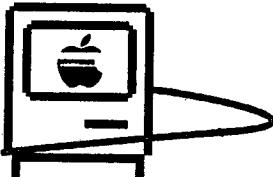
## DataExchange Macintosh connectivity pack for HP 95

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 [95 DataExchange, 3.5"] List \$90 . . . . . \$79.95

Sparcom  
CORPORATION



## Serial Interface Kit for HP 95

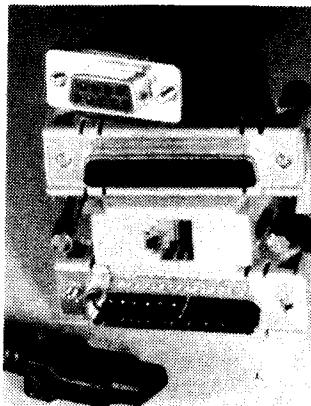
CMT

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.

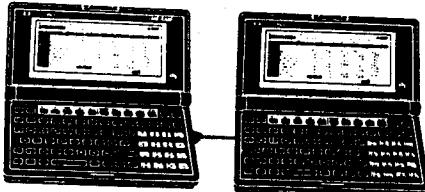
Kermit communication program for PCs is included on disk, along with brief directions for its use.

Stock #2342 [95 Serial Interface Kit, 5.25"] . . . . . \$36.95



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

EduCALC



Works with two HP 95s or two HP 48s, 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 for HP 95] . . . . . \$26.95

## MacLinkPlus for the HP 95

DATAVIZ



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, 3.5") List \$129 . . . . . \$109.95

## SAVE THESE NUMBERS

» <b>BB Marketing (Norway)</b>	011 4722190161
» <b>CASIO</b> Technical Help Line	(800)634-1895
» <b>CALCULATED INDUSTRIES</b>	(800)854-8075
» <b>COMPUTERBOOKS</b>	(714)376-9013
» <b>CORVALLIS MICRO TECHNOLOGY</b>	(503)752-5456
» <b>D'ZIGN</b>	(209)297-8025
» <b>EduCALC NEWS LINE</b>	(714)582-3976
» <b>EPSON</b>	(800)922-8911
» <b>E.Z. SOFTWARE</b>	(718)434-1766
» <b>FIRMWARE</b>	(503)753-3617
» <b>HEWLETT-PACKARD</b> Technical Support Repair Service Customer Support Customer Information Mobile Computing Information CVD BBS	(503)757-2004 (503)757-2002 (208)323-2551 (800)752-0900 (800)443-1254 (503)750-4448
» <b>HP 12C, 17B &amp; 19B SEMINARS</b> Edric Cane	(818)957-3026
» <b>HP 95LX SEMINARS</b> Computer Applications Company Craig A. Levine (CALNET) Intellilink	(800)487-5040 (310)374-6167 (603)888-0666
» <b>NEW MEDIA</b>	(714)543-0100
» <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 (800)827-8416
» <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> Customer 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.

## peripherals continued

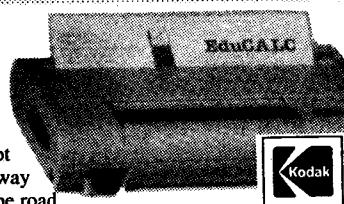
### Diconix 180si Portable Printer for HP 95/100

- 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. 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 \$349 . . . . . \$299  
Stock #CN [NiCd C Cell] (requires 5) . . . . . ea \$5.10  
Stock #2351 [Kodak Print Head] . . . . . \$13.95  
Stock #51604A [HP InkJet Print Head] . . . . . \$8.95



### Drive95 or Drive100 Portable 3.5" Disk Drive for your HP 95 or HP 100

#### Sparcom CORPORATION

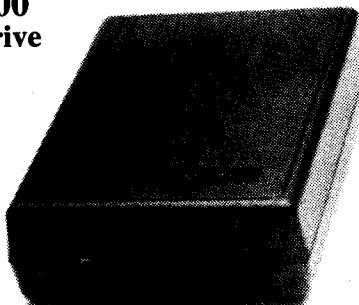
This lightweight, battery-operated disk drive features Sparcom's device driver software, engineered to read and write in MS-DOS format on standard 3.5" HD floppy disks.

This drive makes it affordable to store data, simplifies program execution from 3.5" 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 (7.25" x 5.25" x 2") and contoured to complement the HP instrument, the drive also interfaces with the HP 48S/SX/G/GX or any DOS based palmtop, laptop, or desktop computer, and supports 720K and 1.44MB capacity 3.5" disks.

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

Stock #2602 [Drive95] List \$330 . . . . . \$285  
Stock #3024 [Drive100] List \$330 . . . . . \$299

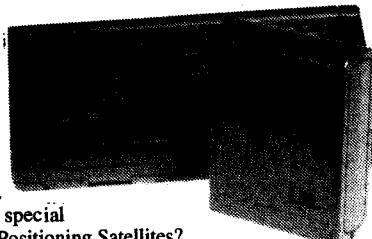


### Engineer's Interface Box for HP 95/100

#### EduCALC

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 95/100 into the MDL cradle. It has texture and color exactly like the HP 95 or HP 100 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 hold a 9v block-type battery. 5 plastic pieces and drawings are included; approx 1 x 2 1/2 x 3 3/8 inches outside.

Stock #2688 [Engnr's Interface Box] 1 to 9 units . . . each \$5.95  
Stock #2689 [Engnr's Interface Box] 10 to 49 units . . . each \$4.95  
(Please call us for quotations in larger quantities.)

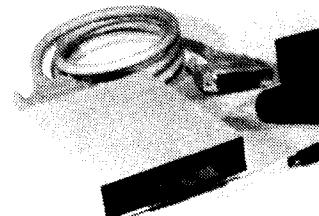
### External Card-Link Drive (ok for HP 95/100/Omnibook)

#### SCT

Lo-cost convenience—transfer files, programs and data between your palmtop and desktop PCs.

4 x 1 x 6 inches, 1 lb, transfers data at 80KB/sec. Includes AC adapter, connects to parallel printer port on PC. Reads or writes to RAM or FLASH cards, Type I or II, 5 or 12 v. Comes on 3.5" floppy to download (free exchange to 5.25" disk).

Stock #CL680 [SCT Card-Link] List \$190 . . . . . \$164.95



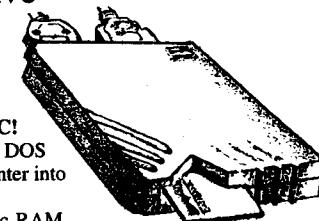
### External ThinCardDrive (ok for 95/100)

#### 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



### Internal ThinCardDrive (ok for 95/100)

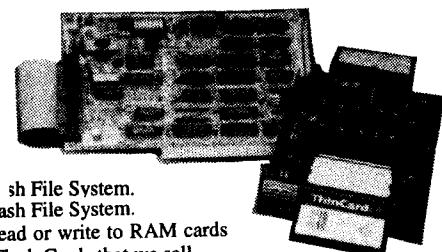
#### Databook

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

Model TMB-240 will read or write to RAM cards and can also program all Flash Cards that we sell.

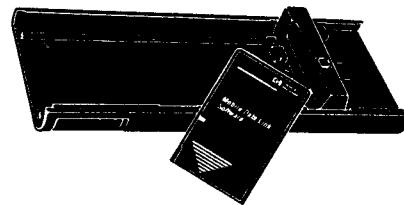
System contains a half-length PC board, 24" interconnect cable, card drive unit which fits into slots for either 3.5" or 5.25" disc-drive units, software and user's guide.

Stock #TMB240 [ThinCard Drive] List \$250 . . . . . \$229



### Mobile Data Link for HP 95

 HEWLETT  
PACKARD



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 [95 Mobile Data Link, card] . . . . . \$119.95

# HP 100LX

## peripherals continued

### SwapBox internal PC card drive *Brand New*

SCM Microsystems

Here's the bridge, between your PCMCIA-equipped palm-top and any desktop PC.

Now you can share the same set of function cards in both machines—sane on the cost of peripherals like memory cards and also FAX/Modems, LAN adapters, etc. You'll maximize your computing investment dollars.

Each drive accepts all PCMCIA release 2.0 cards, types I, II and even big, fat type III. Each carries an unprecedented 5-year limited warranty, the hallmark of fine engineering and precision manufacturing. Each transfers data at 2MB/sec.

Entry-level drive #2977 has a single slot with access at the rear of your PC, #2978 has a single front-access slot, and power-user's #2979 has both slots (one front and one rear, for simultaneous use). Only #2979 will boot your PC.

Stock #2977 [MMCD-V PC Card Drive] List \$119 . . . . . \$99.95

Stock #2978 [MMCD-D PC Card Drive] List \$289 . . . . . \$239.95

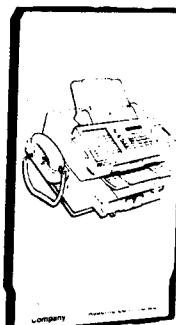
Stock #2979 [MMCD-SD PC Card Drive] List \$399 . . . . . \$329.95



### ThinFax Basic LX the first fax/modem that lets you send and receive faxes from your HP 100LX

EXP

*Brand New*



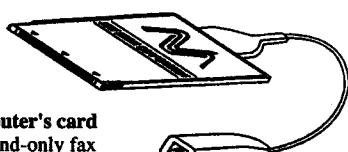
Plug & play software built into card, has user-friendly look and feel of the built-in HP 100LX applications. You can preview faxes on screen before sending or view received faxes. Customized fax cover page. Custom phone directory for frequently called numbers.

Fast 9600 bps send/4800 bps receive for faxes and up to 2400 bps for data. Lifetime warranty.

Stock #2985 [ThinFax Basic LX] List \$279 . . . . . \$219.95

### PalmModem 2400/PalmFax for HP 95 or for HP 100

New Media



Just plug this into your computer's card slot—you've got a modem or a send-only fax machine that's PCMCIA compatible!

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 computer'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 [95 PalmModem] List \$199 . . . . . \$169.95

Stock #2777 [100 PalmModem] List \$199 . . . . . \$174.95

### FAX Modem for HP 100/Omnibook

Chaplet

14,400 bps PCMCIA Type II Fax/Modem is loaded with software. You can view your transmitted fax or print to a serial printer. It is compatible with the HP 100's DATACOM and cc:Mail—even has cellular phone capabilities. The built-in V.42 bis data compression allows greater throughput as well as advanced error correction.

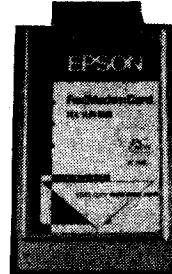
Stock #3010 [Ego Fax Modem] . . . . . \$389



### Fax Modem for HP 100/Omnibook

Epson

*New*



Slide this card into your PCMCIA Type II slot and you've got a go-anywhere modem and send-only fax machine!

Comes complete with Window Fax Software for a PC and Socket Services Software for your portable. Epson reliability, with a 2 yr warranty.

Model EFM96 has a 2,400 Baud modem and 9,600 Baud fax.

Stock #EFM96 [Epson Fax Modem] . . . . . \$299

### Telecoupler II for HP 95/100

Computer Products Plus

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



Works with virtually 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 14,400 bps for data and fax.

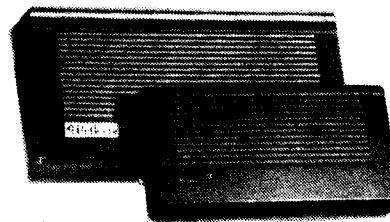
Stock #3001 [Telecoupler II] List \$160 . . . . . \$139.95

### Reflection-To-Go v.4.4

### HP 700/92 Terminal Emulation for your HP 95/100

WRQ

*Brand New*



Lets you connect up to your host, maybe a HP 3000 or even a UNIX host like the HP 9000. Transfer files to it, or to a PC. Redefine your keyboard. Automate tasks you perform regularly.

Come on an uncompressed PCMCIA card so your RAM remains free; includes a 3.5" floppy with additional files. Supports serial, modem and infrared connections.

Stock #2974 (Reflection-To-Go, card & 3.5") . . . . . \$189.95

## peripherals continued

**Will you want to phone home?  
Take along this tiny modem!  
for HP 95**

### US Robotics

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 or 100, it works just fine with your desktop PC as well (or any other computer that has a serial port).

The WorldPort comes in several models, each designed for the HP 95 or 100. 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 or 100 you'll need a Serial Cable (best buy for your HP 95 is #2449). Two year warranty on all modems.

**Stock #2461 [95 WorldPort 1200 Modem] List \$139 . . . \$119.95**  
**Stock #2462 [95 WorldPort 2400 Modem] List \$159 . . . \$139.95**

**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 [95 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).

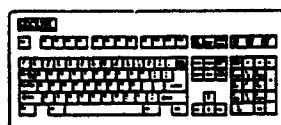
**Stock #2383 [95 Worldport 2400 Plus Modem] List \$249 . . . \$219**

**Save 75% on telephone charges**—world's fastest pocket-size lightweight external 9600 to 300 bps modem with MNP 4 error control. For HP 95 or 100.

**Stock #2585 [Worldport 9600 v.42 Modem] List \$289 . . . \$249**

## DOCK101 Keyboard for HP 95

### Key Tronic



Speed data entry with 101 key full-size keyboard and viewing platform. AC powered; connects to serial port. Use with MS-DOS 3.2 and above, Windows 3.x. Requires HP serial cable #F1015A or #2609.

**Stock #3013 [HP 95 Keyboard] . . . . . \$99.95**

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

## 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 [95 SkyStream Receiver] List \$525 . . . . . \$429**  
**Stock #F1007B [95 Cradle only] List \$60 . . . . . \$54.95**  
**Stock #F1027A [100 Cradle only] List \$79 . . . . . \$69.95**

## cc:Wireless Kits



**Lotus**



**Everything you'll need to start using the RAM Mobile Data service! Save with these two kits from EduCALC, the world's discount source for palmtop electronics.**

**The Mobile Kit**—get one of these for each traveler who wants to be more productive. It's easy to carry and simple to use. Kit contains the Intel Wireless Modem, HP 100LX 2MB computer, RJ45-HP 10 pin serial cable and a rich leather case. You save \$106.

**The Server Kit**—add this to your office's LAN email server (running Lotus cc:Mail Router) so you can exchange messages with its users just as if you were back at the office. Kit contains Intel Wireless Modem (server version) and HP 100LX Connectivity Pack. You save \$35.

**Intel Wireless Modem**—your 2-way radio modem, for email without the phone lines. It has simple, automated operation, with only 2 keys!

- Size: 2.7 x 7.9 x 1.3 inches
- Operation Time: 10 hours per charge
- Weight: approx. 1 lb (470g)
- Data Transfer Speed: 9600 bps
- Terminal Connector: RJ 45, which connects to your PC's DB9 terminal.
- Includes: Lotus cc:Mail Wireless Pack and Intel installation/diagnostic/activation/registration software on 3.5" disk, two batteries with charger and AC/DC adapter, and an RJ45-DB9 serial cable. (Note: server version includes an AC adapter with battery instead of adapter, charger and batteries listed above.)

**The rich leather case**, black and elegant—hold yours HP 100LX and Intel Wireless Modem steady so you can work with them right in this case—has places to put spare batteries for both instruments, business cards, pen and pencil, plus pockets for PCMCIA cards and papers.

**RJ45-HP 10 pin Cable**—connects your HP 100LX to the wireless modem.

\* Other brands and names are Trademarks of their respective owners.

**Stock #2941 [cc:Wireless Kit-Mobile] List \$1655 . . . . . \$1549**  
**Stock #2942 [cc:Wireless Kit-Server] List \$914 . . . . . \$879**  
**Stock #2935 [Intel Wireless Modem] List \$800 . . . . . \$749**  
**Stock #2936 [RJ45-HP 10 pin cable] List \$30 . . . . . \$20.95**  
**Stock #2937 [Leather Case] List \$90 . . . . . \$69.95**

# HP 100LX

## Software

ChiWriter 3  
scientific word processor  
for the HP 100

Horstmann Software

Write notes, memos, exams on the fly. Now the most popular scientific WP has this special 100K version to fit into your 100's 384K RAM without requiring any added memory.

Palmtop version has 14 fonts plus math symbols and structures, all displayed (WYSIWYG) on screen with full text editing. Also includes PC version which has spell check, printing and font design. LaserJet or Postscript compatible printer required.

Stock #2975 (ChiWriter, 3.5") List \$100 . . . . . \$79.95

*Recycle the already recycled — just remove the cover and this catalog is 100% recycled, 100% recyclable (as "newsprint").*

Special  
educational discount!

## HP 95 Software Sampler

Richard Harvey

Brand New

The Best, all the Best and nothing but the Best of public domain and shareware software available for the HP 95, chosen by an expert for your ease and assurance.

Information — about your HP 95, airports, area codes, serial interrupts, infrared port, packet radio, more.

Lotus 1-2-3 — a 6-month calendar, bookkeeping, finance, locate planets/sun/moon, more.

Productivity — macros, programmer's calculator with number conversions, Buddy, remote control, file compressor, more.

Games — biorythm, dungeons & dragons, drawing, solitaire, tetris, more.

Stock #2945 (95 Software Sampler, 3.5") . . . . . \$14.95

## 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.

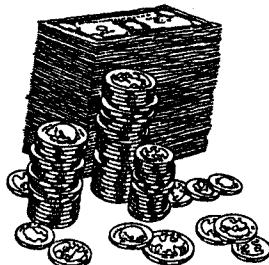
Requires HP 95 with #F1015A serial cable. Includes versions for 95 and also for your PC/compatible (512K RAM) on 3.5" or 5.25" disk.

Stock #2492 [95 Money Manager, 3.5" & 5.25"] List \$60 . . . \$54.95

## Read our mail from California —

"I am very impressed with your response time, and your prices have been consistently lower than other places. surely going to continue doing business with you, and I have passed your catalogs on to my colleagues with my highest recommendation. Thanks for everything."

Tom Marazita, Mucilid Enterprises, Goleta



## HP 95 Productivity Pack

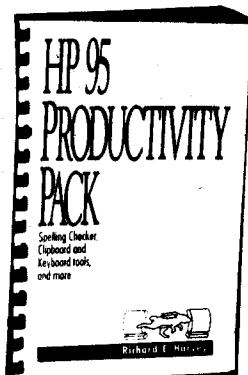
Richard Harvey

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 Productiv Pck, 3.5" & 5.25") List \$50 . . . \$38.95



## PodiumPal for HP 95

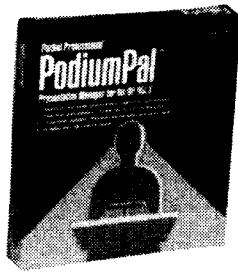
Sparcom  
CORPORATION

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 (95 PodiumPal, 3.5") List \$60 . . . . . \$54.95



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

hp HEWLETT  
PACKARD

Based on *The American Heritage Dictionary* and *Roget'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

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

COMPUTERBOOKS

On the course you'll instantly score a round in progress, view hole statistics to devise a 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 3.5" disk for downloading.

Stock #2845 (95 Golfer's EDGE, card) List \$100 . . . . . \$89.95



Stock #2846 (95 Golfer's EDGE, 3.5") List \$70 . . . . . \$64.95

## SOFTWARE CONTINUED

# ACT!

FOR THE HP 95LX

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

Future 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	42/27/92 18:51

- 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

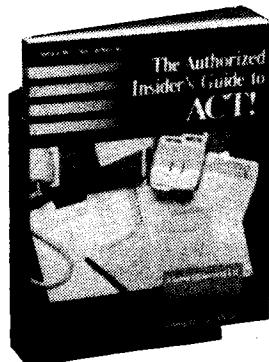
### Generate reports, to view, file and print out

Edit Schedule Clear Lookup Phone	
View Xpenses Report Quit	
Comp	Schedule
Cont	Clear
Ph	Lookup
Ti	Phone
Addr	
0	
Meeting: To-do: 09/05/91 10:00a order new cat	
Screen: 1 of 11 42/27/92 18:51	

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

### 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.

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

### ZAP business cards and integrate data

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

### Manage your calendar and to-do list

Mails	Meetings	To-do
--Thursday-- Sep 5 Thomas Huff 9:00a Tom	--Saturday-- Sep 7 Express Offi 4:00p Kell	--Friday-- Sep 6 National Pap Make travel
--Friday-- Sep 6 Jordan Offic 9:30a Will	--Monday-- Sep 9 Corporate Im 8:00a Huff	
OK Office Su 2:00p Nels	--Wednesday-- Sep 11 Superior Dis 2:00p Lena	
--Sunday-- Sep 8 Paper Moon 8:00a Step		
Tasks 19/05/91-09/15/91 02/27/92 4:58E		

- Daily activity list of calls, meetings and to-dos
- '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

- 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. (5.25" and 3.5" 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, 3.5" & 5.25") List \$149 . . \$89.95

### 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 3.5" and 5.25" disks.

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

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

### Pocket Sales Force for the HP 95/100

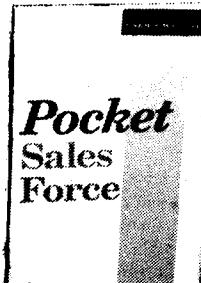
#### CMS Software

Contact Management Software — system-manager compliant, easy to set up, easy to use, only takes 60K disk space, and the price is right.

On its menu, Action Today! brings up your current to-dos, Find Company Records searches by any field, Input New Sales Leads adds the new ones, Process New Sales Leads shows you the ones you haven't yet assigned to-do dates, and Export to 1-2-3 arranges the database for import into Lotus.

Works in HP 100 in 40-column mode, and works on a PC via Connectivity Pack. 36p User's Manual.

Stock #2946 (Pocket Sales Force, 3.5") . . . . . \$49.95

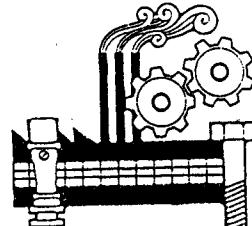


# HP 100LX

## software continued

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

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 95/100'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 95/100, 5.25") . . . . . \$29.95

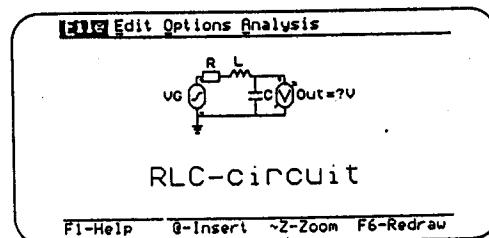
### ME Equation Library for Spreadsheet Use

Same as #2535 with all equations done in Lotus 1-2-3 spreadsheet form so the HP 95/100's HP-CALC program is not used. Spreadsheet format is HP 95/100 friendly, but may be used with any 1-2-3-compatible spreadsheet program.

Stock #2810 (ME Equation Library for Spreadsheets, 5.25") \$29.95

### Palmtop Circuit for HP 95/100

DesignWare



Study and design linear and nonlinear analog electronic circuits on your HP 95/100—get it right with this electronic breadboard. You'll sketch and then simulate in minutes—cutting design costs and reducing experimentation.

Program customizes to your display (HP 95 or 100, VGA, EGA, CGA, Hercules) and printer (laser, 9/24 pin, etc.). Menus, hotkeys and context-sensitive HELP make it user-friendly.

You can evaluate circuits by DC, transient or AC analysis with waveform options (pulse, unit-step, sine, triangular, trapezoidal). You also get closed-form expressions for linear network responses, plus plots for functions and symbolic analysis.

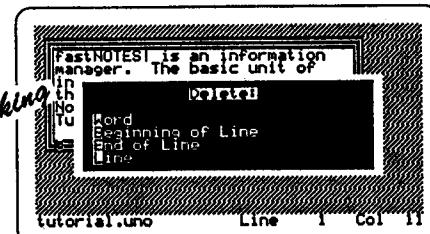
Why waste time with a series of trials? Pick the outcome you want. Palmtop Circuit will deliver the necessary parameters using optimization. With Palmtop Circuit, the power of circuit analysis is always in your pocket. And if you buy Palmtop Circuit now, you get the same fully featured IBM PC-compatible version—Absolutely Free!

Hardware requirements: HP 95/100LX, 1 MB system RAM and minimum 1 MB memory card. Comes on 3.5" disk, requires serial cable & HP Connectivity Pack for downloading to HP 95/100LX. Special order; allow 2 weeks.

Stock #2912 (Palmtop Circuit, 3.5") List \$150. . . . . \$129.95



### Switch 2.0 Launcher/Control Program for HP 95



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 (95 Switch, 3.5") List \$69 . . . . . \$64.95

### Switchable Programs — for HP 95/100

HP 95/100 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.

### 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. 40 column display in HP 100.

Stock #2868 (fastCOMM!, 3.5") . . . . . \$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. 40 column display in HP 100.

Stock #2869 (fastNOTES!, 3.5") . . . . . \$69

### fastLINE!

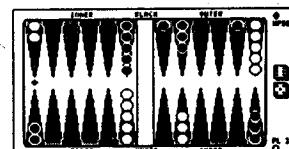
Fast HP 95 outliner and text processor—supports up to 8MB outlines and can be used for text retrieval with global searching. Auto date and time stamping for PIM functions. Built-in File Manager, requires less than 200K of RAM. 40 column display in HP 100.

Stock #2871 (fastLINE!, 3.5") . . . . . \$89

### Games95

Sparcom  
CORPORATION

- Chess ■ Checkers
- Tetris ■ Backgammon
- Space Invaders



Comes on diskette with manual; 1 yr warranty.

Stock #2687 (Games95, 3.5") List \$50 . . . . . \$44.95

### GAMEcard volume 1 for HP 95/100



Plug a lot of fun into your HP 95/100—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

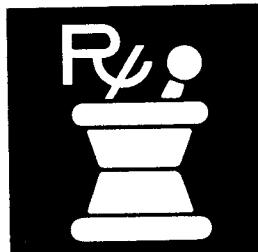
# HP 100LX

## Software continued

### Medical Software for your HP 95/100

COMPUTERBOOKS

Sale  
New Low Price!



■ **Pharmaceuticals**—gives you instant dosages on over 10,000 drugs, warnings and contraindications, therapeutic and pharmacologic classifications, and supplier information on over 3300 generic and trade-named drugs. Fits into 500K. 1.7 MB.

■ **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 3.5" 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. 40 column display on HP 100.

Stock #2790 (95 Medical Demo Disk, 3.5") . . . . .	Free
Stock #2781 (95 Pharmaceuticals, 3.5") . . . . .	\$129
Stock #2761 (95 Patient Mgmt, 3.5") . . . . .	\$99
Stock #2762 (95 Patient History, 3.5") . . . . .	\$99
Stock #2760 (95 Drug Interactions, 3.5") . . . . .	\$99

**Free**—buy any 2 of these Medical Software programs and we will include a free copy of Physician's Reference 1, a \$199 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:

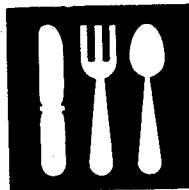
Stock #2899 (95 Physician's Reference 1, 3.5") . . . . . Free

### Personal Food Analyst, Consumer Version Nutritional software for your HP 95/100

• Used by all 1st year students at Univ. of Arizona Medical School  
• Recommended by Take Care, Inc., one of the country's largest HMOs

Mirical

Sale



■ **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 95/100 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 95/100—so easy to use that in 20 minutes it will start having a stunning effect on your health and appearance! Illustrated booklet included.

Stock #2852 (Personal Food Analyst, card) List \$149 . . . . . \$89

### Smart Rounds Physician's software for the HP 95/100



MacroMed

"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

- 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 card) List \$400 . . . . . \$229

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

Labtronics



- get real-time plots from any RS232 device
- collect your data directly into Lotus 1-2-3
- 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 (95 QC-Link/HP, 3.5") . . . . . \$299

### Developer's Kit for Switch 2.0 for HP 95

ACI



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.

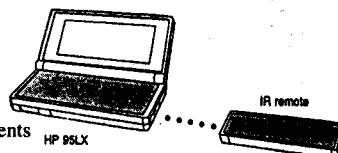
Requires RAM card.  
Stock #2807 (95 Switch 2.0 Developer's Kit, 3.5") List \$99 . . . . . \$89.95

# HP 100LX

## software continued

### myREMOTE 2.0 for HP 95

- 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 (95 myREMOTE, 3.5") . . . . . \$37.95

### FX-7 Flight Planner software for the HP 95/100

#### 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 39,800 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 95/100. You'll need a modem for DUATS briefings. Drop shipped to you.

Stock #2544 (FX-7 Flight Pak, 5.25") . . . . . \$185.95

Stock #2544A (FX-7 Flight Pak, 3.5") . . . . . \$185.95

### System 95 Surveying Software for HP 95/100

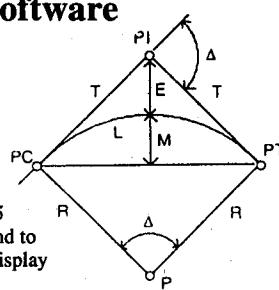
#### TDS

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 95/100. Communicates with all major RS 232 serial-port Electronic Total Stations.

Stock #2716A (System 95 v 2.2, card) List \$695 . . . . . \$549



### BATTman for HP 95

#### ACE

Main Battery Low!

Backup Battery Low!

Card Battery Low!

Main Battery = 2.45U  
NiCAD Installed.

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 (95 BATTman, 3.5") List \$59 . . . . . \$49.95

### programming aids

#### Swift!BASIC

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

**Sparcom**  
CORPORATION

#### GRAF

DIM A@(7), B@(7)

FOR I=0 TO 7 : A@(I)=\$AA@ : B@(I)=\$88

SET FILL 0, A@(0) : SET FILL 1, B@(0)

SET CHAR 4, 4, 20, 0 0

DRAWSTR("S!", 10, 90)

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 (95 Swift!BASIC, 3.5") List \$179 . . . . . \$159.95

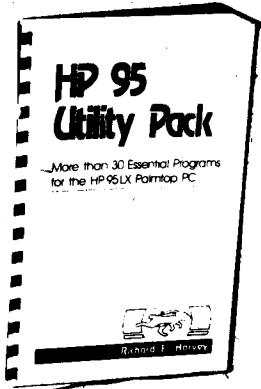
### 95 Utility Pack

#### 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, 3.5" & 5.25") List \$35 . . . . . \$27.95



Shopping by mail is fun—something we can all use more of.

# HP 100LX

# calculator batteries

programming aids continued

## 95-UTIL FORTH Programming System

### EMS

Turn your HP 95 into a portable software-development system with this small and very fast implementation of the Forth programming language. UTIL is System Manager compliant, so it can be popped over other applications with a hot key.

Includes a Forth compiler, an 8086 assembler for speed-critical routines, a decompiler and disassembler for testing and debugging, and numerous source-code utilities and examples. Requires under 30K of system memory, maximizing space for your data and programs.

- Create System Manager loaders for your favorite DOS programs
- Source code tools to access built-in 95 graphics capabilities
- FREE games like Merlin and Master Mind provided as examples
- Music routine code makes your 95's keyboard musical
- Runs on your PC with HP's Connectivity Pack APP95 program

Manual included; comes on disk (requires Serial Interface to download from your PC).

### UTIL Source Code Option

Examples of Forth programming to help you develop your own applications. Includes source code for: UTIL 8086 assembler, HP 95 EXM loader, line and screen edit functions, DOS gateway, System Manager menu and file services interface, disassembler and decompiler, tools to build UTIL system from the kernel file.

Stock #2385 (95-UTIL Source Code, 5.25") . . . . . \$49.95

### UTIL Metacompiler Option

Lets you create tiny executable applications. You explicitly define only those words that are needed for your application and eliminate the overhead of the assembler, test interpreter, etc. Several examples of typical meta-source code are provided, including a file dump utility that metacompiles to only 1228 bytes. Requires UTIL Forth to run.

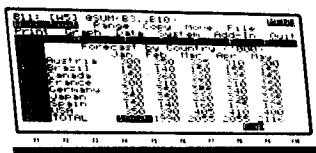
Stock #2384 (95-UTIL Metacompiler, 5.25") . . . . . \$24.95

Stock #2641 (95-UTIL Hex Editor, 5.25") . . . . . \$29.95

## Text-Sort/Browse

free-form text programs  
for the HP 95/100

Dale Thorn



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 (95 Text-Sort/Browse, 3.5") . . . . . \$47.95

**muLISP™ 90**



**Soft Warehouse**

Customized for the 95/100's unique screen, memory and power constraints. Port your expert system to the 95/100 with this fast, compact language! Comes on PC disk, requires Serial Interface to download to 95/100.

Stock #2560 (95/100 muLISP, 5.25") List \$300 . . . . . \$249



## 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.

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 #AAA (Alkaline battery) . . . . . \$0.89

Stock #AA (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

Stock #CR2325 (Lithium battery) . . . . . \$1.95

### Read our mail from Kansas

I recently ordered a HP 100LX from you and the \$749 list price started me remembering. I believe it was 18 years ago I bought my first HP calculator, an HP-65. It too was \$749. I and my engineers beat it unmercifully during its first year, doing all the design analysis for a power steering pump that we ultimately patented. It still sits in my desk drawer, within arm's reach, and I use it when the calculation is a little too complicated for my 16C . . . . .

You just can't beat the reliability of the HP calculators. When I look at the difference between the 100LX and the 65, I am amazed by the growth of technology and value over the years.

Ron Crain, Olathe

# calculator batteries, stands & cases

## 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 p 27.

		Battery No. x Size	Stands	Hard Leather Cases	Protective Cases	Vinyl Cases
	Calculator HP10B, 14B, 17B(II), A 20S, 21S, 22S, 27S, 32S(II), 42S	3 x A76	642, 2403 2127, 2326	2062	2068, 2070 92169K	
B	HP18C, 19B(II), 28C, 28S	3 x N	769, 2025	2063	92169D/E/F	
C	HP11C, 12C, 15C, 16C	3 x A76	629, 998		92169B	82174
D	HP41C, 41CV, 41CX	4 x N	2403, 642, 2127	511		82111A
E	HP71B	4 x AAA				
F	HP48S, 48SX, 48G, 48GX	3 x AAA	2403, 2249, 2252	2225	2638, 2579, 2736, 2763 2865	82221A
G	HP 95LX HP 95LX1mb HP 100LX HP 95/100 RAM Card	2 x AA 1-CR2032 1-CR2025			2638, 2579, 2736, 2665, 2519, 2520 2764	

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	CMIITP	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	DBS11	4 x CR2032		Texas Instruments	TI81/82	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 CR2032	2249, 2252
Sharp	OZ9600/II	4 x AAA		Casio	FX7000G	4 x CR2032	2249, 2252
Sharp	OZ7420	3 x CR2032		Casio	FX7700GB	4 x CR2032	2249, 2252
Sharp	EL9200C	4 x AAA	2249, 2252	Casio	FX8700G	4 x CR2032	2249, 2252
Sharp	EL9300C	4 x AAA	2249, 2252	Casio	FX6300G	2 x CR2032	

## 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 C] . . . . . \$11.95

Get Instant Gratification—  
use our optional UPS Overnight Delivery!

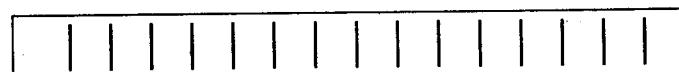
**Brown plastic folding stand**—adjustable viewing angle, quickly collapses for your pocket. A *Best Buy*.  
 Stock #2403 [Plastic stand; Brown, size A, D, F] . . . . . \$5.95

**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

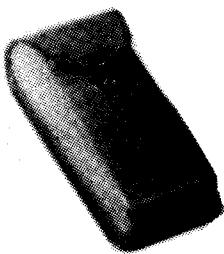
Personalize any stand above with your own name, engraved in blackened letters on bright chrome-plated brass. Self adhesive backing. Please fill in boxes below for up to 16 engraved characters (including punctuation and spaces)—just tear out this page and send it with your order. Dimensions: .375" x 2".



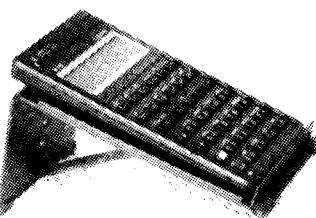
Stock #AWN [Custom Nameplate: Chrome] . . . . . \$7.95

Catalog shopping is convenient—  
why suffer the mall?

# calculator batteries, stands & cases



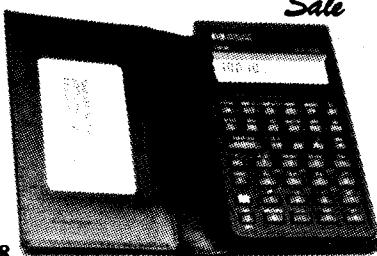
#2225  
#511  
#2062  
#2063



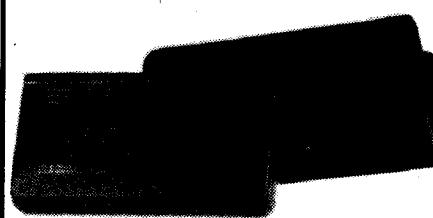
#2403



#92169D #92169K  
#92169E #92169B  
#92169F



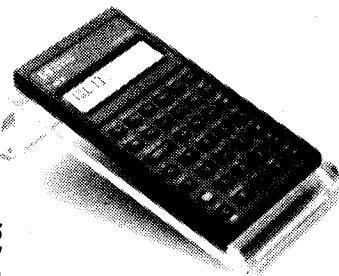
#2068  
#2070



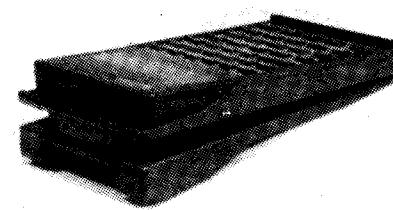
#2736



#2638



#998  
#2025  
#2127  
#2252



#2326



#629  
#642  
#769  
#2249

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

## Hard Leather Cases

Chary

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.

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, size F] . . . . . \$42.95

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

\$12.95  
\$21.95  
\$12.95

## 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 #82174 [Vinyl case: Black, size C] . . . . . \$4.50

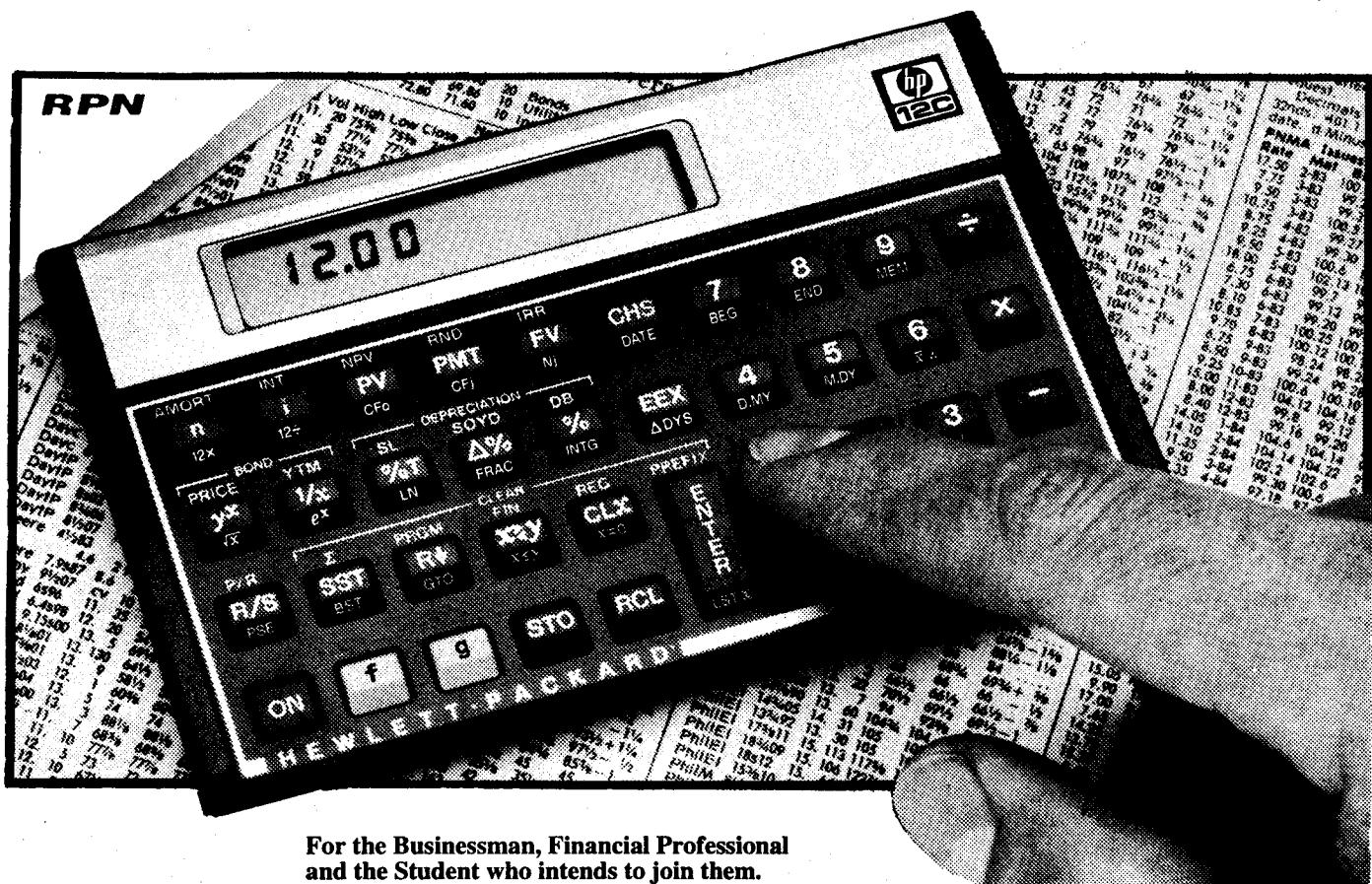
Tuck-top wallet with a second layer of pliant cowhide  
Stock #92169K [HP wallet: Black, size A] List \$19 . . . . . \$17.95  
Stock #92169D [HP wallet: Black, size B] List \$19 . . . . . \$17.95  
Stock #92169E [HP Wallet: Brown, size B] List \$19 . . . . . \$17.95  
Stock #92169F [HP Wallet: Burgundy, size B] List \$19 . . . . . \$17.95  
Stock #92169B [wallet: Brown, size C] List \$12 . . . . . \$10.95

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

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A Big Hurry? UPS OVERNITE AIR!

# HP 12C business calculator



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

# **BROKERS LESSORS**

# ADVISORS BANKERS

# **INVESTORS CONSULTANTS**

**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

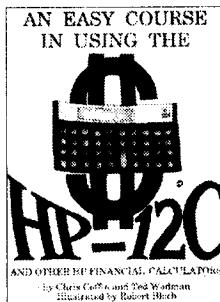
Stock #HP12C, List \$95 (Battery, case & manual incl) . . . \$74.95

## An Easy Course in using the HP 12C by Coffin/Wadman

by Conn 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**



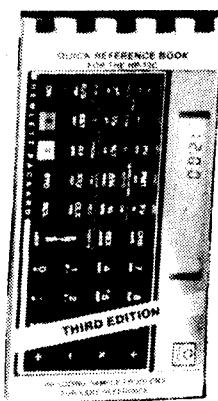
# Quick Reference Guide for the HP 12C

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.

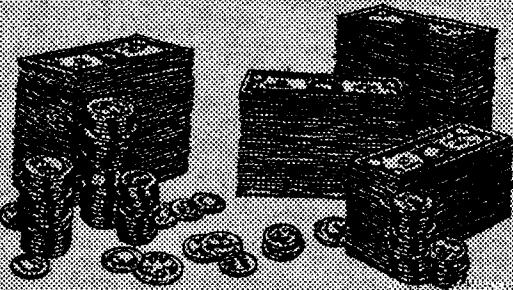
Believe it or not, this little book contains methods and examples covering every function of the calculator—plus more examples to steer you through problems complex enough to require two-stage solutions. It's concise, complete and useful.

**Stock #243, 12C Quick Reference Guide, 36p softbound . . \$5.50**



# HP 12C business calculator

## HP Applications Books



### 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.

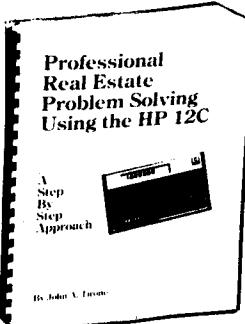
It's all quickly made clear to you by Edric Cane, the master teacher who wrote Volume I as well.

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

*New*



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

*EduCALC has lots of items you can't find in a store.*

## The HP 12C Pocket Guide: Just in Case by Coffin/Wadman



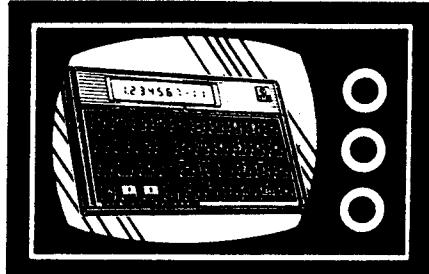
Jiffy HELP that fits in the pouch with your HP 12C—yet it is complete enough, with Descriptions, Instructions and Examples.

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

## HP 12C Video Training Program

Smart<sub>z</sub>



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

## Ratios in Investment Real Estate by Edric Cane

*New*

Stock #3026, Ratios in Real Estate, 122p softbound . . . . \$27.95

# business calculators

# HP 17BII

**BA Real Estate**  
everything you've wanted  
in a RE business calculator  
for professionals and students

**TEXAS  
INSTRUMENTS**

*New*

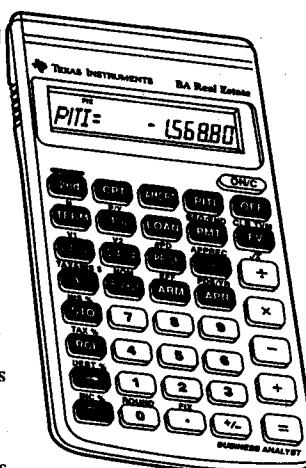
- Buyer Qualification amounts calculated for both income and loan amount
- Calculates PITI (principal, interest, taxes and insurance)
- figures ARMs (adjustable rate mortgages) and Bi-Weekly mortgages
- TVM (time value of money) calculations and amortization schedules with an automatic increment feature

You'll find instant annual percentage rates using points and fees, total mortgage payments based on variable values entered, property appreciation.

You can even input local rates of tax, insurance and qualifying ratio values for your Buyer Qualification and PITI calculations.

Display labels guide you through calculations. Includes guidebook and worksheets plus quick reference card.

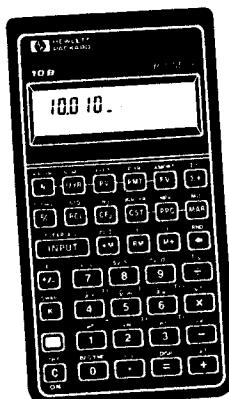
Stock #TIBAIIRE [Real Estate Calculator] List \$60 . . . . . \$47.95



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**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

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. You can even try out either system while you use the other.

## Business and Finance

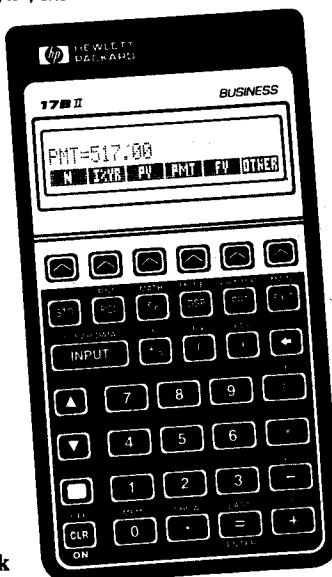
- Amortization with table printout
- Bonds; price, yield
- Date arithmetic
- Depreciation
- Interest rate conversions
- List-based cash flows
- Mark-up as percent of price and cost, percent change, percent total
- Number lists; edit, sort, store
- Time value of money

## Time and Dates

- Appointments and alarms
- Clock, calendar

## Statistics and Math

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



## HP 17BII

**hp** 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

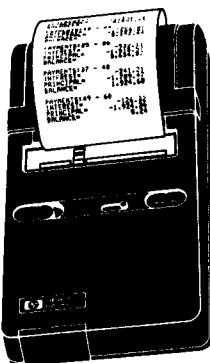
**hp** HEWLETT  
PACKARD

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

*Calculator stands, cases & batteries: see pp 29-30*

# HP 17BII business calculator

**InfraRed Printer**  
for your HP 17, 18, 19, 27, 28,  
41 with IR Module, 42 or 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 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] . . . . . \$34.95

Stock #82175A [2.25" Printer Paper, black, 6 rolls] . . . . . \$9.95

Stock #AA [Batteries, Printer uses 4] . . . . . ea \$8.89

Stock #92169G [Cover, black] . . . . . \$22.95

Stock #92169H [Cover, brown] . . . . . \$22.95

Foreign adapters available; see page 14 (HP 100 section).

## An Easy Course in Using the HP 17BII

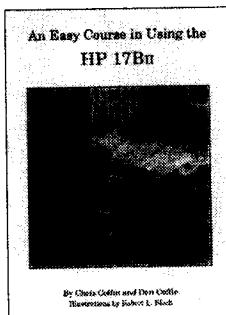
**GRAPEVINE PUBLICATIONS, INC.**

A clear, straightforward explanation of your HP 17BII. 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, 17BII Easy Course, List \$23 . . . . . \$19.95



## 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

"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*

## 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

## An Easy Course in Using the HP 27S

**GRAPEVINE PUBLICATIONS, INC.**

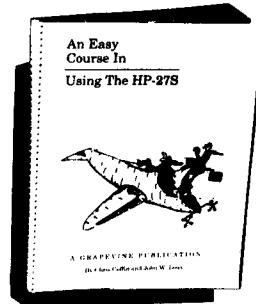
A clear, straightforward explanation of your 27S. It's written in Grapevine's friendly style, so it's easy to understand, right from the first.

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.

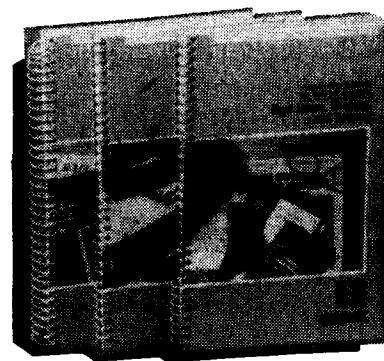
Includes clear diagrams and explicit examples.

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



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

**hp 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 #544, Real Estate, Banking, Leasing . . . . . \$9.95

Stock #545, Business, Finance, Accounting . . . . . \$9.95

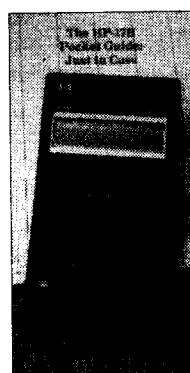
Stock #546, Marketing, Sales . . . . . \$9.95

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."



**hp** HEWLETT  
PACKARD

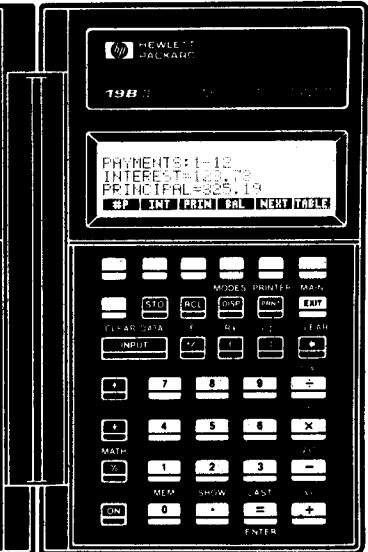
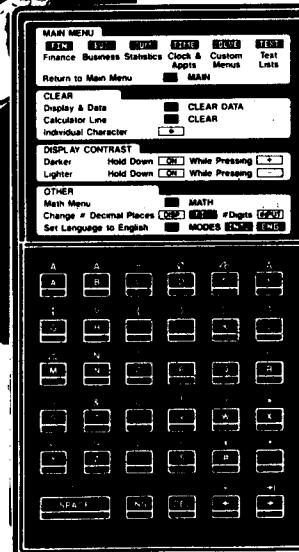
## Data-Saving and Sorting Power

## 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:

- Interest rates
- Time and appointments
- Payment schedules
- Markup and margin
- Statistics
- Internal rate of return
- Interest rate conversions

**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

## HP 19B Pocket Book

by James Donnelly

THE HP-19  
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

**Calculator batteries, stands & cases: see pp. 27-29**  
**InfraRed Printer: see p. 33**



Crown Publishers, Inc., New York, N.Y.

Printed in U.S.A. 4-83

# HP 19BII

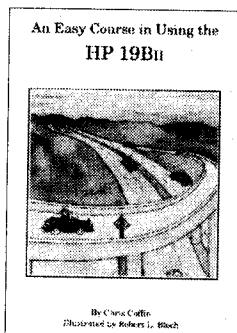
## An Easy Course in Using the HP 19BII

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



# School calculators

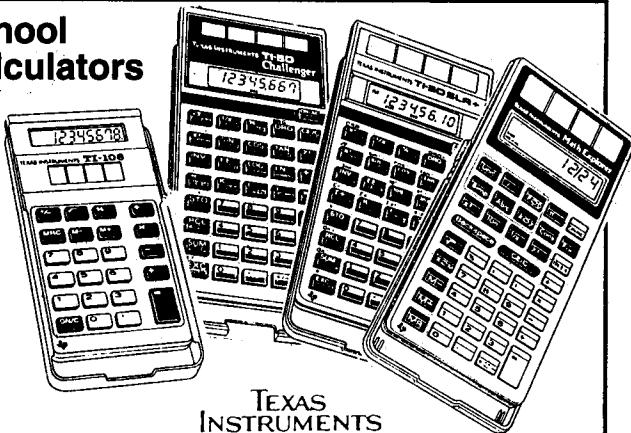
## Notice to Educators —

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.

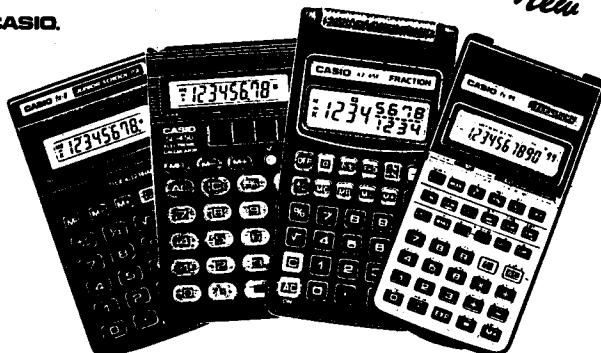
## School Calculators



TEXAS INSTRUMENTS

## School Calculators

CASIO.



Best-Buys from the world's largest manufacturer of calculators! Casio is your school's partner, with a Loaner Program, Classroom Sets from EduCALC, plus Textbooks and Workbooks and Video Tapes to support you—they even publish the quarterly newsletter, *The Electronic Classroom*, to keep you abreast.

### For Grades K through 3: Casio SL-450

Full-featured yet rugged, with solar power, 8-digit display (including function signs and floating minus sign), hard plastic keys and a durable, slide-on case that attaches to the back of the unit during use.

Stock #SL450 [School Calculator] . . . . . 7.95

### For grades K through 6: Casio fx-8

8-digit display includes function signs with 20,000 hour AA battery power. Full set of features including percent and reciprocal. Connected hard case. Stock #FX8 [School Calculator] . . . . . \$12.95

### For grades 4 through 8: Casio AZ-45F

True fraction display shows numerator over denominator, with large whole digits. Division with remainder and decimal/fraction conversions and automatic simplification of fractions. Two AA batteries, hard keys and case. Stock #AZ45F [Fraction Mate Calculator] . . . . . \$19.95

### For grades 7 through 8: Casio fx-95

10-digit plus 2-exponent display. Fractions, simultaneous equations and quadratic equations solvers, random numbers. Swing-back hard case.

Stock #FX95 [Solver Calculator] . . . . . \$16.95

### For grades 7 through college: Casio fx-6300G

Lo-cost yet powerful, the *graphing calculator* built especially for students—with plot, trace, scroll and zoom functions! 200 functions *including fractions*.

Stock #FX6300G [Graphing Calculator] List \$55 . . . . . \$39.95  
See page 41.

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. These calculators are the same units we ship to schools and do not come in a fancy box. 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 #TI17 [Math Mate] . . . . . \$8.50

### For grades 4 through 8: TI Math Explorer

4-8<sup>th</sup> 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 11: TI-30XSLR & TI-34

TI-30 XSLR 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-30XSLR and also does hex/binary/octal conversions, Boolean logic and fractions, 10-digit display.

Stock #TI30XSLR [Sci/Stat Calculator] . . . . . \$17.95

Stock #TI34 [Advanced Scientific] . . . . . \$20.95

See our projectable calculators, for overhead displays, on p 40. See calculator activities books on p 42. Note the new Casio Student Graphics Calculator on p 41.

# scientific calculators

## Discontinued Models of HP Calculators



### HP 11C, HP 16C, HP 27S

We felt like we had opened King Tut's tomb when we found these for you—if you like oldies-but-goodies, you're in real luck now!

All machines are new, but they have no manuals or cases with them (if you need a case see page 29; for owner's manuals see page 64). We have that basic scientific workhorse, the HP 11C—the unique computer-science calculator, the HP 16C—the engineer's calculator with time-value-of-money functions as well as the scientific ones, the HP 27S (it also has the best-ever SOLVER).

This is a limited offer, so order now—they'll go quickly.

Stock #HP11C [Scientific Calculator] . . . . . \$29.95  
 Stock #HP16C [Computer-Science Calculator] . . . . . \$34.95  
 Stock #HP27S [Engineering Calculator] . . . . . \$29.95

### 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



### HP 32SII

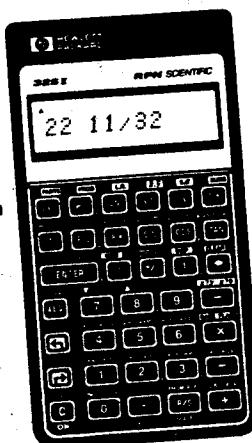
## Real Programmability Real HP RPN



Algebraic HP Solve Application  
Algebraic Equation Entry/Evaluation  
Unit Conversions  
Fractions

New  
'Algebraized' Model

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 29-30*

### Tips and Programs for the HP 32S

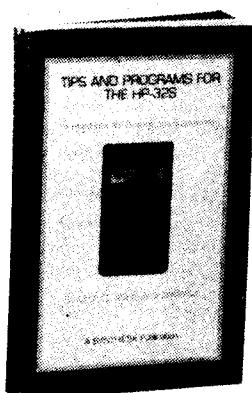
by  
W.A.C. Mier-Jedrzejowicz

Your pocket rocket to skill and success with your HP 32S.

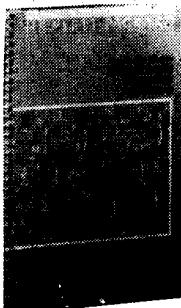
You start from GO, but there's also a quick-start for RPN-users. By Chapter 2 you'll do short programs that you may use in college courses. Then you'll learn how to make and use larger programs that add extra power to the HP 32S statistics and integration functions.

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



\$5.95



# scientific calculators

## TI-30X Scientific Calculator

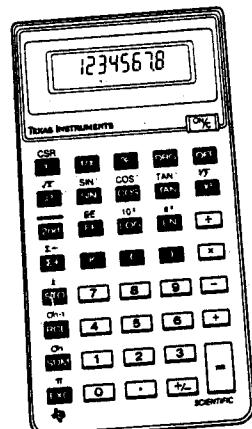
TEXAS  
INSTRUMENTS

**Your Best Buy for learning to calculate!** For general math and science — statistics, trigs, logs, powers and roots, plus 3 memories that persist when it's OFF.

It's loaded, with fractions and fraction/decimal conversions, hyperbolic trigs, natural and base 10 logs, and factorials. Does polar/rectangular conversions as well as degrees, minutes, seconds/decimal degrees conversions. Combinations and permutations.

10 digits with 2-digit exponent. Automatic Power Down. Durable Slide Case, Manual and Quick Reference Card included; 1 yr warranty.

Stock #TI30X [Scientific Calculator] List \$18 . . . . . \$14.95



## 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

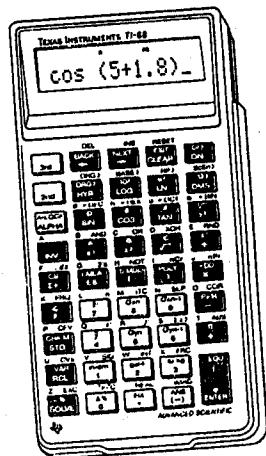
- Solve up to 5 simultaneous equations—with real or complex coefficients.
- Evaluate 40 complex functions—arithmetic to advanced trig—polar or rectangular form.
- Recall, check, edit your last equation.
- Store up to 36 values—with alpha numeric names you define.
- Program up to 12 formulas you define—up 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, hex, 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.

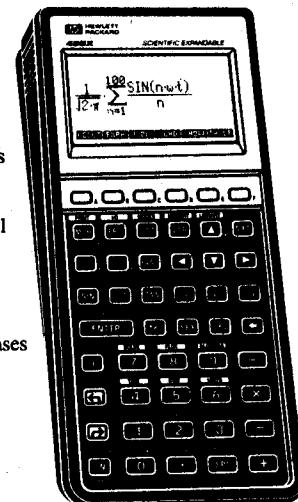
Stock #TI68 [Advanced Sci Calculator] List \$65 . . . . . \$49.95



Be sure to check out our surplus HP 71B offer on page 61.

## Used Calculators — HP 48S & SX Scientific Calculators

hp HEWLETT  
PACKARD



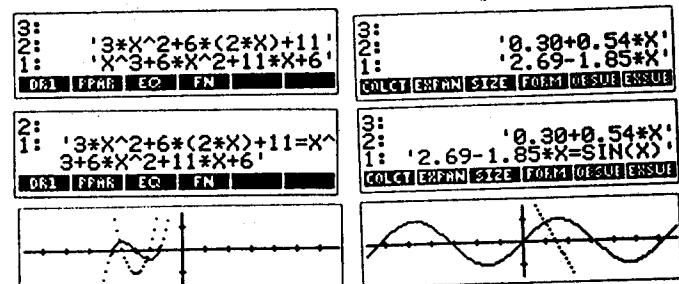
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- Equation Solver
- Integrated Applications
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Let experts help you set up your calculations so you can work with them most easily. These professional references include practical routines and tips 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:

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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 42S scientific calculator

## HP 42S

Engineered for the Engineer  
SuperFast RPN Scientific

 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 HP 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

## 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.

Super-concise summary that fits right in your instrument case—

- using menus
- base conversions
- modes and flags
- matrix operations
- statistics
- data types
- simple programming
- numerical integration
- variables/registers
- executing functions/programs
- using variable menus
- the solver

Stock #2064, 42 Quick Ref, 20p softbound . . . . . \$4.95

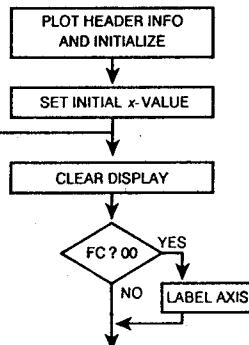
## Programming Examples and Techniques for the HP 42S

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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!

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## An Easy Course in Using the HP 42S

GRAPEVINE PUBLICATIONS, INC.



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.

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## Solution Books for your HP 42S

### Step-by-step examples and programs

Stock #2016, Electrical Engineering . . . . . \$9.95  
Stock #2015, Mechanical Engineering . . . . . \$9.95

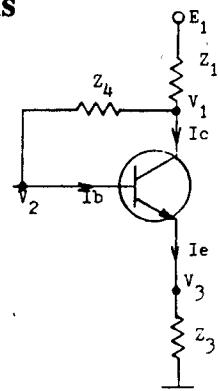
## Advanced Circuit Analysis with the HP 42S

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.

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# HP 42S scientific calculator

## HP 42S Surveying Solutions

from D'Zign

- 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 . . . \$24.45**

## Booklets of Programs for the HP 42S

### Surveyor's Vertical Alignment

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 \$9.95**

### 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 . . . \$9.95**

### 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 . . . \$9.95**

### 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.

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### Triangle Solutions Booklet

Your complete set of triangle solutions programs for the HP 42S—solves with any of these knowns: ASA SAA SAS SSA SSS Area-SS Area-AA Area-SA. If a problem has two possible solutions, you get both output.

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*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>, . . . !*

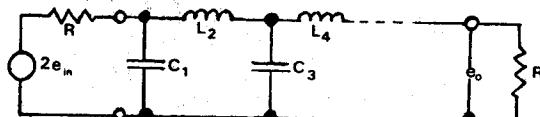
**HP 41 Solution Books — work quite well with the HP 42 also — and the price is reduced!**

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25 RCL 06      34 GTO IND 42+LBL 08
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
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32 PROMPT     40 SF 02 49 /

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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.

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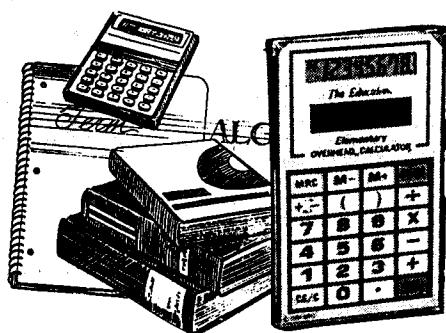
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# projectable calculators

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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.

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 Stock #2195 [Educator BASIC Calculator] . . . . . \$39.95  
 Stock #2196 [Educator INTERMEDIATE Calculator] . . . . . \$79.95  
 Stock #2197 [Educator SCIENTIFIC Calculator] . . . . . \$79.95  
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## Free Calculator Drawing

Fill out and return this coupon to EduCALC before May 15, 1994, to enter (no purchase necessary).

1. How long have you been an EduCALC customer?

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3. How frequently do you order from a catalog?

<input type="checkbox"/> about once per year	<input type="checkbox"/> about 5 times per year
<input type="checkbox"/> about twice per year	<input type="checkbox"/> about 6 times per year
<input type="checkbox"/> about 3 times per year	<input type="checkbox"/> more than 6 times per year
<input type="checkbox"/> about 4 times per year	<input type="checkbox"/> very seldom

4. From how many different catalogs do you order in a year?

<input type="checkbox"/> only from EduCALC	<input type="checkbox"/> 5 or 6
<input type="checkbox"/> 1 or 2	<input type="checkbox"/> 7 or 8
<input type="checkbox"/> 3 or 4	<input type="checkbox"/> 9 or more

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

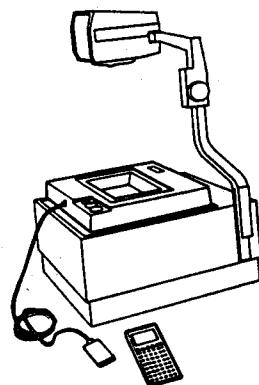
Send it to me,  
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Charles W. Kitz, Millbrae, California, won a free HP 17BII in our last drawing. Enter now—it may be you this time!

## InVision 48 Overhead Display for HP 48SX/GX

Firmware  
Systems

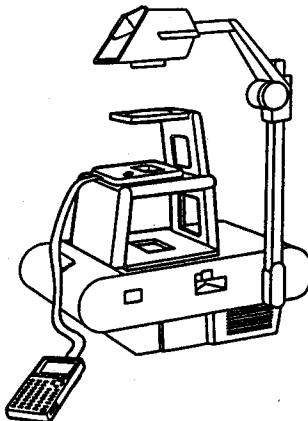


Giant 7" LCD panel sits on OH projector stage—projects large, clear image without using an enlarger. Connects via card slot to calculator (not included).

Stock #2778 [InVision OH Display] List \$550 . . . . . \$489.95

## TI-81, TI-82 or TI-85 ViewScreen

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INSTRUMENTS



All features and functions of the TI-81, TI-82 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).

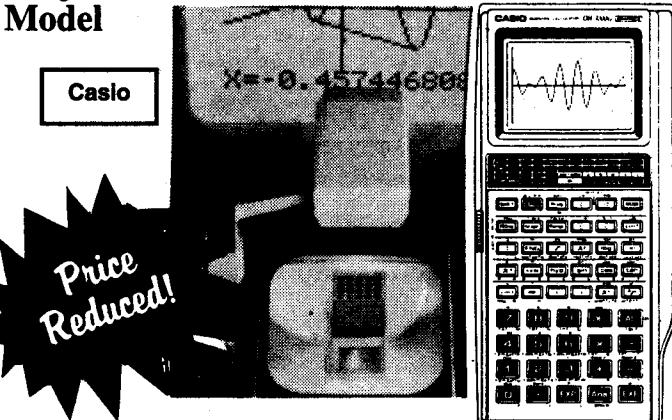
Package includes Overhead Enlarger, Thermal Absorption Device, Guidebook, calculator/display unit, 4 AAA batteries and a rigid case for it all.

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## Overhead Projectable Model



All features of the fx-7000G or the fx-7700G plus a transparent screen.

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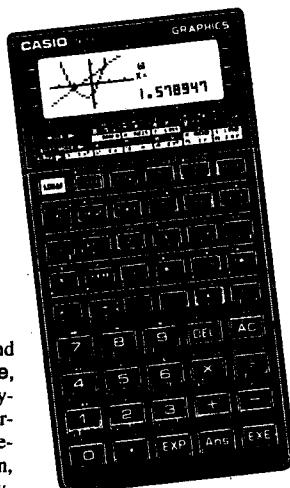
Stock #OH7700G [Overhead Projectable Display] \$274.95

\$249.95  
\$274.95

# graphics calculators

## 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.

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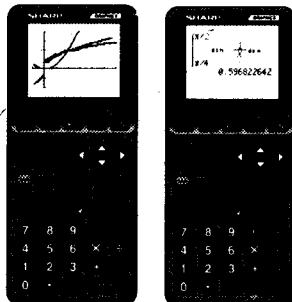
*Calculator batteries, stands & cases: see pp 27-29*

*OH projector models: see p 40.*

## Graphing Calculators EL-9200C/9300C

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FROM SHARP MINDS  
COME SHARP PRODUCTS™

- Algebra I 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)



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.

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## TI-81 Graphics Calculator

*Best Buy.*

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Superior interactive graphing features—so you'll have the power to easily analyze the behavior of several functions at once and solve equations graphically. 7 Zoom functions.

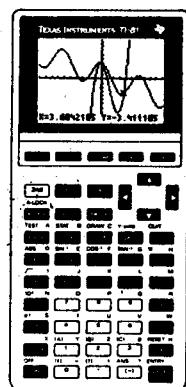
Pull-down display menus—so you'll quickly access more than 300 advanced scientific functions.

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Big Constant Memory—so you can save up to 37 programs totalling 2400 bytes, using up to 27 stored variables. List-based statistics.

Manual, protective slide-on cover, batteries included; 1 year warranty.

Stock #TI81 [Graphics Scientific Calculator] List \$115 . . . \$79.95  
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## TI-82 Graphics Calculator

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*Brand  
New*

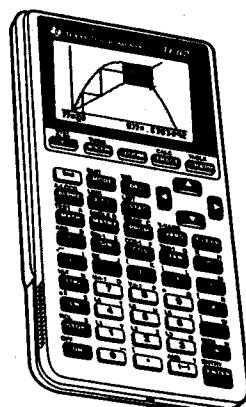
The new way to go through calculus and statistics—special powers like cobweb graphs, function tables, split screens and box/whisker plots.

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Stock #2792 [TI-Graph Link, cable] . . . . . \$61.95



## TI-85 Graphics Calculator

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✓ professionals ✓ students

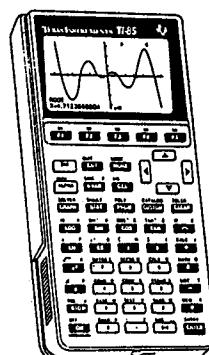
Your powerful visual tool for advanced math, science and engineering—now you can store, graph and analyze up to 99 functions, parametric equations and polar functions, plus differential equations. 5 redefinable menu keys.

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. Complex numbers.

Programmable with branching and looping; 32K bytes RAM.

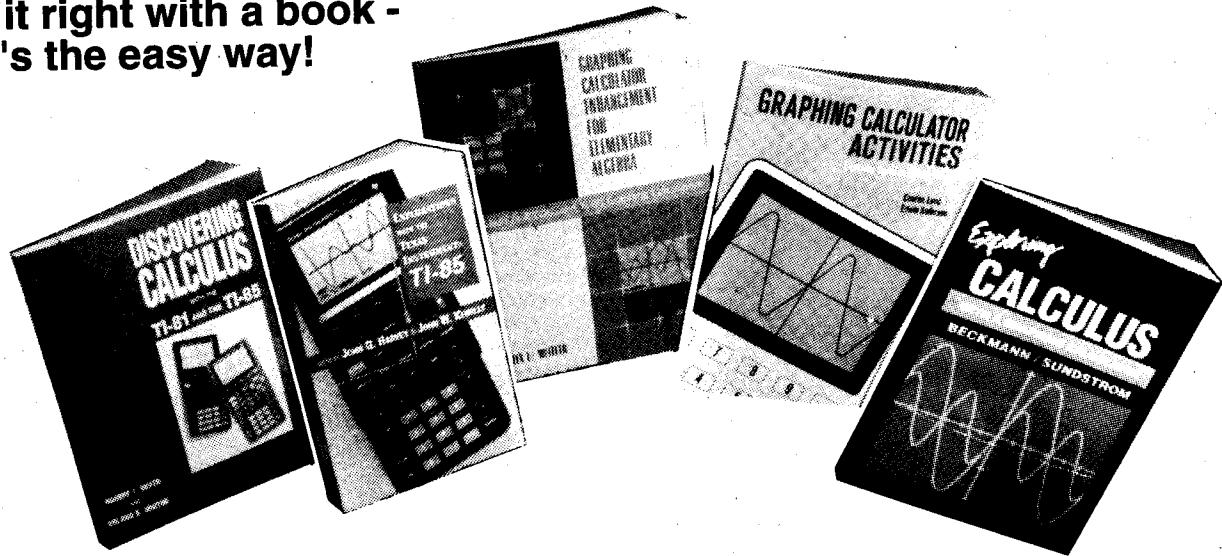
BIG screen shows 8 lines of 21 characters text or 64 x 128-pixel graphs—2 levels of display menus. Main and back-up batteries included; 30" cable and I/O port for data sharing between two TI-85s; 352-page guide book; slide-on cover; 1 yr warranty. Graph Link connects you to a PC or Mac.

Stock #TI85 [Graphics Calculator] List \$135 . . . . . \$119.95  
Stock #2792 [TI-Graph Link, cable] . . . . . \$61.95



# graphics calculators

**Need help graphing?  
Get it right with a book -  
that's the easy way!**



Learn about the calculator, learn about the course—  
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## 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.

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## 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.

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## Introduction to Programming on the TI-81/82/85

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Learn both general programming concepts and specific implementation on your own instrument.

These exercises demonstrate Defining Environment, Input/Output/Program Flow, Defining the Viewing Window, Graphics in Programs, and Using Programs as Building Blocks.

Each model's version is about 39 pages in looseleaf form and may be reproduced for classes, workshops and seminars.

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Stock #3015, Intro Programming TI 82, looseleaf . . . . . \$7.95

Stock #3016, Intro Programming TI 85, looseleaf . . . . . \$7.95

## Exploring Calculus with a Graphing Calculator

by Beckmann/Sundstrom

*Brand New*

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Works with all kinds of graphing calculators as well as calculus software packages for PCs or Macs. Some programs are used; these are given for TI and Casio machines.

Stock #2990, Exploring Calculus Graphing, 267p 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

# 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 shares with the HP 48S/SX a distinctive size (3.2 x 7.1 in.) 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. Most applications have 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, . . . at the press of a key. 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 315 equations for geometry, stress analysis, electrical engineering, fluid flow, heat transfer, and more. Given your known values, solve for the unknown values with the 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 4.1MB.

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.

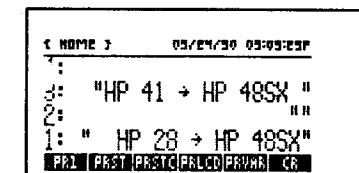
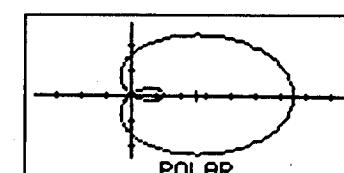
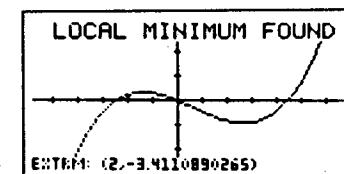
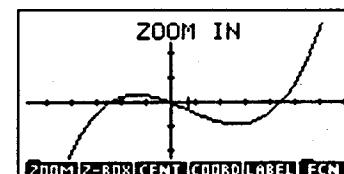
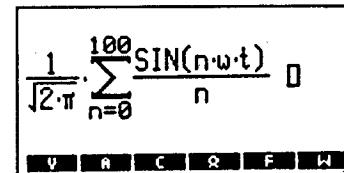
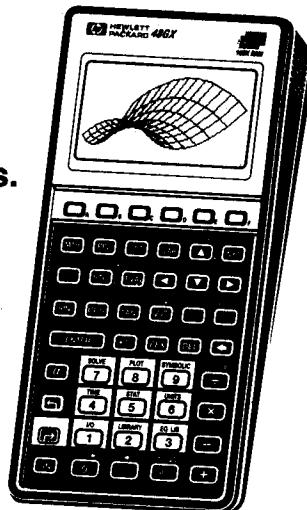
Kermit is built right into the HP 48G/GX so you can also wire-up to your PC or Macintosh with an optional Serial Interface Kit—then you can generate high-quality printouts and use your computer's disk drive to store data and programs. You can use the computer's keyboard to program your calculator, too, 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?*

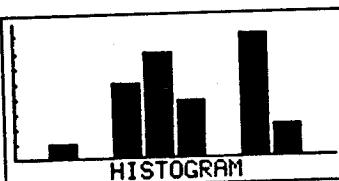
**4. You'll be fast and timely.** This baby is fast — fast at computations and fast writing to screen. Its heart beats at nearly 4 MHz, so its overall throughput is 40% greater than for that old speed king, the HP 48SX.

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.

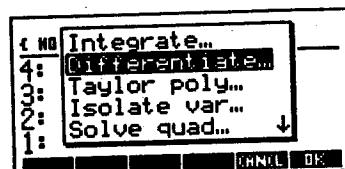
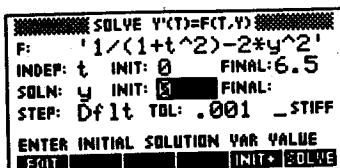
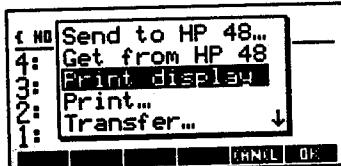
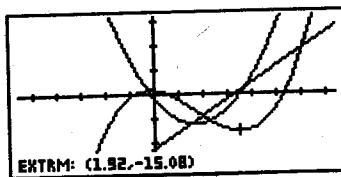
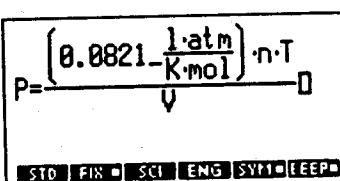
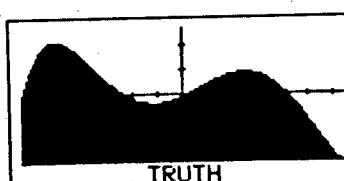
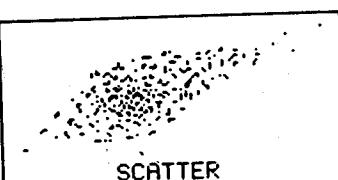
There's a clock which you can have on your screen if you wish (there's date-arithmetic, too). You'll have two types of alarms: appointment and control. *OK?*



# 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 mph added to 10 ft/s 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 differential 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 DBUG 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 PLOTR 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 User's 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 port memory, more commands, better plotting, new and improved input form, expanded list processing, built-in equations. But they will run almost all the software designed for the HP 48S/SX as well, and any user code program you have developed for the HP 48S/SX will run just fine in your new HP48G/GX.

**Stock #HP48GX [Graphic Expandable Calculator]** List \$350 . . . \$274.95

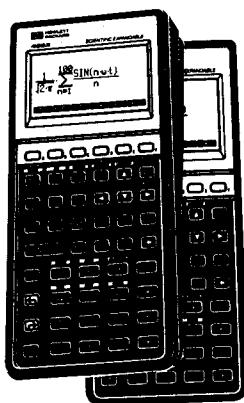
**Stock #HP48G [Graphic Calculator]** List \$165 . . . . . \$134.95

# HP 48 series

here's where you find . . .	
accessories	45
cables/interfaces	47
peripherals	48
software	49
programming aids	57
bookware	59

## Trade In Program Save even more —

**hp** HEWLETT  
PACKARD



TRADE IN your used HP 41CV/CX, 48S or HP 48SX. Just send it to us, insured, in working order, with all its Manuals. Take CRedit on your Order — \$50 CRedit for a 48S, \$95 CRedit for a 48SX, \$45 for a 41CV, \$60 for a 41CX or Card Reader — and put the order and your check right in the box.

If you prefer to keep your old instrument until your new one 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.

## Educators— HP 48G Ten-Pack

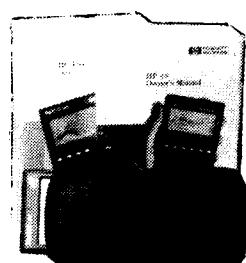
### EduCALC

New cost-effective way to provide your whole class with the very best graphing calculator. Contains ten HP 48G calculators, two Owner's Manuals, 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

### Extras for your HP 48 like those that came with the product



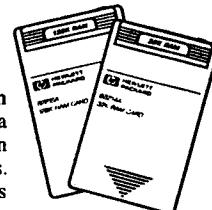
Stock #2787, HP 48G/GX Owner's Manual . . . . .	\$24.95
Stock #2250, HP 48S/SX Owner's Manual . . . . .	\$24.95
Stock #2251, Equation Library Owner's Manual . . . . .	\$9.95
Stock #82221A [HP Soft Case] . . . . .	\$14.95
Stock #AAA [Alkaline Battery] uses 3 . . . . .	ea \$8.89

## Battery-backed RAM Cards for SX/GX

**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, 128K and 1MB, and your machine can hold up to 2 of them. 1-year warranty. Stock #82215A [128K RAM card] List \$150 . . . . . \$124.95 Stock #82216A [1MB RAM card for 48GX only] List \$399 . . . . . \$324.95



## Memory Expansion Cards for HP 48GX only

**Sparcom**  
CORPORATION

*New*

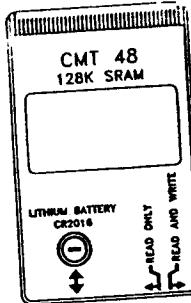


Approved by Hewlett-Packard. Powered by long-life battery that saves programs and data even when card is out of calculator.

Stock #2951 [256K RAM card for HP 48GX] List \$170 . . . . . \$149.95 Stock #2952 [512K RAM card for HP 48GX] List \$260 . . . . . \$229.95

## Battery-backed 128K RAM Card for your HP 48SX/GX

CMT

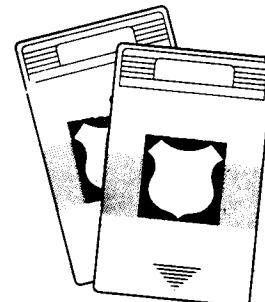


Special Write-Protect Switch guards against accidental erasure. Built-in tranzors protect from electrostatic discharge. CR 2016 battery included (2-3 year life). 1-year warranty.

Stock #2422 [48 RAM, 128K card] List \$95 . . . . . \$85.95

## Battery-backed RAM Cards for SX/GX

TDS



Free Software — 128K RAM Card comes with 5.25" 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 48GX. Battery-backed. Stock #2365 [128K RAM card] List \$115 . . . . . \$99.95 Stock #2475A [256K RAM card for 48GX] List \$199 . . . . . \$149.95 Stock #2476A [512K RAM card for 48GX] List \$240 . . . . . \$219.95

# HP 48 series

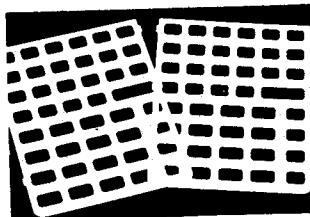
## accessories continued

### Overlay Kit for S/SX/G/GX

**hp** HEWLETT  
PACKARD

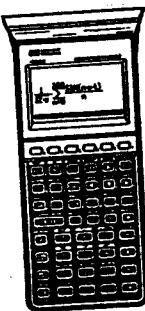
7 plastic keyboard overlays slip into place — 3 transparent, 3 opaque (you can write key labels on these), and 1 with standard alpha keyboard markings for 48S/SX.

Stock #82220A [48 Keyboard Overlay Kit] . . . . . \$14.95



### Protective Bag for S/SX/G/GX

**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

### TDS 148 Environmental Case for S/SX/G/GX



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 allows communication with other HP 48s.

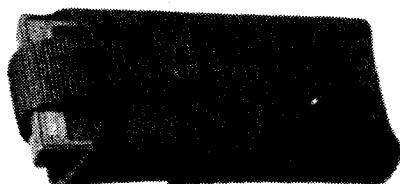
Optional Cold Case goes on over Environmental Case to keep your 48 warm for up to 6 hours in below-freezing weather.

Optional Total Station Cable gives you a direct connection.

Stock #2950 [TDS 148 Environmental Case] List \$120 . . . . . \$109.95  
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, Sokkia/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

### The Pouch for your HP 48S/SX/G/GX

**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

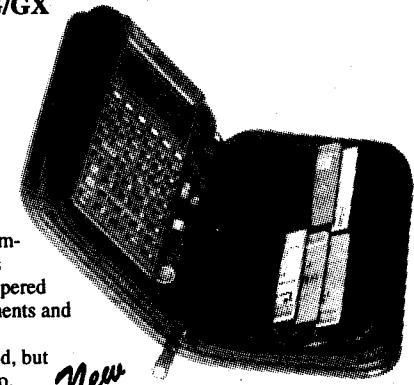
### HP 48 Accessories

#### for S/SX/G/GX

Stock #2249 [Solid Oak Stand] . . . . . \$16.95  
Stock #2252 [Clear Acrylic Stand] . . . . . \$11.95  
Stock #2225 [Hard Leather Case] . . . . . \$42.95

### the Leather Desk our best organizer for the executive's S/SX/G/GX

**EduCALC**



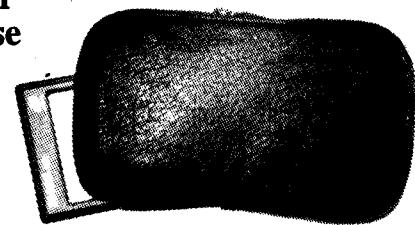
Sumptuous black napa leather coddles your 48, with extra padding for instrument protection. Software and memory cards fit into 6 slots, 2 pockets hold notes and diary. There's a zippered compartment for important documents and a loop for your pen.

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

### Black Leather Carrying Case for your HP 48

*Brand  
New*



- looks rich
- feels sumptuous
- padded for protection

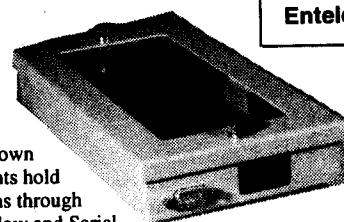
Stock #2579 [HP Leather Case] . . . . . \$34.95

### Protect your 48 in a Hostile Environment for S/SX/G/GX

**Entelechy**

- 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

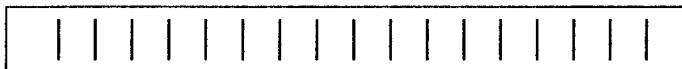
# HP 48 series

## Accessories continued

### Your Name in Silver on your HP 48G/GX

Personalize your calculator with this black-background, self-adhesive nameplate—it installs quickly in the recess on the back of your instrument.

A big plus is, now your borrowers will know where to return your HP 48. Just tell us the 18 standard characters to engrave for you, and allow 2 weeks for delivery. Indicate whether all caps or upper/lower case.



Stock #2786 [HP 48 Personalization] . . . . . \$5.95

### The Belt Holster for your HP 48 or HP 95/100

Ripoffs



The very best belt clip we've ever seen, on a double-stitched black nylon holster with velcro closure and foam padding—good design at the right price!

Stock #3000 [Belt Holster] . . . . . \$14.95

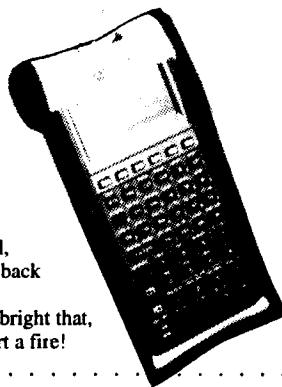
### audacious orange Protective Case for your HP 48

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.

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



### An Easy Course in Programming the HP 48G/GX

Now

GRAPEVINE PUBLICATIONS, INC.

An Easy Course in  
Programming the  
HP 48G/GX



by Chris Coffin

Here is an *Easy Course* in true Grapevine style — examples, illustrations, and clear, simple explanations give you a real feel for the machine and how its many features work together.

After the overview comes simple programming — looping, branching, etc. Next, you program with the built-in applications. Then you design your own applications — directories, custom menus, the works.

Stock #2929, Easy Programming 48G/GX, 350p softbnd . . . \$19.95

### An Easy Course in Using the HP 48SX GRAPEVINE PUBLICATIONS, INC.

Your fast, easy way to get  
up-to-speed on the 48SX!

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 . . . . . \$9.95



- Calculus
- SOLVing Equations
- Time Calculations
- Postfix Programs

## cables/interfaces

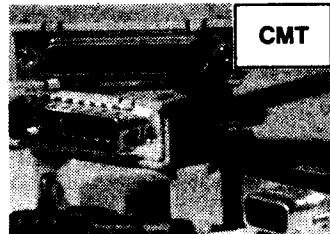
### Serial Interfaces— Kits & Cables—for PCs and Macs to S/SX/G/GX

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 (3.5" disc for PC; 3.5" disc for Macintosh).



CMT

Stock #82208C [PC Serial Interface Kit] List \$60 . . . . . \$49.95

Stock #F1015A [48/95/100 to DB9 Cable, 6'] List \$35 . . . . . \$24.95

Stock #F1013A [Serial Cable Adapter Kit] . . . . . \$24.95

Stock #82209B [Mac Serial Interface Kit] List \$60 . . . . . \$49.95

Stock #F1016A [Mac Serial Cable only] List \$35 . . . . . \$24.95

### Experimenter's Serial Cables for S/SX/G/GX

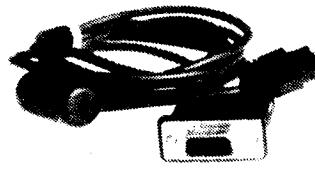
- Engineers
- Hobbyists
- Instrument Makers

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



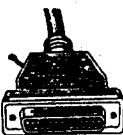
# HP 48 Series

cables/interfaces continued

## Dual-Purpose HP 48 Serial Cable for S/SX/G/GX

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 48S/SX/G/GX

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, 5.25"] . . . . . \$36.95



## CalcWare PC/Mac Link

**Sparcom**  
CORPORATION

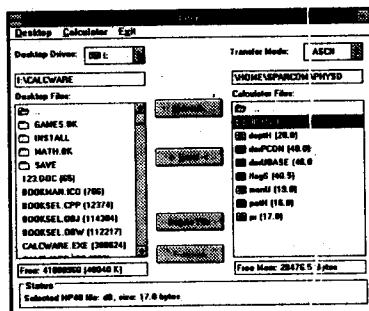
Upload, download and backup files from your HP 48 S/SX/G/GX to a DOS/Windows or Mac computer—here's your connectivity software.

Create documents, analyze results, prepare examples and design curricula quickly with Screen Capture and Remote commands.

Comes with a library of essential math functions—so you can derive solutions or solve equations in math, science and engineering.

Stock #2953 [DOS/WIN CalcWare] List \$60 . . . . . \$49.95  
Stock #2954 [Mac CalcWare] List \$60 . . . . . \$49.95

*Need fast data transfer from one 48 to another? See the 4 x 4 Cable from EduCALC on page 18.*



## peripherals

## Program Development Link

HP 48S/SX 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, 5.25" & 3.5"] List \$120. \$99.95

## Diconix 180si Portable Printer S/SX/G/GX



- 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 \$349 . . . . . \$299

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

## InfraRed Printer for your HP 48 S/SX/G/GX

**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] . . . . . \$34.95

Stock #82175A [2.25" 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

Foreign adapters available—see p. 14, HP 100LX section.



## Drive95 Portable 3 1/2" Disk Drive for your HP 48S/SX/G/GX

**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 (7.25" x 5.25" 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 3.5" disks.

Includes File Manager software, manual, Kermit, serial cable and AC charger/adaptor; 1 year warranty.

Stock #2602 [Drive95] List \$330 . . . . . \$285

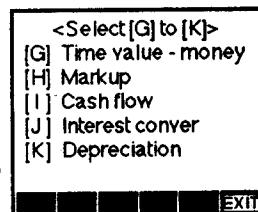
Stock #2327 [Formatted 3.5" disk] . . . . . each \$2.50

## Software

### 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, Mark-up, Cash Flow, Interest Rate Conversions, Depreciation.  
Stock #2482 (Financial Functions, 48 card) List \$95 . . . . . \$79.95



### HP Solve-Equation Library Application Card

for SX

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! Equations and Constants built into HP 48G/GX.

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. Tetris included on card.

Stock #82211B (Equation Library ROM card) List \$100 . . . . . \$79.95

### Games48 for SX/GX

Sparcom  
CORPORATION

- Poker
- Diamonds
- Keno
- Blackjack
- Sokoban
- Reversi
- Skunk
- Vaders
- Slots
- Roulette



Take a break! Test your reflexes with Diamonds. Solve strategic puzzles in Sokoban. Transform your HP 48SX/GX 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 for SX/GX

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 48SX/GX and enjoy. Stock #2259 (Casino 48, card) List \$65 . . . . . \$41.95



### HP 48SX/GX

Engineering Mathematics Library  
including MATHLIB, a ROM card  
with 715 new commands

by John Holland

Academic Press

### Our most complete math package

- ✓ quick analyses for the professional
- ✓ worked examples for students

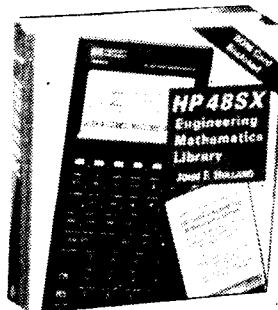
Complete, with statistics, linear algebra and digital signal and data processing. Over 300 tabulations of complex math functions, most to 10-digit accuracy.

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/GX Math Library General Application Programs

John Holland

### An introduction of Symbolic and Complex Computation with Applications

- 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 3.5" disk for downloading

$$\begin{bmatrix} -3E-12 & -5E-12 & -7E-12 \\ 8E-12 & 1E-11 & 2E-11 \\ 2E-12 & 4E-12 & 7E-12 \end{bmatrix}$$

$$x[n] = \sum x[n'] \delta_{nn'}$$

$$= \frac{1}{m} \sum_{n=1}^{m-1} x[n'] \sum_{i=0}^{n-1} \sum_{j=0}^{n-1} a_{i+jm}^* a_{i+jm}^* x[n']$$

$$= \frac{1}{m} \sum_{n=0}^{m-1} \sum_{i=0}^{n-1} a_{i+nm}^* \sum_{j=0}^{n-1} \bar{a}_{i+jm}^* x[n']$$

$$= \frac{1}{m} \sum_{n=0}^{m-1} \sum_{i=0}^{n-1} a_{i+nm}^* c_i^*$$

Stock #2902 (HP 48 Application Programs, 3.5") . . . . . \$59.95  
Stock #2903 (HP 48 Application Programs, card) . . . . . \$99.95





# HP 48 series

software continued

## HP 48SX/GX Application Cards for ME, EE, Gen Chem, and Math

**Sparcom**  
CORPORATION

*Multi-Sale!*

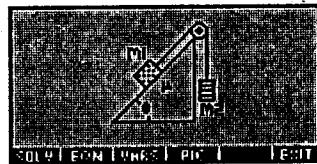
Get all the Sparcom Application Cards you need right now, or get a buddy and save double discount \$25 — use our regular stock number and discount price for the first card on your order but use the underneath stock number (ending in 'M') for your second, third, . . . cards on the same order.

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-driven 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  
Stock #2290M (ME Applns, card) . . . . . Multi-price \$79.95

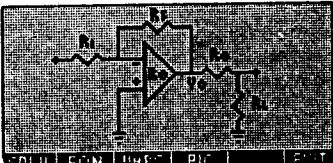


ME Reference Library — over 3000 entries from nine subject areas; including properties of solids and liquids, composition of metals, refrigerants, fuels and combustion, thermal properties, saturated gas properties and more.

Stock #2291 (ME Reference, card) List \$100 . . . . . \$89.95  
Stock #2291M (ME Reference, card) . . . . . Multi-price \$79.95

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  
Stock #2292M (EE Applns, card) . . . . . Multi-price \$79.95



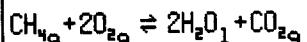
EE Reference Library — over 3000 entries from seven subject areas; covering properties of Silicon, digital specifications, properties of lasers, III-V and II-VI compounds, standard component values, wire gauge, and dielectric and magnetic properties.

Stock #2293 (EE Reference, card) List \$100 . . . . . \$89.95  
Stock #2293M (EE Reference, card) . . . . . Multi-price \$79.95

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  
Stock #2294M (Chem Applns, card) . . . . . Multi-price \$79.95

SPARCOM CHEMICAL EQUATION WRITER



PRESS [ENTER] TO RETURN TO LIST . . .

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  
Stock #2295M (Chem Reference, card) . . . . . Multi-price \$79.95

Mathematics Applications Pac — easy access to algebraic utilities: cubic/quartic solver, combinations/permuations, base conversions, LCM/GCD/ prime factors. Trig includes graphs and definitions for trig and hyperbolic functions 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  
Stock #2324M (Math Applns, card) . . . . . Multi-price \$79.95

*Save \$5 in our  
close-out sale —  
while they last!*

Application and Reference Cards for the HP 48SX only. These are the same programs as in our regular cards above, but they will not perform properly in an HP 48GX.

Stock #2290SX (ME Applications, card) List \$100 . . . . . \$69.95  
Stock #2291SX (ME Reference, card) List \$100 . . . . . \$64.95  
Stock #2292SX (EE Applications, card) List \$100 . . . . . \$69.95  
Stock #2293SX (EE Reference, card) List \$100 . . . . . \$64.95  
Stock #2294SX (Chem Applications, card) List \$100 . . . . . \$69.95  
Stock #2295SX (Chem Reference, card) List \$100 . . . . . \$64.95  
Stock #2324SX (Math Applications, card) List \$100 . . . . . \$69.95  
Stock #2323SX (PIM Card) List \$100 . . . . . \$69.95

## EQuation Xpert for S/SX/G/GX

**VectorSoft**

**EQuation Xpert**

For the HP48 Calculator Series



Create your own custom equation directory — here's your graphic interface software.

You simply store your equations by category and subject — EQuation Xpert does the rest. You'll have the option to add equation-related information, graphics objects and AutoVARS.

Then you can select equations by description, scroll, expand your windows, drop an equation to stack or to SOLVER. You can view equation-list, equation and user information on screen all at once.

Includes Manual; comes on ROM card or on disk for downloading from PC.

Stock #2947 (EQuation Xpert, 3.5" disk) . . . . . \$29.95  
Stock #2948 (EQuation Xpert, card) . . . . . \$59.95

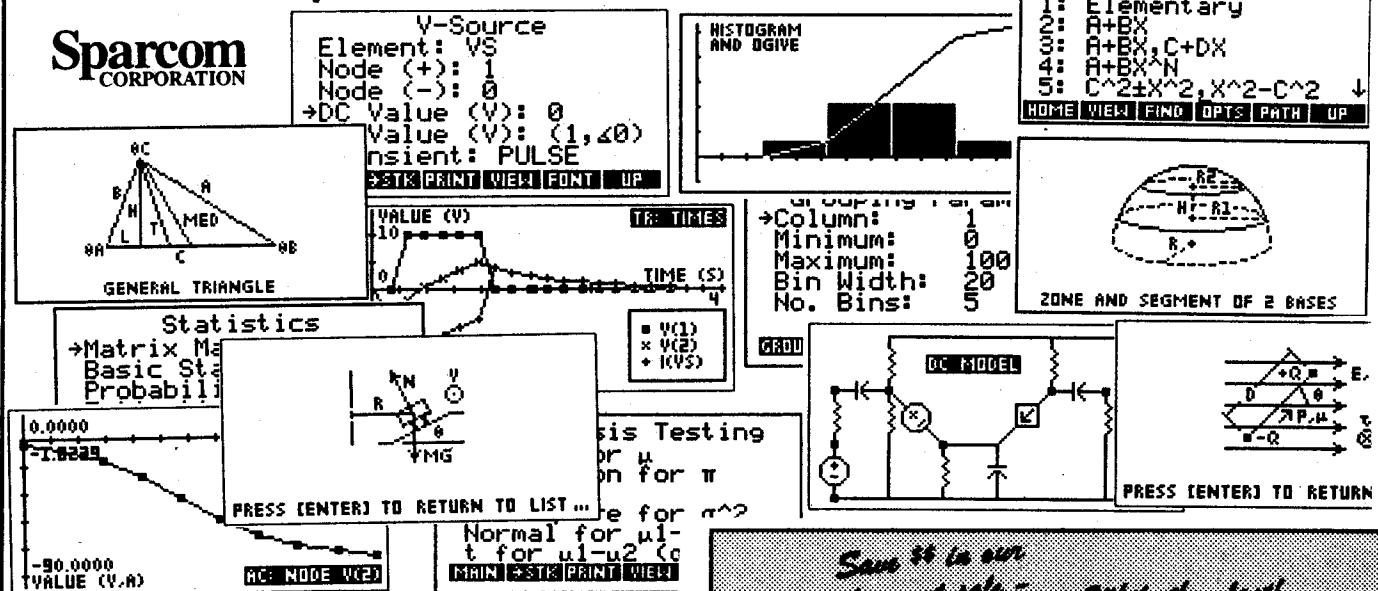
## Read our mail from California —

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

software continued

## Pocket Professional Software for the HP 48SX/GX 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

Save 35% on our discount rate - While they last!	
Pocket Professional Software Cards for the HP 48SX only. These are the same programs as in our regular cards above, but they will not perform properly in an HP 48GX.	
Stock #2589SX (Spice48, card for SX only)	\$69.95
Stock #2599SX (Physics Pac, card for SX only)	\$69.95
Stock #2743SX (Statistics Pac, card for SX only)	\$69.95
Stock #2599SX (SS Electronics, card for SX only)	\$69.95
Stock #2691SX (Calculus Pac, card for SX only)	\$69.95
Stock #2636SX (Celestial Nav Pac, card for SX only)	\$69.95

### Math•Pro

Here's the way you can instantly transform your HP 48 SX/GX into a technical-information powerhouse!

For professionals and students in engineering, math and the physical sciences. Menu-driven so it's easy to use, for preprogrammed equations and formulae, electronic reference data and one-step unit entry and conversion. Fast, with on-line HELP.

Over 1000 equations, routines and tables for arithmetic, algebra, geometry, trig, hyperbolics, calculus, curve-fitting, transforms, quadric surfaces, partial-fractions. Valuable routines like Simpson's rule and the general triangle solution.

Stock #2960 (Math-Pro, card) List \$110 . . . . . \$99.95

### EE•Pro

Transfer your HP 48SX/GX into an ultra-fast, easy-to-use electronic handbook—high-speed problem-solving for EE professionals and students.

Over 1000 equations and analysis routines with reference data—includes Bridge, RL, RC, RLC, AC, Polyphase, OpAmp and Linear Amplifier Circuits; Meters, Resonance, Solid State Devices.

Functions from HP's famous 16C computer-engineering calculator are built in, including integer arithmetic, base conversion and bit manipulation. Also has on-line help text, font options and customizable scrolling-speed settings.

You'll compare, solve, plot and analyze equations without tedious programming or searching through handbooks.

Stock #3025 (EE•Pro, card) List \$110 . . . . . \$99.95

# HP 48 series

software continued

## Structural Analysis Card for the HP 48SX/GX

TDS

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 for SX/GX

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, 3.5") List \$250 . \$224.95

## Easy Survey—PC Software, works with SX/GX

So you'll have the same menus, screens and functions on your office PC as you use in the field with TDS Survey Cards

Includes all data collection functions, extended COGO, street intersection layouts, contour mapping. Least-squares adjustment and plotting. LINK accepts field data from some other data collectors.

Contains a powerful, easy-to-use AUTO LINE-WORK function—with a few codes entered in the field, you can design a plot and later draw your survey map automatically.

Stock #2932 (PC Easy Survey, 3.5" & .5.25") List \$1095 . \$729

## Surveying Card for SX/GX

▪ Setup Functions	▪ Stake out	▪ Adjustments
▪ Job Creation & Review	▪ Sunshots	▪ Screen Plotting
▪ Coordinate Geometry	▪ Curves	▪ Calculator (HP 48)
▪ File Transfer to PC	▪ Printing	▪ Data Collection

A plug-in software card that's quick to learn and easy to use—plus, it even displays curves graphically.

Uses full HP 48SX or GX 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 or GX.

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 or GX as you work. Choose correct cable to fit your brand of total station.

Stock #2239 [TDS Surveying card for 48SX] List \$550 \$459.95

Stock #2775 [TDS Surveying card for 48GX] List \$550 \$459.95

Stock #2261 [TDS Tripod Bracket] List \$75 . . . . . \$69.95

Stock #2253A [TDS Cable, Sokkia/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 #2266 [TDS CoGo only, card] List \$145 . . . . . \$124.95

Stock #2269 [SX Survey card Demo, 3.5" disk] deposit . \$35.00

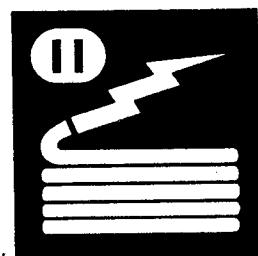
## HP 48 Engineering Analysis for S/SX/G/GX

by Robert Boyd

Analyze circuits with the full power of your 48—programs come with listings (also on included 3.5" disc), examples (so you can check your program), discussions and references.

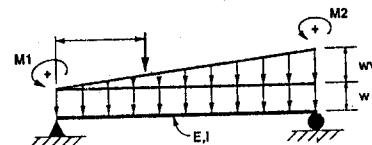
Includes State Space Methods, Polynomials, Signal Processing and Transfer Functions. Plus goodies like Gain Ratios, Splines, Kalman Filtering, Inductors and CRT Pincushion Distortion, Worst Case Analysis and Opamp Stability.

Stock #2911, HP 48 Engineering Analysis, 112p softbound . \$17.75



## Structural Engineering Program Card for the HP 48SX/GX

SMI



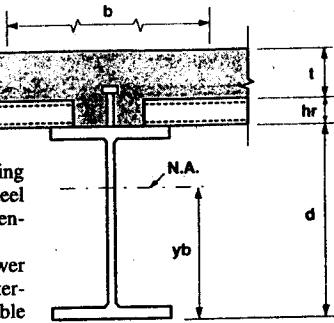
Aids and tools for your design work—7 user-interactive programs and a database (for 415 AISC 9th edn shapes).

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

## Structural Engineering Equation Card for the HP 48SX/GX

SMI



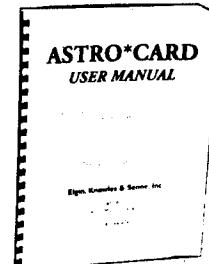
Analysis and design tools for the working engineer—covers topics in structural steel design, reinforced concrete design and general structural analysis.

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

## ASTRO\*CARD for SX

Elgin, Knowles & Senne



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

## 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

## software continued

### Surveyor's Software ROM Cards for the HP 48SX/GX

SMI



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

### Coordinate Geometry Enhanced survey software cards to slide into your HP 48GX

SMI

*Brand  
New*

### 48BCE—Basic COGO power, yet affordable and easy-to-use

Inverse, traverse and side shot, computing areas, perimeters and closure. Stores 100s of points in your 48GX without additional memory, so you do several jobs at the same time. Includes vertical curves, triangle solutions and compass rule adjustment.

Stock #2980 (48BCE, card) List \$150 . . . . . \$119

### 48SCE—Standard COGO power second to none

All features of the 48BCE plus 3D surveying earth curvature and refraction, sunshot with its own ephemeris. Inverse by coordinates or by point number, multiple angles, screen plot and south azimuth. Stakeout; COGO functions like perpendicular offset, trig leveling and angle windings.

Stock #2981 (48 SCE, card) List \$300 . . . . . \$259

### 48 ACE—Advanced COGO powers at your fingertips

Every feature and function of the 48 BCE and 48 SCE, plus it stores and codes. Notes, codes or elevations can be turned off or on any time. Angle adjustment program handles traverse while holding the angles to the side shots constant. Compass rule program adjusts side shots as well as traverse points. Two-point resection. Transfer elevations from benchmarks to instrument. Trig leveling and mean reciprocal leveling. Offset program.

Stock #2982 (48 ACE, card) List \$600 . . . . . \$519

### CVP 3.7 Survey Pack complete survey software on a card for HP 48SX/GX

CVP Micro Systems

*Brand New*

Increase your speed, productivity and accuracy in survey calculation, staking, data collection, plan interpretation and COGO. Input the vertical and horizontal alignment of plans and begin Stake-out of stations and offsets. Electronic cut/fill sheets. 2 point resection. Download data to popular plotting software. C.R., T.R. and angular adjustments with rotation and translation. Triangle and curve solver. Intersections and areas. Connect to NIKON, LIETZ or TOPCON total stations. All on ONE card!!!

The complete, 91-page manual takes you through all the routines step-by-step with examples.

Stock #2976 (Survey Card for HP 48SX/GX) List \$400 . . . . . \$349

## HP 48 Goodies Disks Public-Domain Software Programs

- High Density Disks for PCs; 1.2M 5.25" or 1.44M 3.5" (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; about half of these programs work on the HP 48G/GX (but that may not be stated)

*Each disk comes with descriptive notes. These may also be ordered separately—see page 63 for our 'Technical Notes'. Cumulative Index see TN 53.*

No. 1: We have Joseph K. Horn to thank for this: 272 files and 989K bytes on a 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.

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 Planetary, 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.

No. 9: Improved DOC file reading; OK S or G series noted; Database; Phone Book; Compress/Uncompress for G/GX; Scheduler BOSS/OZ clone; Clock Auto Adjust; ML Dev Lab; Double Precision Routines; Auto Plot Poly Fit; 7 Videos; IceCube, Pyramid, Asterix, Runway Games; Library Creator; System RPL Dev Toolbox.

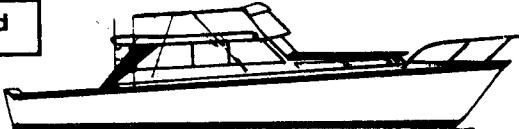
Stock #GD1A (HP 48 Goodies Disk No. 1, 5.25" HD)	... \$4.95
Stock #GD2A (HP 48 Goodies Disk No. 2, 5.25" HD)	... \$4.95
Stock #GD3A (HP 48 Goodies Disk No. 3, 5.25" HD)	... \$4.95
Stock #GD4A (HP 48 Goodies Disk No. 4, 5.25" HD)	... \$4.95
Stock #GD5A (HP 48 Goodies Disk No. 5, 5.25" HD)	... \$4.95
Stock #GD6A (HP 48 Goodies Disk No. 6, 5.25" HD)	... \$4.95
Stock #GD7A (HP 48 Goodies Disk No. 7, 5.25" HD)	... \$4.95
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Stock #GD9A (HP 48 Goodies Disk No. 9, 5.25" HD)	... \$4.95
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Stock #GD2B (HP 48 Goodies Disk No. 2, 3.5" HD)	... \$4.95
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Stock #GD4B (HP 48 Goodies Disk No. 4, 3.5" HD)	... \$4.95
Stock #GD5B (HP 48 Goodies Disk No. 5, 3.5" HD)	... \$4.95
Stock #GD6B (HP 48 Goodies Disk No. 6, 3.5" HD)	... \$4.95
Stock #GD7B (HP 48 Goodies Disk No. 7, 3.5" HD)	... \$4.95
Stock #GD8B (HP 48 Goodies Disk No. 8, 3.5" HD)	... \$4.95
Stock #GD9B (HP 48 Goodies Disk No. 9, 3.5" HD)	... \$4.95

# HP 48 series

software continued

## Navigation Pac with Ship Loading for SX/GX

Bringslid



Sailing Great Circles on Rhumb Lines, Composite and Combined Sailing, Spherical Trigonometry, 24-hour Sailing.

Mercator Sailing with observations, and Observations of Sun and Stars. Ship Loading and Unloading. Interface for use with GPS engine.

Stock #2698 (Navigation Pac, card) . . . . . \$109.95

**HP 48SX (used Scientific Calculators):**  
call EduCALC for great savings on used units

## Celestial Navigation Pac for the HP 48SX/GX



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.

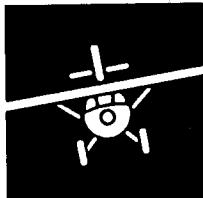
More goodies—sight reduction, dead reckoning, time of fix, running fix, accuracy of fix, plotting line of position. Messier objects, sextant error, height of eye, atmospheric conditions, time zone and watch error.

Comes on a ROM card; includes manual with examples.

Stock #2636 (Celestial Navigation Pac, card) List \$100 . . . \$89.95

## Flight Navigation System for SX/GX

Bringslid



Dead Reckoning on a card for your HP 48SX/GX — weight and balance calculations plus flight plans that are easy to edit (with change of parameters) and reversible. Flight plans may be printed.

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 such as a stop watch accessible during flight. Interface for use with GPS engine.

Stock #2831 (Flight Navigation, card) . . . . . \$119.95

## 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.

## Lo-Cost Surveying Software for the HP 48SX/GX

**D'Zign**

### HP 48 Surveying Pac

Complete lo-cost ROM-card software for your SX or GX

Remember the HP 41 Survey Pac? This modern program upgrades that 41 classic.

Transit Adjustment is omitted here (it's not used much) in favor of Multiple Offsets and Automatic Bearing Recall (which will be real time-savers for you). Plus whole sets of Radial Stakeout programs (with super-fast come-and-go) and Triangle Solutions routines.

You'll do any miscellaneous calculations without leaving whichever program you're using, so you won't lose your place. Angles are entered directly in deg/min/sec. There are no overlays—you'll use your softkeys instead.

Stock #2973 (HP 48 Surveying Pac, card) . . . . . \$135

Transfer—software to communicate to/from a PC

Kermit, automated file transfer and conversion programs so you can upload files to your PC surveying program, or download from it to your 48. Requires serial cable between PC and 48.

Stock #2958 (Transfer, 5.25" and 3.5") . . . . . \$49

### Surveying Packet #1

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 inversing. 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 has spiral curves, resection, A.L.T.A. remote slope staking, topographic pickup, end area volumes, and foot-inch/fraction conversion.

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 \$40 each to register for the freebies (and to conform to U.S. copyright law, and to give the workman his due).

Program package comes to you on both 5.25" and 3.5" 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). Package includes Owner's Manual and transfer software.

Requires HP 48GX, or 48SX with 128K RAM Card installed.

Stock #2606 (48 Survey Pack #1, 5.25" & 3.5") . . . . . \$275

## NAVCOM 48SX/GX Marine Navigation

**AR**  
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, card] List \$160 . . . . . \$149

# HP 48 series

## Software continued

**SURVcalc v.1.0**  
surveying software  
for HP 48SX/GX

**Cartesian Systems**

Free - PC-to-SURVcalc  
file conversion utility on disk

Keep setup time to a minimum with this powerful, intuitive, easy-to-use library—you'll create permanent data files in the sideshots, layout, traverse and alignment routines.

You just enter its name to use a file—stop and restart sideshots and layout files whenever you want. A separate control point file is used so you don't have to re-enter points common to each subproject.

Calculations are done in 3 dimensions so you can stake and grade in one operation. You'll work in horizontal or slope distances. Zenith angles can be entered relative to 90 or 270 degrees.

You'll have the following routines at your fingertips: Sideshots, Layouts, Two point resection, Alignments, Traverse, Inverse traverse, Radial inverse, Areas, Volumes, Vertical curves, Straight grades, Control file editing.

Requires HP 48SX with minimum 32K RAM card or HP 48GX. Comes with User's Manual on both 3.5" and 5.25" disks for downloading from desktop PC via serial cable.

Stock #2994 (SURVcalc, 3.5" & 5.25") List \$75 . . . . . \$66.95

## programming aids

**AP-View**  
for HP 48 SX/GX



Give your programs a PC-style screen and keyboard interface—with these 24 integrated utilities you can run your programs entirely through the 48's PICT display environment.

You'll create custom PICT displays, key in numeric or alpha data directly to the PICT display, do calculations within PICT with the 'Mini-Stack' window, make up custom time/date entry and display routines.

'Catalog' function allows fast, alphabetic selection of data objects within PICT. 'Shell' program quickly integrates your routines—you can install these routines as a library or use them individually.

3.5" disk contains instructions, Library and non-Library versions of AP-View, Example Program and Shell. Requires HP Program Development Link or Kermit, a PC, and a working knowledge of the HP 48's programming language (Help-Line phone number included).

Stock #2959 (AP-View, 3.5") . . . . . \$35

Example Display  
Time1: 19:41:14 10/25  
Time2: 19:41 MON 10/25  
Line3: 124  
Line4: ABCDE  
Line5: Inactive  
Line6: Justify  
TIME TIME2 LINE3 LINE4 LINE5 LINE6

**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.

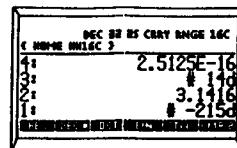
Card does not support HP-JL, graphic printer or HP 41CX Extended or Time functions (although you will have some alternatives).

Stock #82210A [41/48 Emulator, card] List \$100 . . . . . \$39.95

## HP 16C Emulator Library for S/SX

**Schwartz-Grevelle**

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 3.5" disks for downloading, with keyboard overlay and comprehensive user manual.

Stock #2870 (16C Emulator, 3.5") . . . . . \$39.95

Stock #2773 (16C Emulator card for HP 48SX/GX) . . . . . \$74.95

## Advanced User's Reference Manual for HP 48G/GX

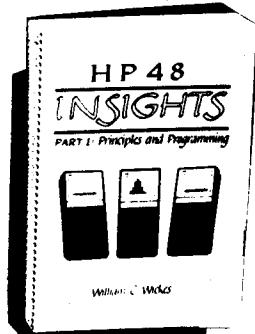


Called AUR in your Owner's Manual—has programming examples, covers Commands, Error & Status Messages, Units, Flags, List Processing.

Stock #2789, 48G Adv User's Ref, 745p softbound . . . . . \$19.95

## 48 Insights, Part I & II for S/SX or G/GX

by William Wickes



If you do serious programming on the HP 48, this book is for you

Part I, Principles and Programming.

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, Problem-Solving Resources, covers the applications: SOLVE, PLOT, ALGEBRA, TIME, STAT and UNITS with the same thorough 'insights' as Part I.

Dr. Wickes has written 2 versions of Part I, one for HP S/SX and one for HP G/GX, so you'll have a perfect fit with your instrument. However, either version is mostly directly applicable to the other models as well.

Stock #2322, 48 Insights, Part I, S/SX edn, 393p wirebnd . . . \$25.95

Stock #3006, 48 Insights, Part I, G/GX edn, 435p softbnd . . . \$25.95

Stock #2358, 48 Insights, Part II, S/SX edn, 340p wirebnd . . . \$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, card) . . . . . \$89.95

# HP 48 series

programming aids continued

## The HP 48 Handbook 2nd Edition The ultimate programmer's how-to and reference book for S/SX/G/GX

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 of HP manuals into a portable collection of concise, convenient tables, tips and facts. More than example programs illustrate the power of the HP 48G/GX with an emphasis on interactive programming and graphics.

The HP 48 Handbook covers objects/constants/names, 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 softbnd . . \$19.95

## The HP 48 Handbook for S/SX only

by James Donnelly

*Price slashed—  
While they last!*

If you intend to make your 48 dance and sing, this is for you. It condenses the 1400 pages of Owner's and Programmer's Reference Manuals into 198 pages of concise, convenient tables, tips and facts. There's also a chapter on the Solve Equation Library—functions, commands, applications.

Covers objects/names/constants, memory organization, graphics, statistics, data transfer, menus, user keys, programming, system operations, printer control, units, message tables, character codes, flags, alpha keyboard.

Complete index of commands and functions, with a bonus (54 pages!) of stack diagrams for all commands and functions.

Stock #2246, The HP 48 Handbook, 198p wirebound . . \$19.95

~~\$2.95~~

## The HP 48 Programmers Toolkit for S/SX/G/GX

James Donnelly

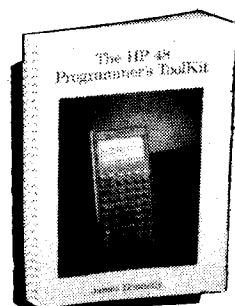
Turbo charge your own programs with this library of machine-code subroutines—more than 60 new commands for high-speed stack operations, list and string utilities, sorting, graphics, data calculations, meta-object utilities and directory searching—for example, create a 10K character string in one second, 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, 3.5") . . . . . \$24.95

Stock #2284 (Toolkit, Mac Pgms, 3.5") . . . . . \$24.95

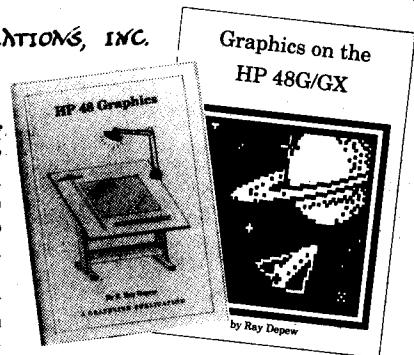


## HP 48SX Graphics

and

## Graphics on the HP 48G/GX

GRAPEVINE PUBLICATIONS, INC.



Use the full potential of that big display on your HP 48—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.

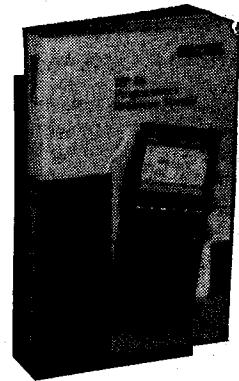
Then you walk through the process of building your own GROBS to produce some very impressive graphics, right on your own HP 48—don't miss it!

Stock #2417, HP 48SX Graphics, 272p softbnd . . . . . \$9.95

Stock #2928, Graphics on 48G/GX, 300p softbnd . . . . . \$19.95

## HP 48 Programmer's Reference Manual for S/SX

**hp** 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.

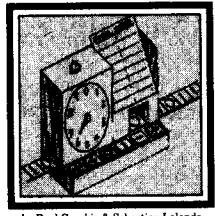
Stock #2289, HP 48 Pgmr's Ref Manual, 504p softbnd . . \$19.95

## HP 48S/SX Machine Language

*Brand New*

GRAPEVINE PUBLICATIONS, INC.

HP 48S/SX  
Machine Language



Run your programs at incredible speed—for serious programmers, here are the inside secrets you've been looking for.

After a quick introduction to the HP 48, you learn all about machine language—what is it and how it works. You get some 60 useful machine language program examples—everything from utilities to math to games. Extensive appendices list number tables, error messages, instructions and objects.

Stock #2927, 48S/SX Machine Language, 400p softbnd . . \$19.95

## Fantastic Savings for HP41/71 owners!

To get a FREE HP 41/71 Accessories Catalog,  
call (800)677-7001, ext 134.

# HP 48 series

## programming aids continued

### HP 48 Programming Examples for S/SX

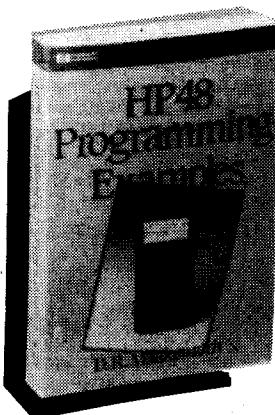
by D.R. Mackenroth

- 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



### 48SX/GX Application Card Programming Service

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

## BOOKWORX

### Using MS-DOS Kermit, 2nd edn for S/SX/G/GX

by Christine Gianone

#### How to connect your HP 48 to the World, step-by-step

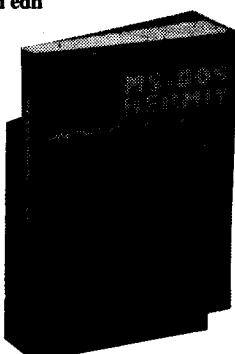
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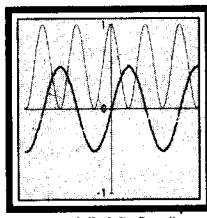
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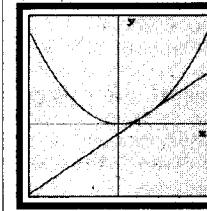
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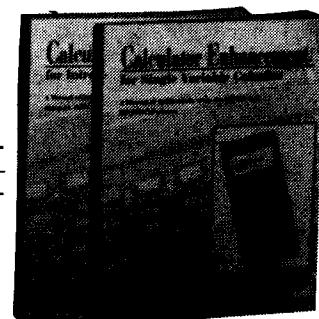


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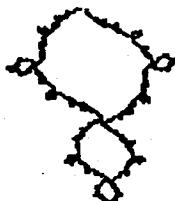
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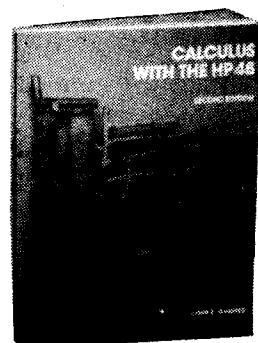
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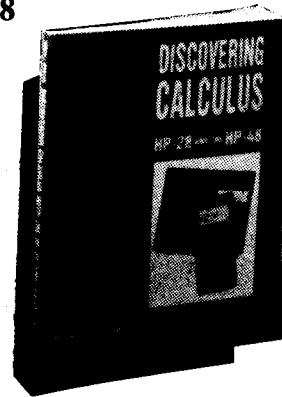
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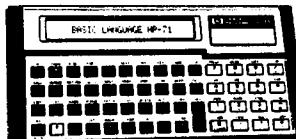
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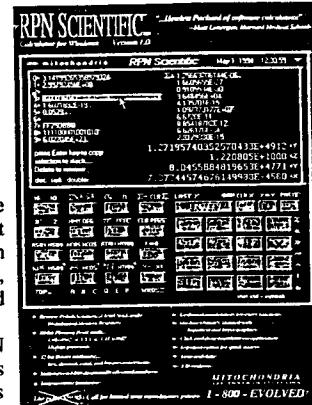
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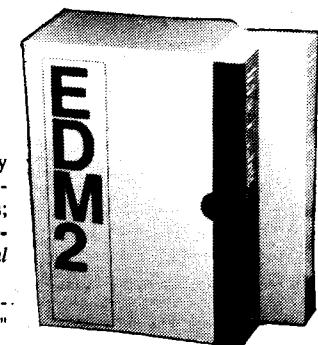
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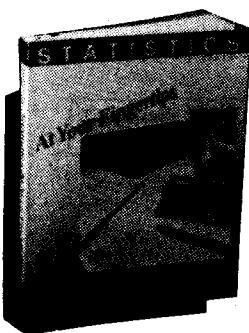
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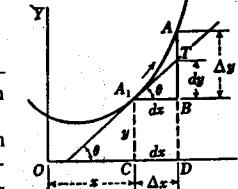
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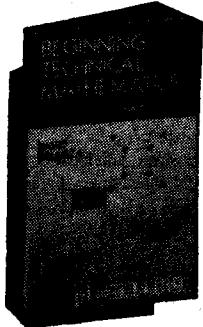
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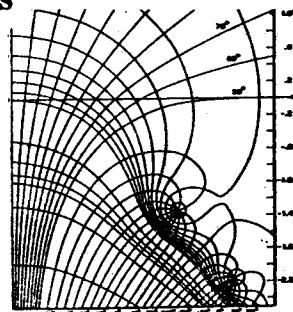
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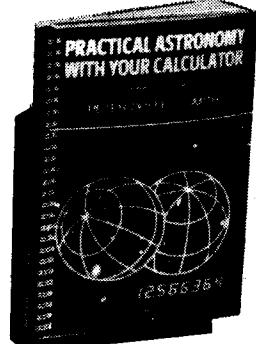
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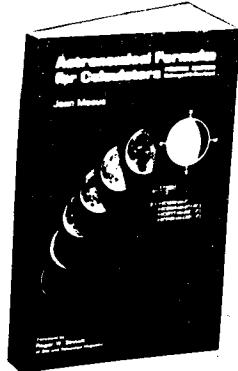
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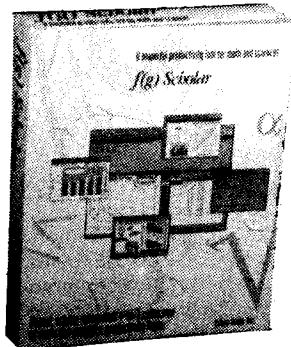
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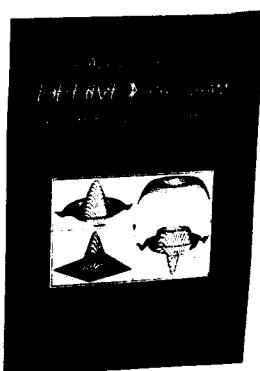
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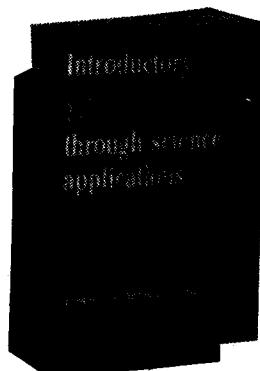


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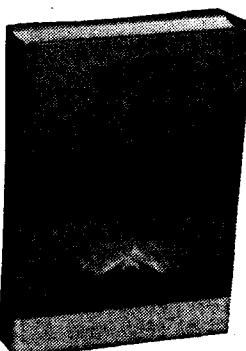
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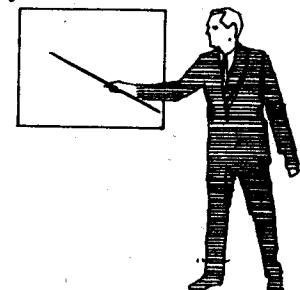
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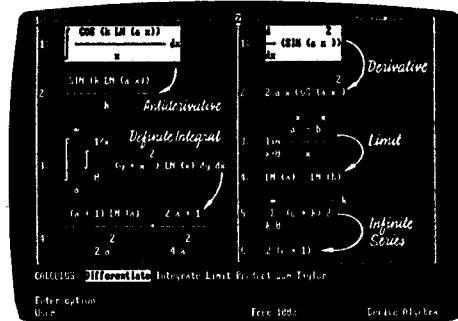
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- Stock #TN19, HP 41 Glossary of Terms.
- Stock #TN20, Factoring Large Numbers on the HP 15.
- Stock #TN22, What is HP IL?
- Stock #TN23, Calculating with Fractions.
- Stock #TN25, Currency Conversions on HP 12C.
- Stock #TN26, Swap Disk Service Description & 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.
- Stock #TN36, HP 48 Goodies Disk #9 Description.
- Stock #TN48, Subtracting and Adding Time on the HP 20S.
- Stock #TN49, What's New in the HP 48G/GX, by Joe Horn.
- Stock #TN50C, INPUT - by Example, (6 pp).
- Stock #TN51C, HP 48 Loop Structures - by Example (11 pp).
- Stock #TN52C, Writing your First HP 48 Program.
- Stock #TN53C, HP 48 Data Base Basics - Superbowl Pool Example (HP 48G Series List Processing), by Nelson and Horn.

Note: TN #'s suffixed with a C indicate EduCALC HP 48 Programming Class Handouts.

## Calculator Owner's Manuals



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 (photocopy) . . . . .	\$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 (photocopy) . . . . .	\$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 Manual . . . . .	\$24.95
Stock #2787, HP 48G/GX Owner's Manual & Quick Start Guide . . . . .	\$24.95
Stock #2789, HP 48G/GX Advanced User's Manual . . . . .	\$19.95
Stock #2251, HP 48 Equation Library Owner's Manual . . . . .	\$9.95
Stock #2331, HP 95LX Owner's Manual . . . . .	\$24.95
Stock #2788, HP 100LX Owner's Manual . . . . .	\$19.95
Stock #2103, HP 82240B InfraRed Printer Owner's Manual . . . . .	\$10.00

## Foreign-Language Owner's Manuals for HP Calculators



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 IL Owner's Manual (Italian) . . . . .	\$25.00

## Floppy Disks

Stock #92190N [5.75" 360K 2-sided; box of 100] List \$99 . . . . .	\$86.95
Stock #92192A [3.5" 710K 2-sided; box of 10] List \$19 . . . . .	\$12.50
Stock #92192X [3.5" 1.42M 2-sided; box of 10] List \$42 . . . . .	\$27.00
Stock #92190A [5.25" 360K 2-sided; box of 10] List \$11 . . . . .	\$7.50
Stock #92190X [5.25" 1.2M 2-sided; box of 10] List \$19 . . . . .	\$12.95

## DATA TECH/BASF Floppy Disks—high reliability and low cost

Stock #1351 [3.5" 710K 2-sided] List \$4 . . . . .	ea \$1.99
Stock #1352 [5.25" 360K 2-sided] List \$2 . . . . .	ea \$.99
Stock #1353 [5.25" 1.2M 2-sided] List \$3 . . . . .	ea \$1.49

## Optical Disks

Stk #92279T [Rewritable, 512 bytes/sector, 1.2 GB capacity] List \$140 . . . . .	\$129.95
Stk #92280T [Rewritable, 1024 bytes/sector, 1.3 GB capac] List \$140 . . . . .	\$129.95
Stk #92289T [Write-once, 512 bytes/sector, 1.2 GB capacity] List \$140 . . . . .	\$129.95
Stk #92290T [Write-once, 1024 bytes/sector, 1.3 GB capac] List \$140 . . . . .	\$129.95
Stk #92279A [Rewritable, 512 bytes/sector, 600 MB capac] List \$125 . . . . .	\$119.95
Stk #92280A [Rewritable, 1024 bytes/sector, 650 MB capac] List \$125 . . . . .	\$119.95
Stk #92289A [Write-once, 512 bytes/sector, 600 MB capac] List \$125 . . . . .	\$119.95
Stk #92290A [Write-once, 1024bytes/sector, 650 MB capac] List \$125 . . . . .	\$119.95

## Tape Cartridges

Stock #92283A [DDS cart., 60 meter, 1.3 GB capacity, 4mm; box of 5] . . . . .	\$68.95
Stock #92283B [DDS cart., 90 meter, 2.0 GB capacity, 4mm; box of 5] . . . . .	\$79.95
Stock #92300A [DDS cart., 120 meter, 4.0 GB capacity, 4mm; box of 5] . . . . .	\$98.95
Stock #92283K [DDS cleaning cassettes for all DAT drives; box of 2] . . . . .	\$19.95

## Data Cartridges

Stock #88140LC [67 Mbyte Tape Cart., formatted] List \$219 . . . . .	\$169.00
Stock #88140SC [16 Mbyte Tape Cart., formatted] List \$169 . . . . .	\$129.00

# HP calculator/computer/plotter supplies

## PC/Printer Accessories & Cables

Stock #35177C [Print Cache software, all HP printers, 3.5" & 5.25] 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
Stock #C2912B [***** Parallel Cable] List \$27	\$22.95
Stock #C2913A [***** Cable] List \$18	\$12.95

## Plotter Cables

Stock #C2914A [Serial Plotter Cable] List \$18	\$12.95
Stock #17255F [RS 232 Cable] List \$44	\$32.95

## Storage Trays & Accessories

Stock #92167F [Data Cartridge storage tray for mini-data cartridges 98200A, 92192T, 92192U. Incl security lock; holds 18]	\$38.95
Stock #92192Q [	
Stock #92283K [DDS cleaning cassettes for all DAT drive; box of 2]	\$19.95
Stock #92283L [DDS cassettes storage box. Incl security lock & file hanger adapter; holds 12 cassettes]	\$32.95

## Accessories for Older-Model Calculators & Peripherals



### 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 #82059D [Recharger] HP 75 C/D	\$18.95
Stock #82066B [Recharger, 220 volt]	\$22.95

### For the HP 41:

Stock #82120A [Rechargeable Battery Pack]	\$32.95
Stock #82059D [Recharger]	\$18.95

### For the HP 65A, 67A:

Stock #13143 [80 Magnetic Cards]	\$42.95
Stock #82001B [Rechargeable Battery Pack]	\$14.95

### For the HP 71:

Stock #82059D [Adapter]	\$18.95
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### For the HP 97A, 91A, 92A:

Stock #13143 [80 Magnetic Cards]	\$42.95
Stock #82033A [Rechargeable Battery Pack]	\$24.95
Stock #82059D [Recharger]	\$18.95

### 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 #82059D [Recharger]	\$18.95
Stock #82175A [2.25" Printer Paper, black, 6 rolls]	\$9.95

### For HP 2225B ThinkJet Printer

Stock #82199A [Rechargeable Battery Pack]	\$63.95
Stock #82059D [Recharger]	\$18.95

### HP 9114 Disk Drive Supplies

Stock #92191Q [Desk Top File, 25 disks]	\$19.95
Stock #88014B [Rechargeable Battery] List \$73	\$69.95
Stock #LCR6V2 [Replacement Battery Pack]	\$63.95
Stock #T-9 [Torx Key]	\$4.95
Stock #82059D [Recharger]	\$8.95



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 \$8 . . . . . \$6.95*

Transparency Pens	Paper Pens	Color
0.3 mm	0.6 mm	0.3 mm
#17725T	#17726T	#17825P
#17727T	#17728T	#17827P
		#17839P
#17731T	#17732T	#17831P
		#17833P
		#17835P
		#17837P
		#17839P
#17741T	#17742T	#17841P
		#17843P
<i>Multi-color, 5 pen package</i>		
		#17744T
		#17745T
		#17746T
		#17747T
		#17748T
		#17749T
		#17750T
		#17846P
		#17848P
		#17850P
		Red-Violet
		Bl/R/B/G/Y
		Bl/B/A/G/Y
		R/O/B/Y/RV

**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, 8.5" x 11"; 100 sheets] List \$16 . . . . . \$12.95  
Stock #17902G [B-size, 11" x 17"; 100 sheets] List \$28 . . . . . \$25.95

**Non-Glossy Paper:** for all HP plotters; use paper pens.

Stock #17800P [A-size, 8.5" x 11"; 50 sheets] List \$5.50 . . . . . \$4.95  
Stock #17801P [A-size, 8.5" x 11"; 250 sheets] List \$13 . . . . . \$11.95

Stock #17803P [A4 Metric size; 250 sheets] List \$13 . . . . . \$11.95  
Stock #17804P [B-size, 11" x 17"; 50 sheets] List \$10 . . . . . \$8.85

Stock #17805P [B-size, 11" x 17"; 250 sheets] List \$26 . . . . . \$18.95  
Stock #17802P [A4 size 50 sheets] List \$5.50 . . . . . \$4.95

**Transparency Film** — A-size, 8.5" x 11", 50 sheets, for plotter listed below

Stock #17700T [HP-7470, ColorPro Plotters] List \$55 . . . . . \$49.95  
Stock #17702T [7220, 7221, 7225, 7475, 7550, 9872] List \$55 . . . . . \$49.95

## 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		Rollerball pens
	Paper	Transparency	Refillable	Disposable	
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 \$24 . . . \$21.95*

Color	0.25mm	.35mm	med .50mm	wide .7mm
Black	#17762V	#17763V	#17764V	#17765V
Blu/R/G/Blk	#17932V	#17933V	#17934V	#17935V
Or/Ye/Br/Vi	#17942V	#17943V	#17944V	#17945V
		Blue	Green	Red
		#17773V	#17783V	#17793V
		Single Color Packages of 4 available in 0.35mm only		
		Multi-width Package of 4, available in Black only	0.25/0.35/0.50/0.70	#17760V

# HP plotter/printer supplies

## Disposable Drafting Pens for polyester film, 2 pens in pkg

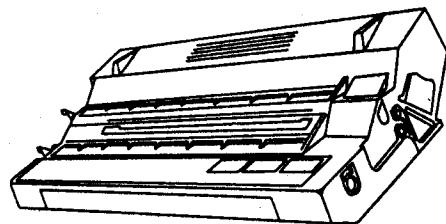
Stock #5062-1592 [0.25mm, Black]	List \$24	\$21.95
Stock #5062-1593 [0.35mm, Black]	List \$24	\$21.95
Stock #5062-1594 [0.5mm, Black]	List \$24	\$21.95
Stock #5062-1595 [0.7mm, Black]	List \$24	\$21.95
Stock #5061-7578 [Disposable-Pen Adapters & Caps, 4 in pkg]	List \$8	\$7.25

## Rollerball Pens, 0.3mm (narrow), 4 pens in package

Stock #5061-5033 [Rollerball Pens, Black, 0.3mm]	List \$15	\$13.95
Stock #5061-5034 [Roller Pens, Red, 0.3mm]	List \$15	\$13.95
Stock #5061-5035 [Roller Pens, Green, 0.3mm]	List \$15	\$13.95
Stock #5061-5036 [Roller Pens, Blue, 0.3mm]	List \$15	\$13.95

## Pen Organizers, Acrylic—save desk space

Stock #92177T [Short Organizer, 30-60 pens]	List \$43.75	\$38.50
Stock #92177U [Long Organizer, 30-60 pens]	List \$46.75	\$41.95
Stock #92177V [Personal Organizer, 33 pens]	List \$34.75	\$29.95
Stock #92177Y [7550 Organizer]	List \$229	\$204.95



**"No one ever got fired for buying genuine HP Toner Cartridges."**

## LaserJet Toner Cartridges

Stock #92285A [LJ Ser. I Toner, black]	List \$125	\$79.95
Stock #92295A [LJ Ser. II, III, IID & IIID Toner, black]	List \$125	\$79.95
Stock #92275A [LJ Ser. IIP, IP+, IIIP Toner, black]	List \$95	\$64.95
Stock #92291A [LJ III Si Toner, black]	List \$169	\$107.95
Stock #92282A [LJ 2000 Toner, 2.5 kg]	List \$93	\$74.95
Stock #92298A [LJ4 Toner, 6000 pages]	List \$150	\$99.95

## LaserJet Memory

Stock #33474B [1MB board; LJ IIP, III, IIIP/D]	List \$ 169	\$154.95
Stock #33475B [2MB board; LJ IIP, III, IIIP/D]	List \$ 279	\$249.95
Stock #C2063A [1MB SIMM, LJ IIISi]	List \$ 119	\$109.95
Stock #C2065A [4MB SIMM, LJ IIISi]	List \$ 279	\$249.95

## LaserJet Transparencies and Labels

Stock #92296T [LJ Transparencies, 50 each]	List \$25	\$22.95
Stock #92296A [LJ Labels 1" x 2-5/8", 3000 each]	List \$32	\$28.95
Stock #92296B [LJ Labels 1-1/3" x 4", 1400 each]	List \$32	\$28.95
Stock #92296C [LJ Labels 1" x 4", 2000 each]	List \$32	\$28.95
Stock #92296F [LJ Labels 1-1/2" x 1-3/4", 8000 each]	List \$32	\$28.95
Stock #92296J [LJ Labels 1-1/2" x 4", 1200 each]	List \$44	\$39.95

## LaserJet Bitmapped Font Cartridges

Stock #92286T [LJ Font Cart; Tax 1]	List \$195	\$189.95
Stock #92286GPC [LJ Font Cart; Pro Collection, 65 fonts]	List \$300	\$284.95
Stock #92286IC [LJ Font Cart; International Collection]	List \$325	\$299.95
Stock #C2053A#C01 [LJ Font Cart; Word Perfect]	List \$195	\$189.95
Stock #C2053A#C02 [LJ Font Cart; Microsoft]	List \$195	\$189.95
Stock #C2053A#C03 [LJ Font Cart; Polished Worksheets]	List \$195	\$189.95
Stock #C2053A#C04 [LJ Font Cart; Persuasive Presentations]	List \$195	\$189.95
Stock #C2053A#C06 [LJ Font Cart; Bar Codes & More]	List \$195	\$189.95
Stock #C2053A#C07 [LJ Font Cart; Text Eqns, Mth Symbols]	List \$195	\$189.95

## DeskJet, DJ PLUS, DJ500 & DeskWriter Supplies

Stock #51626A [DJ Ink Cartridge, high top]	List \$32	\$29.95
Stock #51625A [DJ Tri Color Ink Cartridge]	List \$35	\$31.95
Stock #22706B [DJ Prestige Elite Font]	List \$79	\$73.95
Stock #22706R [DJ Times Rom Font Cart]	List \$79	\$73.95
Stock #22706T [DJ Helvetica Font Cart]	List \$79	\$73.95
Stock #22706W [DJ WordPerfect Carts (2)]	List \$140	\$132.95
Stock #22707B [DJ 256K RAM Cartridge]	List \$175	\$1165.95
Stock #22707F [DJ PLUS/500 Epson Emulation Cart]	List \$79	\$72.95
Stock #22709A [DW Soft Font Collection]	List \$195	\$189

## LaserJet Paper Trays and Feeders—U.S. Sizes

Stock #92285B [LJ I Letter Paper Tray, 100 sheets]	List \$59	\$54.95
Stock #92285C [LJ I Legal Paper Tray, 100 sheets]	List \$59	\$54.95
Stock #92275B [LJ IIP Letter Paper Tray, 250 sheets]	List \$69	\$64.95
Stock #92275F [LJ IIP Envelope Feeder, 20 envelopes]	List \$89	\$84.95
Stock #92291B [LJ III Si Letter Paper Tray, 500 sheets]	List \$129	\$115.95
Stock #92291C [LJ III Si Legal Paper Tray, 200 sheets]	List \$129	\$115.95
Stock #92297B [LJ II, IID, III, IIID Letter Tray, 200 sheets]	List \$69	\$64.95
Stock #92297C [LJ II, IID, III, IIID Legal Tray, 200 sheets]	List \$79	\$74.95
Stock #33472A [LJ IIP, IIIP Lower Cassette, 250 sheets]	List \$195	\$183.95

## DeskJet 1200C Supplies

Stock #51640A [Ink Cartridge, black]	List \$30	\$24.95
Stock #51640C [Ink Cartridge, cyan]	List \$35	\$31.95
Stock #51640M [Ink Cartridge, magenta]	List \$35	\$31.95
Stock #51640Y [Ink Cartridge, yellow]	List \$35	\$31.95

## PaintJet & PaintWriter Supplies

Stock #51606A [PJ Ink Cartridge, black]	List \$ 32	\$29.95
Stock #51606C [PJ Ink Cart., red/grn/blue]	List \$35	\$31.95
Stock #51630P [PJ Fanfold Paper, 250 sheets]	List \$23	\$21.95
Stock #51630Q [PJ film w/sleeves, 50 sheets]	List \$ 70	\$64.95
Stock #51630Y [PJ Cut Paper, 200 sheets]	List \$21	\$20.95
Stock #51606B [PJ/PW XL Cyan Ink Cartridge]	List \$35	\$31.95
Stock #51606R [PJ/PW XL Magenta Ink Cartridge]	List \$33	\$29.95
Stock #51606Y [PJ/PW XL Yellow Ink Cartridge]	List \$ 33	\$29.95

## ThinkJet Supplies

Stock #92261A [TJ Printhead Cartridge]	List \$13	\$11.95
Stock #51604A [TJ Printhead Cartridge, Plain Paper]	List \$13	\$11.95
Stock #51605B [TJ Printhead Cartridge, Blue]	List \$16	\$14.95
Stock #51605R [TJ Printhead Cartridge, Red]	List \$16	\$14.95
Stock #92261N [TJ Paper, 2500 sheets]	List \$80	\$74.95
Stock #51630A [Jetpaper, Z-fold, 500 sheets]	List \$25	\$21.95
Stock #51630D [Jetpaper, Wide Z-fold, 2500 sheets]	List \$95	\$86.95

## Impact Printer Supplies—inc. Rugged Writer 2235A/B/C/D

Stock #92154B [Print Head for 293X Printer]	List \$175	\$159.95
Stock #92156S [RW Ribbon, 3 in box]	List \$41	\$37.95

(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	\$51.95
Stock #92155B [for 2631G; box of 3]	List \$57	\$52.95
Stock #92155L [for 2932/33/34A; box of 3]	List \$66	\$58.95
Stock #92156A [for 82905A/B, 82906A; box of 2]	List \$15	\$13.95
Stock #92162A [for 2608A/S; box of 3]	List \$69	\$62.95
Stock #92162M [for 2562C; box of 3]	List \$70	\$59.95
Stock #92155M [for 2932/33/34; box of 3]	List \$70	\$59.95

## Thermal Paper

Stock #82931A [Blue, box of 2; for HP 85]	List \$38	\$36.95
Stock #82954A [Black, box of 3; for HP 85]	List \$33	\$30.95

## SNAP Glass & Plastic Cleaner

• Safe—eliminates static charges

• Clean—repels dust, dirt, smears and water

The only cleaner recommended by HP for cleaning computers and calculators.

Stock #2490 [SNAP G&P Cleaner, 1 oz] . . . . . \$1.95

Stock #2491 [SNAP G&P Cleaner, 8 oz] . . . . . \$4.95

**Mist Products**

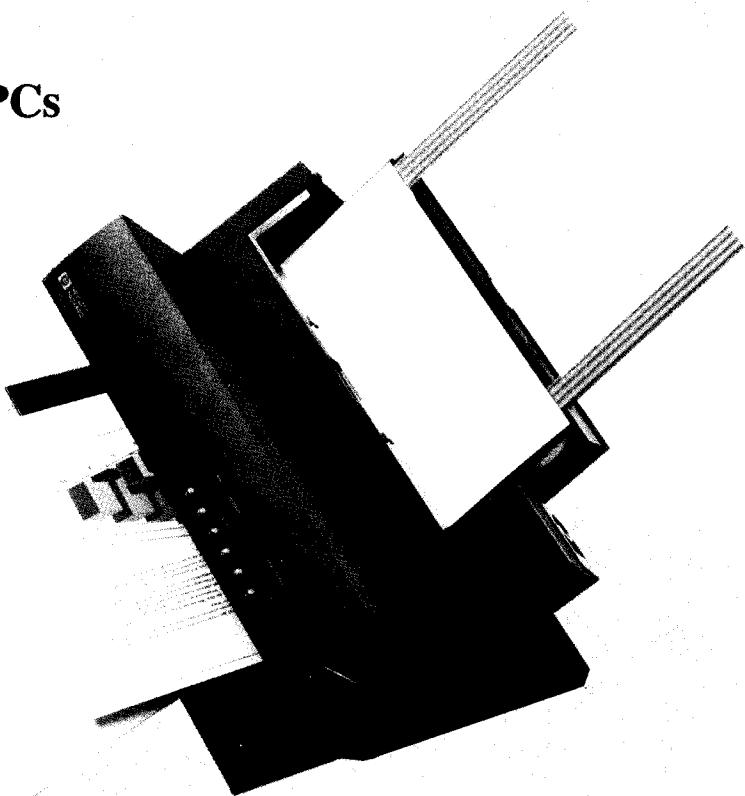
# DeskJet 310 InkJet Printer for HP 95/100, Notebook and Deskbound PCs



HEWLETT  
PACKARD

Annual Sales  
in units

The Effect of Color On Business Communication



- You'll look crisp—300 dpi printing
- You'll have it fast—up to 3 pages per minute
- You'll have desk room—it's small and light

All this plus HP reliability, yet it is affordable too (priced like an ordinary desk printer). So you may find it a pleasant surprise that you also get

- Portable Option—you'll print up to 100 pages on the battery, then recharge it in an hour
- Color Option—you'll have 16 million colors for under \$50

It has built-in fonts in 84 typefaces, styles and size combinations including italic and bold, portrait and landscape. It will print them on plain paper or glossy, or even transparencies or labels. Optionally available bundled with a cut-sheet feeder that handles 60 pages. Stylish carrying case (optional) holds your computer, too, and fits under your airplane seat. Optional Centronics parallel cable is highly flexible so it rolls up easily and takes little space. Low profile power adapter has automatic voltage-switching that will take you around the world.

Comes with power adapter, stand, printer-driver software on 3.5" disk, black cartridge, User's Guide kit. HP 95/100 computers require a parallel converter to drive this printer.

Stock #C2621A [DeskJet 310 Printer]	List \$379	.....	\$349
Stock #C2622A [DeskJet 310/Sheet Feeder]	List \$455	.....	\$419
Stock #C3067A [DeskJet Color Kit]	List \$49	.....	\$39
Stock #C3003A [Rechargeable Battery]	List \$49	.....	\$39
Stock #C3004A [Rapid Recharger, Worldwide]	List \$99	.....	\$89
Stock #C3050A [DeskJet Carrying Case]	List \$99	.....	\$89
Stock #C3061A [Low-profile Parallel Cable]	.....	.....	\$19
Stock #51633A [Black Print Cartridge]	.....	.....	\$20
Stock #51625A [Color Print Cartridge]	.....	.....	\$31.95
Stock #51636F [Transparency Film, 8.5 x 11"]	.....	.....	\$52
Stock #51636H [Glossy Paper, 8.5 x 11"]	.....	.....	\$54
Stock #51630Y [Cut-Sheet Paper, 8.5 x 11"]	.....	.....	\$17.95

## Desk Writer 310 InkJet Printer for Macintosh Powerbook

True Type and ATM-compatible—with 35 scalable fonts built in.

Stock #C2617A [DeskWriter 310 Printer]	List \$379	.....	\$349
Stock #C3005A [Automatic Cut-Sheet Feeder]	.....	.....	\$89
Stock #92215N [AppleTalk Cable]	.....	.....	\$28.50
Stock #C3066A [Apple Connect Serial Cable]	.....	.....	\$13



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