

THE W.R. WILSON COMPANY, INC.
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Hardware and Software for the
Texas Instruments 99/4 Computer
Catalog number five
Catalog code: CAT PHC-5, prices effective October 1, 1982

definitions

Hardware is that part(s) of the computer that contains electronics which perform a specific function. For example: if you added memory expansion to your computer, you would be adding hardware. For this catalog, hardware has been defined into three types: (A) card expansion (those cards that fit within the peripheral expansion system PHP 1200), (B) module expansion (those modules that are self-contained and plug daisy-chain fashion into the computer), (C) add-ons (those systems or peripherals that connect to (A) or (B). An example would be a printer that connects to the RS232, PHP 1220 or PHP 1700.)

Software contains the instructions by which your computer (with associated hardware) can perform a specific function. An example would be our General Ledger. From the keyboard you would enter information requested by the computer's monitor or tv screen (eg, a trial balance), after the information is entered and checked, the computer would perform the requested function. For this catalog software is defined into three types: (1) cartridge (meaning a cartridge that plugs into the front of the 99/4, eg. a command module), (2) cassette (software stored on a computer quality cassette, similar to audio cassettes. This requires a special cassette recorder to "play" the software into the computer), (3) diskette (commonly referred to as floppy diskettes, (don't confuse this with "disk"), software is stored on a flexible media (hence-floppy) that resembles a small record. This record is enclosed in a square envelope (for dust protection). Diskette software is entered into the computer via a disk drive. A computer may have several "disk" drives. Disk drives and diskettes may be five inch or eight inch. For purposes of this catalog "five inch" is assumed unless otherwise specified.

Other jargon: RS232 is an engineering term that refers to a particular type of serial communications. RS232 is necessary to support printers, modems, and other devices. K means one thousand. You will frequently read "32K memory expansion", this is thirty-two thousand byte memory expansion. A Modem (modulator-demodulator) is a device which allows a computer to communicate with other computers through the use of telephone lines. A Modem is a type (C) hardware that must connect to an RS232 type (A) or (B) hardware. Of course, you will need software of type (1), (2), or (3) to make the system operational. Easy?
A bit is the smallest number a computer uses and has a value of 0 or 1.
A byte is eight bits. Memory is measured in bytes. RAM is temporary memory (gone with the power), ROM is permanent memory (like TI basic).

hang in there, it gets better

About Us

Wilson Inc. has been producing software and hardware for over seven years. Our initial experience began with the PDP 11/35. We support systems from Digital Equipment Corporation, Texas Instruments, Tandy, Atari, Sharp, ITE, GTE, RCA, IBM, Apple, California Computer Systems, and Motorola.

Microprocessor support include 8080, Z80, TMS9900, MC68000, 6800, 1802, Z8, 8035, LSI/11, and 6502.

Operation system support include RT-11, CPM, CPM-86, CP-NET, MPM II

Languages include BASIC, FORTRAN, LOGO, SNOBOL, PASCAL, PILOT, FORTH, and FOCAL.

Our primary in-house operating system is System 80, our own design computer with multiple LSI-11s, and Z80s, with a MC68000 scheduler, 512K of processor RAM, 64K RAM per user (16 users), and two 40 megabyte hard disks. We support the above microprocessors, operating systems, and languages with cross-assemblers, cross-compilers, and cross-interpreters.

After a program has been developed, it is formatted to the input of the particular computer and debugged.

Software and hardware are tested in-house (alpha test), tested at customer sites (beta test), and released to general customers (gamma test).

Occasionally "bugs" still show up in the hardware or software. It is our policy to do what ever we can to resolve the problem.

Alas, we too have problems in receiving product from suppliers. You will find in dealing with Wilson Inc. we support a sophisticated order entry system that tracks the progress of raw material to finished product. You will be notified (in writing) of the date your order was received, when the shipment is expected and any change in the status of your order. Should we delay a shipment, you always have the option of having your money returned.

Customer Service is here to help. We can answer questions regarding descriptions, applications, your order, delivery, and availability. Technical questions will be referred to Technical Service; as an engineer or technician may not be available, please allow us to call back.

Customer service hours are 9:00 am to 12:00 pm and 1:00 pm to 4:00 pm, Monday thru Friday. Customer Service may be reached by calling: (317)-462-9511

Specific questions on the 99/4 may be referred to:

Jim Byron
99/4 Specialist

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TI-99/4A Computer
order code: SYS 1

description: CPU-TMS9900, 16 bit microprocessor with 256 bytes high speed RAM. MEMORY-Internal ROM 26K bytes (non-programable), external ROM capacity 30K bytes. Internal RAM 16K bytes (programable). External RAM capacity 48K bytes. Total memory capacity (combined) 72K bytes. Staggered qwerty keyboard. SOUND-5 octaves, 3 tones, white noise, range 110HZ to 40KHZ. Sixteen colors. VIDEO RESOLUTION-192 vertical x 256 horizontal, 24 lines of 32 characters, upper and lower case. With rf adaptor for connection to color tv or black & white tv. (tv user supplied)

system price: \$349.95
(special price thru 12/31/82 \$299.95)
software capability: type 1 only (cartridge)

TI-99/4A Computer
order code: SYS 2

description: includes PHC 004A, PHA 2010 (monitor cable), and PHA 4100 (ten inch high resolution color monitor) NOTE: this monitor accepts a video and audio input only (not rf). Excellent for video tape and disk players with video output.

system price: \$699.95
(special price thru 12/31/82 \$649.95)
software capability: type 1 only (cartridge)

TI-99/4A Computer
order code: SYS 3

description: includes PHC 004A and General Electric ten inch color television PHA 5000. A compact television with solid state chassis, automatic frequency and color controls and pre-set fine tuning. Wilson recommended for the 99/4 because of DC restoration and bandwidth.

system price: \$649.95
(special price thru 12/31/82 \$599.95)
software capability: type 1 only (cartridge)

Don't be disappointed

Many standard television sets lack the necessary bandwidth to properly display the 99/4 video resolution (this results in the characters being "clipped" from the left and right sides of the set). Buy our recommended products for best results. (from your dealer or from us)

HARDWARE EXPANSION

(assumes you have purchased SYS 1 or SYS 2 or SYS 3)

title: To use cassette based software type 2

order code: CAS 1000

description: includes dual cassette cable PHA 2000 and two General Electric tape recorders CRR 1000 (TI and Wilson recommended).

system price: \$69.95

software capability: type 1 (cartridge), type 2 (cassette)

title: single disk expansion type A (card)

order code: SDE 1000

description: includes expansion system PHP 1200, disk controller card with disk manager PHP 1240, expansion disk drive PHP 1250, connecting cables and manuals.

system price: \$699.95

software capability: type 1 (cartridge), type 3 (diskette)

title: single disk expansion system type B (module)

order code: SDE 2000

description: includes disk controller module with disk manager PHP 1800, disk drive PHP 1850, connecting cables and manuals.

system price: \$629.95

software capability: type 1 (cartridge), type 3 (diskette)

title: additional disk drive for SDE 1000 or SDE 2000 type C (add-on)

order code: DSK 1000

description: includes disk drive PHP 1850, connecting cable and manual.

system price: \$399.95

software capability: type 3 (diskette)

NOTE

up to two DSK 1000 may be added to SDE 1000 or SDE 2000 for a maximum of three disk drives. Some software requires two or three drives. See sections on hardware required for various software. Also, additional disk drives can speed the process of backup and increase your overall storage capacity.

title: printer expansion for SDE 1000 type A (card) & type C (add-on)
order code: PRT 1000

description: includes 80 column impact printer PHP 2500, RS232 card
PHP 1220, five foot RS232 cable CAB 1000, manuals.

system price: \$749.95

software capability: interface with many programs supporting printer,
listing of your own software, telecommunications hard copy.

title: printer expansion for SDE 2000 type B (module) & type C (add-on)
order code: PRT 2000

description: includes 80 column impact printer PHP 2500, RS232 module
PHP 1700, five foot RS232 cable CAB 1000, manuals.

system price: \$789.95

software capability: interface with many programs supporting printer,
listing of your own software, telecommunications hard copy.

**Combination Disk Based
Expansion Systems**

for Business and Professionals

(assumes you have purchased SYS 1 or SYS 2 or SYS 3)

title: single disk and printer type A (card) & type B (add-on)
order code: CDB 1000

description: includes SDE 1000, PRT 1000, cables and manuals.

system price: \$1399.95

software capability: type 1 (cartridge), type 3 (diskette), hardcopy

title: single disk and printer type B (module), type C (add-on)
order code: CDB 2000

description: includes SDE 2000, PRT 2000, cables and manuals.

system price: \$1399.95

software capability: type 1 (cartridge), type 3 (diskette), hardcopy

title: double disk and printer type A (card), type B (add-on)
order code: CDB 3000

description: includes SDE 1000, PRT 1000, DSK 1000, cables and manuals.

system price: \$1799.95

software capability: type 1 (cartridge), type 3 (diskette), hardcopy

title: double disk and printer type B (module) & type C (add-on)
order code: CDB 4000

description: includes SDE 2000, PRT 2000, DSK 1000, cables and manuals.

price: \$1799.95

software capability: type 1 (cartridge), type 3 (diskette), hardcopy

NOTE

cassette expansion CAS 1000 may be added to any SDE AND CDE system to run cassette based software type 2. This would allow the user software capabilities of type 1 (cartridge), type 2 (cassette), type 3 (diskette). See description of CAS 1000.

LANGUAGE EXPANSION

(assumes you have purchased SYS 1 or SYS 2 or SYS 3)

PASCAL

UCSD pascal is a structured high level language that is faster and more powerful than TI-BASIC and EXTENDED BASIC. Pascal is a compiled (as opposed to an interpreter) language that uses an editor program to construct pascal programs. The program is passed thru the compiler to generate native code and is linked to the 99/4 with a separate linker. Pascal programs are block structured and more logical than basic, resulting in increased power by operating at the machine language level of the TMS9900 processor. Existing UCSD pascal programs may be run with little modification. System includes extensive utilities (common routines, eg. keyboard input). Far more "elegant" than basic.

title: pascal system type A (card)
order code: PAS 1000

description: includes expansion system PHP 1200, 32K memory card PHP 1260, disk controller card with disk manager PHP 1240, expansion disk drive PHP 1250, pascal card PHP 1270, pascal compiler PHP 5063, pascal assembler and linker PHD 5064, pascal editor, filer, utilities, PHD 5065, cables and manuals.

system price: \$1299.95

software capability: type 1 (cartridge), type 3 (diskette), other UCSD pascal programs of type 3 (diskette)

OPTIONS

- CAS 1000 for cassettes
- DSK 1000 (recommended)
- PRT 1000 (recommended)

Serious pascal work will need two disks and a printer to develop software. However, for those wanting to expand beyond basic PAS 1000 will do a fine job, and other hardware can be added later. Remember, even more sophisticated languages (such as the government's ADA) has developed in part from pascal. Pascal can be learned even without a thorough knowledge of basic.

LOGO

Logo is a computer language for children. Logo has been developed over a twelve year period by Professor Papert and the staff of the artificial intelligence laboratory at M.I.T. Logo principals are to create a computer based environment in which math and other forms of learning may occur within the natural cycle of a child's development. Logo places the child in a creative connection with the computer; the computer "learning and changing" with the child.

title: logo system type A (card)
order code: LDG 1000

description: includes expansion system PHP 1200, 32K memory card PHP 1260, TI-LOGO II PHM 3109, manuals.

price: \$419.95
software capability: type 1 (cartridge)

OPTIONS

CAS 1000 (strongly recommended)
SDE 1000 (recommended)
PRT 1000

title: logo system type B (module)
order code: LDG 2000

description: includes 32K memory module PHP 2200, TI-LOGO II PHM 3109, manuals.

price: \$379.95
software capability: type 1 (cartridge)

OPTIONS

CAS 1000 (strongly recommended)
SDE 2000 (recommended)
PRT 1000

PILOT

(assumes you have purchased PASCAL SYSTEM PAS 1000)

Pilot is an interactive language and is a form of computer assisted (CAI) instruction. CAI permits the student to answer questions easily programmed by the teacher or parent. The answers may be stored for later review or other computation.

title: pilot system type 3 (diskette)
order code: PLT 1000

description: diskette PHD 5066

system price: \$69.95
software capability: other pilot compatible diskettes

EDITOR * ASSEMBLER

(assumes you have purchased SDE 1000 or SDE 2000)

Write assembly language programs in TMS9900 mnemonics, assemble programs into "pure" 9900 machine code. The fastest, most powerful programs that can be written for the 99/4. Unleash the power of a sixteen bit processor. Supports all 9900 codes except four (seldom used or not supported codes). Full extensions to UCSD pascal, extended basic, and with the mini-ram PHM 3058, TI basic. Extensive documentation (over 450 pages). Package includes access to graphics, color, disk, speech, and your own hardware designed systems. Assumes you have knowledge of machine language programming, not recommended for beginners. However, excellent books are available as an introduction. We also recommend the 9900 family systems design and data book (over 1000 pages) LCC4400. The limit of what you can do with 99/4 (and our EAS 1000-2000) is your imagination.

title: editor/assembler system type A (card)
order code: EAS 1000

description: includes 32K memory card PHP 1260, editor/assembler PHM 3055, application programs, manuals.

price: \$269.95

software capability: type 1 (cartridge), type 3 (diskette)

title: editor/assembler type B (module)
order code: EAS 2000

description: includes 32K memory module PHP 2200, editor/assembler PHM 3055, application programs, manuals.

price: \$389.95

software capability: type 1 (cartridge), type 3 (diskette)

OPTIONS

CAS 1000

DSK 1000 (strongly recommended)

SDE 1000 > PRT 1000 (recommended)

SDE 2000 > PRT 2000 (recommended)

PHM 3058 (mini-ram)

TELECOMMUNICATIONS SYSTEM

(assumes you have purchased SYS 1 or SYS 2 or SYS 3)

With TCS 1000 or TCS 2000 you can communicate with other 99/4 computers, exchange programs, or access powerful databases by telephone. Details later on available databases.

title: telecommunications system type A (card)
product code: TCS 1000

description: includes expansion system PHP 1200, RS232 card PHP 1220, modem PHP 1600, and TE-II PHM 3035, manuals.

system price: \$499.95
software capability: type 1 (cartridge)

title: telecommunications system type B (module)
order code: TCS 2000

description: includes RS232 module PHP 1700, modem PHP 1600, TE-II PHM 3035, manuals.

system price: \$389.95
software capability: type 1 (cartridge)

title: 80 column impact printer for TCS 1000 or TCS 2000 type C (add-on)
order code: PHP 2500

description: add hard copy capabilities for permanent review. Plugs into second port of either RS232, includes five foot RS232 cable CAB 1000.

system price: \$599.95
software capability: will interface with many other programs

SPEECH

(assumes you have purchased SYS 1 or SYS 2 or SYS 3)

The dimension of speech with the 99/4 is only one of the many attributes of this unique computer. The synthesizer alone will not produce speech. The synthesizer (as with all hardware) requires software to operate. This software may be in any of our three forms (cartridge, cassette, diskette). Our programs that produce speech, or have speech as an option, provide the software necessary to drive the synthesizer. Speech for your own programs may be obtained with the speech editor PHM 3011, terminal emulator II PHP 3035, or extended basic PHP 3026. Of course, assembly language can also be used, our EAS 1000-2000, but the process is complex.

title: speech synthesizer type C (add-on)
order code: SPH 1000

description: includes synthesizer PHP 1500, manual

price: \$119.95
software capability: programable only

Software for the 99/4

As you have already seen this catalog is quite lengthy, but it is necessary to explain as much detail possible in order for you to make your purchase decision. Wilson Inc. produces product for many suppliers under their own brand name. This catalog has been intended for the 99/4, but we shall offer other products that may be of interest. Should you have questions about other products or systems, please feel free to call our customer service line (317)-462-9511.

Wilson Inc. has installed over 1000 computer systems and our customer base is 17,000. We have 200 dealers throughout the world. If your dealer doesn't carry Wilson software and products, ask her or him to give us a call.

Cassette Software Notes

by Jim Byron

Everyone knows the trouble with cassette recorders is that they take too long. Running cassettes with the 99/4 offer special problems: the boys in the back room (engineering), tell me that T.I. records each stream of data twice, and that each stream is followed by a header (more time), where the recorder must stop, and then start again. This is a very reliable system, but being a 99/4 user for almost a year, I was still having problems loading tapes. I went to the mountain (engineering), and asked what was wrong. The first fellow I asked said, "Cassette interface? Didn't that go out ten years ago?" I paid him no attention and he turned back to the 68000 system he was working on with a forty-megabyte hard disk. I then asked someone much older and wiser for his opinion.

As it turned out, he had done the initial evaluation on the 99/4 three years ago. All I understood was something about operational amplifiers and that the T.I.'s op amps worked in a very small tolerance.

"What can I do?" I asked. He pointed out that T.I. had specified a list of recorders to use with the 99/4, and that the heads of these recorders should be cleaned at least once a month with rubbing alcohol and a cotton swab. He said to avoid using "cleaning tapes" as these tapes scatch the heads. He also showed me a list of recorders that he had tested and that the General Electric model 3-51050 was the best.

GENERAL RULES REGARDING CASSETTES

- (1) don't panic
- (2) don't unnecessarily suspect the tape, even if it's new
- (3) do you have the right tape recorder?
- (4) is the recorder hooked up right? mic to mic, cable plugged in?
- (5) are the heads dirty?
- (6) still won't load? try opposite side of tape
- (7) record error type and call Wilson Inc.

title: Personal Property Manager
product code & version: PPM:1.0

description: PPM records over 2800 items found in the home or apartment. The user inputs date purchased, expected life, original cost, and expected replacement cost to the system's two hundred fixed definitions. PPM calculates present value and provides detailed information for insurance and net worth. Statistical information includes: ratio of values histogram, analysis of replacement planing, and room cost comparisons. Supports RS232 and printer. Disk and cassette versions.

price disk version: 49.95
price cassette version: 49.95

order code disk version: PPM:1.0-DISK
order code cassette version: PPM:1.0-CASS

hardware required: 99/4 or 99/4a, monitor, or rf adaptor, disk version: disk controller and one disk drive, cassette version: two tape recorders.

optional hardware: RS232 and printer (epson mx-80 or equivalent).

command module required: extended basic version 110 or higher.

optional software: none

documentation: loose leaf manual, available separately, order code PPM:1.0-MAN, \$10.00 postage paid.

files: Disk files compatible with GEN-LED specification.
Special Cassette file.

title: Business Proforma Analysis
product code & version: BPA:1.0

description: Should you buy or not? BPA answers the "tough" questions about starting or purchasing a business: Will the business be profitable? How much money will I make? When can I draw money for myself? If I borrow on credit, when can I pay back? And more. BPA is based on algorithms developed at the University of Indiana, School of Business, and others. BPA is an excellent adjunct to our General Ledger GEN-LED to reconstruct the business outlook. Factors that weigh the value of BPA include: Interest rates, Inflation, money supply, and other indicators. RS232 and printer required. Disk and cassette versions.

price disk version: 49.95
price cassette version: 49.95

order code disk version: BPA:1.0-DISK
order code cassette version: BPA:1.0-CASS

hardware required: 99/4 or 99/4a, monitor or rf adaptor, RS232 and printer (epson mx-80 or equivalent), disk version: disk controller and one disk drive, cassette version: one tape recorder.

optional hardware: none

command module required: extended basic version 110 or higher.

optional software: Business and Economic Factors, BEF-DAT, \$10.00 postpaid. Adjusted quarterly, BEF-DAT, comprises current economic factors and trends as a file input to BPA. BPA includes the BEF-DAT current to the quarter in which BPA is bought. On updates, specify disk or cassette.

documentation: application notes, available separately, order BPA:1.0-APP, \$2.00 postage paid. Program is self documenting.

files: BEF-DAT, special BPA file.

title: Securities Manager
product code & version: SMAN:1.0

description: SMAN can manage over 700 securities. SMAN keeps accurate records of number of shares, description, certificate numbers, date acquired, cost, date sold, sales price, capital gains or losses. SMAN provides monthly gain or loss, sort by gain, sort by loss, and interpolation. Supports RS232 and printer. Disk and cassette versions.

price disk version: 49.95
price cassette version: 49.95

order code disk version: SMAN:1.0-DISK
order code cassette version: SMAN:1.0-CASS

hardware required: 99/4 or 99/4a; monitor or rf adaptor, disk version: disk controller and one disk drive, cassette version: two tape recorders.

optional hardware: RS232 and printer (epson mx-80 or equivalent).

command module required: extended basic version 110 or higher.

optional software: none

documentation: loose leaf manual, available separately, order code SMAN:1.0-MAN, \$10.00 postage paid.

files: Disk files compatible with GEN-LED specification.
Special Cassette file.

title: Dividend Manager
product code & version: DMAN:1.0

description: DMAN supports over fifty companies with twelve dividends per company. DMAN tracks date and amount, ordinary income, capital gain, and non-taxable gain. DMAN provides for joint, husband, or wife ownership. Utilities include percent value, shifts in ownership, sorts, mean value, income value, and tax weight carry. In addition, your two disk 99/4 can interface to our Value Line Database, a comprehensive history and performance tool. See section on Value Line Database Manager. Supports RS232 and printer. Disk version only.

price disk version: 49.95

order code disk version: DMAN:1.0-DISK

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk version:
disk controller and one disk drive.

option hardware: RS232 and printer (epson mx-80 or equivalent),
additional disk drive for Value Line Database.

command module required: extended basic version 110 or higher.

optional software: Value Line Database, DMAN:1.0 can input VLDM-DAT
files for database adjustments. VLDM:2.0 is required to construct files.

documentation: loose leaf manual, available seperately, order
code DMAN:2.0-MAN, \$10.00, application notes, available seperately,
order code DMAN2.0-APP, \$2.00 postage paid.

files: DMAN-REQ, special DMAN file, optional DMAN-VAL compatable with
GEN-LED specification.

title: Value Line Database Manager
product code & version: VLDM:2.0

description: VLDM is our expanded database manager for use with
the 99/4. VLDM is used for stocks and bonds but can scan other databases.
VLDM brings the power of our System 34 and System 80 Processors into
your home or office. The VLDM Executive runs your 99/4 and accepts
input from the VLDM-DAT diskette. Through the Exexutive you can
specify the companies you want scanned or the information you desire.
VLDM formats the diskette as an input job to our processors. The diskette
is returned to Wilson Inc. and read by our computers. The computers
search over one hundred databases to provide information pertaining
to your subject or company. Information on the database may be as recent
as the day scanned or as old as six years. The diskette is returned to
you, and at your leisure, without worry of additional charge, you
examine the information. Scan charges are low: \$1.00 for a short scan,
\$2.00 for a long scan, \$10.00 minimum per diskette, postage paid.
Turnaround is fast and the information is yours to use. Perfect for
Business Analysts, Researchers, and Students. Supports RS232 and printer
for hard copy. Disk version only.

price disk version: 29.95

order code disk version: VLDM:2.0-DISK

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk version:
disk controller and one disk drive.

optional hardware: RS232 and printer (epson mx-80 or equivalent).

command module required: extended basic version 110 or higher.

optional software: Dividend Manager, DMAN:1.0, see description;
VLDM-DAT, database service from VLDM:2.0 diskettes, \$1.00 short scan,
\$2.00 long scan, \$10.00 diskette minimum, postage paid, first five scans
are included in VLDM:2.0 package.

documentation: application notes, available separately, order code
VLDM:2.0-APP, \$2.00 postage paid, program is self-documenting.

files: compatible with System 80 specification.

title: Education Master
product code & version: EM:1.0

description: Sit down, turn on the computer, and listen to a story. With graphics, music, and speech, EM entertains (and teaches) children and adults. EM accepts as input any of the EM series stories from Wilson Inc. Features include colorful graphics and music, and the amazing ability of the 99/4 to form speech in different voices. EM requires the 32K Memory Expansion to execute its machine language routines and the Speech Synthesizer to form speech on your television or monitor. Disk version only. One story from EM series included, please select for adult or child.

price disk version: 49.95
order code disk version: EM:1.0-DISK

hardware required: 99/4 or 99/4a, monitor or rf adaptor, 32K memory expansion, speech synthesizer, disk version: disk controller and one disk drive.

optional hardware: none

command module required: extended basic version 110 or higher.

optional software: EM series stories:
EM-0014 Tales from the Brothers Grimm (child)
EM-0012 Popular Mother Goose (child)
EM-0062 About your Weight (adult)
EM-0003 What can a computer do? (child to adult)

stories are \$10.00 postage paid, order code EM-(4 digit number).

documentation: introduction for parent or teacher, on diskette (the program introduces itself as Mr. T.I.Computer). Introduction to children also on diskette. Diskette not available separately. Application notes, available separately, order code EM:1.0-APP, \$2.00 postage paid. Teacher's Guide, loose leaf manual, available separately, order code EM:1.0-GUIDE, \$5.00 postage paid.

files: compatible with EM/B specification.

title: General Ledger
product code and version: GEN-LED:3.0

description: Our popular General Ledger in its third release, GEN-LED is an input program accepting data from ACCTREC, ACCTPAY, the inventory series, the payroll series, and other GEN-LED compatible files. GEN-LED features seven schedules, and twenty-four account definitions per schedule; twenty-one definitions dedicated, three user configured. GEN-LED is one of the most comprehensive packages available for micro-computers.

99/4 GEN-LED has many of the features of our original GEN-LED as configured for the D.E.C. PDP 11/03 and 11/23 minicomputers. GEN-LED's limitations (as with most of our business programs) are primarily due to disk size. We offer several systems for the 99/4 depending on the size of your system. RS232 and printer are required. Disk versions only. GEN-LED features include: trial balance, financial statements, monthly profit and loss, monthly proof and balance, quarterly consolidation, and yearly consolidation.

two disk version: 50 accounts, 100 entries/session, 1000 transactions/month
one disk version: 25 accounts, 50 entries/session, 500 transactions/month

price one disk version: 99.95

price two disk version: 129.95

order code one disk version: GEN-LED:3.0-1DISK

order code two disk version: GEN-LED:3.0-2DISK

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk versions: disk controller and one or two drives as required by version, RS232 and printer (epson mx-80 or equivalent).

PRINTER DEFINITION: The statement "epson mx-80 or equivalent" is meant to describe a printer with the following specifications: 80 columns, printer responds to form feed ASCII 12decimal or 0Chex, prints ASCII set 32decimal to 96decimal or 20hex to 60hex, operates thru TI RS232 Interface. NOTE: Utility provided in GEN-LED to test RS232 and printer.

optional hardware: none

command module required: extended basic version 110 or higher.

optional software: ACCTREC, ACCTPAY, Inventory, Payroll; see descriptions.
GEN-LED accepts compatible files from other programs.

GEN-LED:3.0 Demo Disk, 49.95 postage paid, order code GEN-LED:3.0-DEMO.
Want to see what GEN-LED can do? The GEN-LED Demo requires one drive, the RS232 and printer. Demo simulates an on-board GEN-LED with operator interaction and limited files. Complete with GEN-LED manual.

documentation: loose leaf manual with three ring binder, available separately, order code GEN-LED:3.0-MAN, \$25.00 postage paid.

files: reads GEN-LED compatible files.

note: GEN-LED:3.0 is not compatible with ACCTREC:1.0, ACCTPAY:1.0, and INVENTORY:1.0, upgrade your older programs for \$10.00 to \$20.00, send your serial number(s) to Wilson Inc. for details.

*** INVENTORY PROGRAMS ***

Depending on your needs, you can inventory 475 to over 4000 items. All of our programs feature Inventory Alert, a system that eliminates the task of examining inventory for reorder. Disk and Cassette programs.

title: Cassette Inventory I
product code & version: CASS-INVI:1.0

description: A cassette implementation of our popular Disk Inventory I. All features have been retained: part number, description, quantity, vendor, ordered, received, max and min, PTS and PTB, and more. The difference is in time, Cassette Inventory I operates much slower than disk. Cassette Inventory I stores 500 to 1000 parts. Supports RS232 and printer.

price cassette version: 49.95

order code cassette version: CASS-INVI:1.0

hardware required: 99/4 or 99/4a, monitor or rf adaptor, cassette versions: two tape recorders.

optional hardware: RS232 and printer (epson mx-80 or equivalent).

command module required: extended basic version 110 or higher.

optional software: none

documentation: loose leaf manual, available separately, order code CASS-INVI:1.0-MAN, \$20.00 postage paid.

files: special cassette file.

title: Disk Inventory I
product code and version: INVI:2.0

description: The original disk inventory for the 99/4, first produced over two years ago and in its second release. Fully expanded to be compatible with GEN-LED:3.0. Inventory I features part numbers to eight digits, description, quantity to eight digits, vendor name; address; city; state; zip, quantity ordered, date ordered, purchase order number, quantity received, date received, maximum on hand and minimum on hand to eight digits, PTS (price to sale) and PTB (price to buy) to eight digits. Utilities include: search file, update file, add part(s) to file, print inventory, print alert. Supports RS232 and printer (recommended). Disk version only.

price one disk version: 49.95, 475 parts.

price two disk version: 69.95, 950 parts.

price three disk version: 79.95, 1425 parts.

order code one disk version: DISK-INVI:2.0-1

order code two disk version: DISK-INVI:2.0-2

order code three disk version: DISK-INVI:2.0-3

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk versions: disk controller and one, two, or three drives depending on version.

optional hardware: RS232 and printer (epson mx-80 or equivalent).

command module required: extended basic version 110 or higher.

optional software: GEN-LED:3.0 See description.

documentation: loose leaf manual with three ring binder, available separately, order code DISK-INVI:2.0-MAN, \$20.00 postage paid.

files: compatible with GEN-LED specification.

title: Disk Inventory II
product code and version: INVII:2.0

description: Disk Inventory II has all the features and utilities of Disk Inventory I, but records less information to the permanent file. The result is three times greater capacity compared to Inventory I. Inventory II records inventory by part number, description, quantity, max and min on hand, price to buy and price to sale. Inventory II features a "look up" table on part numbers for quick access. Supports RS232 and printer (recommended). Disk version only.

price one disk version: 49.95, 1432 parts.
price two disk version: 69.95, 2864 parts.
price three disk version: 79.95, 4296 parts.

order code one disk version: INVII:2.0-1
order code two disk version: INVII:2.0-2
order code three disk version: INVII:2.0-3

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk versions: disk controller, one, two, or three drives as required by version.

optional hardware: RS232 and printer (epson mx-80 or equivalent).

command module required: extended basic version 110 or higher.

optional software: GEN-LED:3.0 see description.

documentation: loose leaf manual with three ring binder, available separately, order code INVII:2.0-MAN, \$25.00 postage paid.

files: compatible with GEN-LED specification.

title: Accounts Receivable
product code & version: ACCTREC:2.0

description: ACCTREC features include write transactions, search account, update account, add account, print summary, totals, age; print invoice, totals, age; display totals, age. ACCTREC has a management cycle available to display your slow pays at any time of the month. ACCTREC is an valuable tool for any business with receivables. RS232 and printer required. Disk version only.

price one disk version: 99.95, 237 accounts, 712 transactions/month.
price two disk version: 129.95, 475 accounts, 1425 transactions/month.

order code one disk version: ACCTREC:2.0-1
order code two disk version: ACCTREC:2.0-2

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk versions: disk controller and one or two drives as required by version, RS232 and printer (epson mx-80 or equivalent).

CAT PHC-5 page 18
optional hardware: none

command module required: extended basic version 110 or higher.

optional software: GEN-LED:3.0 see description.

documentation: loose leaf manual with three ring binder, available
seperately, order code ACCTREC:2.0-MAN, \$25.00 postage paid.

files: compatible with GEN-LED specification.

title: Accounts Payable
product code & version: ACCTPAY:2.0

description: ACCTPAY does more than pay bills, it is a cash-flow
calculator, determining how much money you need and when you need it.
ACCTPAY provides a day-by-day journal for the cash needed to meet
expenses. ACCTPAY features include check writing and detailed reports.
ACCTPAY lets you "set-up" accounts to warn you of over buying or
mistakes. Check writing compatible with two and four checks
per page (ordering information included with ACCTPAY, other checks
may not be compatible). RS232 and printer required. Disk version only.

price one disk version: 99.95, 50 vendors, 200 transactions/month.

price two disk version: 129.95, 100 vendors, 400 transactions/month.

order code one disk version: ACCTPAY:2.0-1

order code two disk version: ACCTPAY:2.0-2

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk versions:
disk controller and one or two disk drives as required by version,
RS232 and printer (epson mx-80 or equivalent).

optional hardware: none

command module required: extended basic version 110 or higher.

optional software: GEN-LED:3.0 see description.

documentation: loose leaf manual with three ring binder, available
seperately, order code ACCTPAY:2.0-MAN, \$25.00 postage paid.

files: compatible with GEN-LED specification.

title: Payroll I
product code & version: PAYI:2.0

description: The original one and two disk payrolls for the 99/4.
Payroll I provides two pay types (salaried and hourly), three pay rates
(regular, overtime, special), and six deductions (FIT, SIT, county, city,
FICA, medical) and two user defined deductions (life insurance, thrift
plan, ect.). Automatically calculates overtime (preset at forty hours).
Prints payroll checks and W-2 forms. Keeps year-to-date totals in
permanent file. RS232 and printer required. Disk version only.

price code one disk version: 129.95, 25 employees.

price code two disk version: 149.95, 50 employees.

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk versions:
disk controller, one or two disk drives as required by version, RS232 and
printer (mx-80 or equivalent).

optional hardware: none

optional software: GEN-LED:3.0 see description.

command module required: extended basic version 110 or higher.

documentation: loose leaf manual and three ring binder, available
separately, order code PAYI:2.0-MAN, \$25.00 postage paid.

files: compatible with GEN-LED specification.

title: Cassette Payroll

product code & version: CASSPAY:1.0

description: We wrote this program because you requested a cassette
payroll. If you have the time to wait for the tape recorder to spin, this
is the program for you! Many features of our Payroll I have been included:
Multiple pay types, pay rates and deductions. Cassette Payroll does
print checks, or gives you in printed form the information to fill
out checks. Perfect for small business. Requires RS232 and printer.

price cassette version: 99.95, 25 employees.

order code cassette version: CASSPAY:1.0

command module required: extended basic version 110 or higher.

hardware required: 99/4 or 99/4a, monitor or rf adaptor, cassette
version: two tape recorders, RS232 and printer (epson mx-80 or
equivalent).

optional software: none

documentation: loose leaf manual with three ring binder, available
separately, order code CASSPAY:1.0-MAN, \$25.00 postage paid.

files: special cassette file.

*** ENGINEERING NOTES ***

HOW TO PUT A BIG PROGRAM INTO A SMALL PLACE (and other ideas)

Most of our business packages require twenty to sixty thousand bytes
of memory to run. Since the 99/4 has only 16K (more like 13K) without
the memory expansion where do you keep the program? On disk. By
chaining and merging programs together, one can run a very large program.
What you do give up is a little time required to overlay the different
programs. This may take time, but remember the system didn't cost

YOU KEEP REQUESTING EXTENDED BASIC VERSION 110 OR HIGHER

How do I know which version I have or expect to buy? Simple! From extended basic issue the command CALL VERSION(X), extended basic will print its version number.

I have version 100, will it work? Yes, and maybe no. Version 110 (and higher) takes care of a bug or two found in version 100. The main reason to buy 110 is speed. Our benchmarks show 110 to be almost twice as fast as 100, especially in reads and writes to the disk. And for the reason above (swapping in and out of programs) 110 is recommended for all our programs. 110 can also control pre-scan (ever load a program, type run, and wait?).

The guys in the back room (engineering) like 110 because it does not beep at them when they specify a one character field.

title: 99/4 Literacy
product code & version: 99/4:2.0

description: A comprehensive course in the use of the 99/4 computer. Designed for the novice, skills taught include the use of the keyboard, "special" 99/4 keys, colors, numbers, letters, and sound. Ages six to adult.

price disk version: 24.95
price cassette version 19.95

order code disk version: 99/4:2.0-DISK
order code cassette version: 99/4:2.0-CASS

hardware required: 99/4 or 99/44a, monitor or rf adaptor, disk version: disk controller and one disk drive, cassette version: one tape recorder.

optional hardware: none

command module required: extended basic version 110 or higher.

optional software: none

documentation: application notes with current version, not available seperately. Program is self documenting, and requires direct user input and attention.

files: none

title: Mail list
product code & version: MLIST:2.0

description: Mail List for both cassette and Disk. Prints four lines to a label. Disk Mlist features random access, sort by name, sort by zip code. Cassette Mlist lacks sorts, and random access, but can search for a name, address, city, state, zip. Both are updateable and have

delete functions. Sorts and access are done in RAM from a special look-up table to speed the process. RS232 and printer required.

price disk version: 69.95, 1432 names
price cassette version: 49.95, 1432 names.

order code disk version: MLIST:2.0-DISK
order code cassette version: MLIST:2.0-CASS

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk version:
disk controller and one disk drive, cassette version: two tape
recorders, RS232 and printer (epson mx-80 or equivalent).

optional hardware: none

command module required: extended basic version 110 or higher.

optional software: none

documentation: loose leaf manual, available separately, order code
MLIST:2.0-MAN, \$20.00 postage paid.

files: special MLIST format, diskette and cassette.

*** ADVANCED EDUCATION ***

title: Addition, Subtraction, Multiplication, Division
product code & version: ADD:1.0, SUB:1.0, MUL:1.0, DIV:1.0

description: Features Adaptive Computerized Learning (c)1982 Wilson Co.
Presents to the student a series of exercises based on the "three-by-eight" concept (three series of eight exercises). The program monitors student response and "adapts" itself to the needs of the student. On completion of a series, the student is promoted to the next level of activity. Should the student have difficulty, the computer reconfigures the series and the student is re-tested. There are seven levels of activity: from $1+1=2$, to $35782358+92345703=128128061$. Color and sound are used to promote interest and attention. Response analysis is available for parent or teacher. Wilson Inc. supplies established knows for different situations. Parent or teacher may use these knows or establish their own. Supports RS232 and printer. Password required to view results of testing. Ages six to adult.

price disk versions: 24.95
price cassette versions: 19.95

order code disk version:
ADD:1.0-DISK
SUB:1.0-DISK
MUL:1.0-DISK
DIV:1.0-DISK

order code cassette version:
ADD:1.0-CASS
SUB:1.0-CASS
MUL:1.0-CASS
DIV:1.0-CASS

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk version:
disk controller and one disk drive, cassette version: one tape recorder.

optional hardware: RS232 and printer (epson mx-80 or equivalent).

command module required: extended basic version 110 or higher.

optional software: none

documentation: application notes for parent or teacher, available
separately, order code ACL:1.0-APP, \$2.00 postage paid.

files: none

***** READY FOR FUN? *****

title: Poker

product code & version: POKER:2.0

description: Have you got a lot of money to loose? Not your ordinary
game of poker, your opponent "thinks" his moves at over a million
times per second. He bluffs and takes chances. Trouble is he remembers
your moves and the way you played your hand (and he doesn't forget).
But don't break the computer! We tried this program in Vegas and they
showed us the door. Guaranteed not to cheat, rated as an advanced
player. A challenge for the experienced, computer fun for the
novice.

price disk version: 24.95, one player.

price cassette version: 19.95, one player.

order code disk version: POKER:1.0-DISK

order code cassette version: POKER:1.0-CASS

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk version:
disk controller and one disk drive, cassette version: one tape recorder.

optional hardware: none

command module required: extended basic version 110 or higher.

optional software: none

documentation: game book and notes, available separately, order code
POKER:1.0-APP, \$2.00 postage paid.

files: none

title: A Day at the Races

product code & version: ADR:1.0

description: Rained out in Miami? You can have the spectacle of Horse
Racing in your own home. For one to four players, Day at the Races features
exciting graphics as the horses run to the call of the chase. The computer

is handicapper, bank, and race track. Choose from some of America's greatest horses and jockeys; odds up to forty-to-one. And yes, the long shots come in. Select the horse you want, how much you want to bet, and whether to win, place, or show.

Beware, this game may be addictive, especially to women. We watched a group of grandmothers, yell, scream, and hug each other when one of them won the triple sweepstakes. This game may take several hours to play. Great fun for the family, but not an arcade game that lasts two minutes.

price disk version: 24.95

price cassette version: 19.95

order code disk version: ADR:1.0-DISK

order code cassette version: ADR:1.0-CASS

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk version: disk controller and one disk drive, cassette version: one tape recorder.

optional hardware: none

command module required: extended basic version 110 or higher.

optional software: none

documentation: game book and notes, available separately, order code ADR:1.0-APP, \$2.00 postage paid.

title: Talking Bingo Master
product code & version: BING:1,0

description: The best computer technology has to offer, Bingo Master is perfect for social and group events where Bingo is enjoyed. BING prints Bingo sheets, and other mundane chores, but BING can talk! He may even sing you a song (courtesy of Stephen Foster). He calls the numbers and letters, checks bingo, and entertains as only a computer could, with feeling. Very effective with large groups of people.

BING even has utilities to pronounce your group's name or message. He will remember the winner's name and more. BING learns as you use it. Requires RS232 and printer to print bingo cards. Requires 32K expansion memory to hold its utilities and machine language routines. Bingo cards have been adapted to use advanced Epson MX-80 graphics, or a much simpler card can be chosen for other printers.

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk version: disk controller and one disk drive, 32K Memory Expansion, Speech Synthesizer.

optional hardware: RS232 and printer (epson mx-80 or equivalent-see special note above), Public Address System (the 99/4 and 99/4a have a sound (speech) output).

command module required: extended basic version 110 or higher.

optional software: none

documentation; game book and notes, available separately, order code: BINGI:0-MAN, \$2.00 postage paid.

files: none

POINT OF SALE SYSTEM

POS completes our general business package of Accounts Receivable, Payable, Inventory, and General Ledger. From these blocks, powerful business software can be built for the 99/4.
(see our software libraries that follow or construct your own system)

title: Point of Sale
product code & version: POS:2.0

Description: POS is an order entry system that interacts with ACCTREC and Inventory. A minimum system would be POS and Disk Inventory I or II. POS requires a dedicated disk for sales records, and an additional disk for the files created by Inventory I or II. POS records sold to, ship to, address, city, state, zip; payment (cash, credit), salesperson, quantity, part bought, description, unit price, extended price. POS totals thirty items per page, calculates tax (if taxable), grand totals, receives cash (if specified), and gives balance (change). Your customer receives a printed invoice (multiples may be specified) with your company name, date, sales order number and a "THANK YOU" computer style. The operator enters little information other than customer, quantity, and part number. The rest is pulled from the inventory disk and accordingly inventory is adjusted based on sale. If you specify in-house credit, the sales file will be made compatible with ACCTREC (yes, this means you will not have to transact accounts to ACCTREC, rather ACCTREC will batch the input and post the account to statement). Your sales utilities include totals, totals by salesperson, totals by cash and credit. Inputs sales data to GEN-LED. Records up to 475 sales per diskette (varies according to sale length).

price two disk system: 149.95, (POS first disk, INV second disk)

price three disk system: 169.95, inventory may reside on two disks

order code two disk version: POS:2.0-2

order code three disk version: POS:2.0-3

hardware required: 99/4 or 99/4a, monitor or rf adaptor, disk version; disk controller, two or three disk drives as required by version, RS232 and printer (epson mx-80 or equivalent).

optional hardware: none

command module required: extended basic version 110 or higher.

software required: Disk Inventory I or II (one or two disk only).

optional software: ACCTREC, GEN-LED, see description.

documentation: loose leaf manual with three ring binder, available separately, order code POS:2.0-MAN, \$25.00 postage paid.

files: compatible with GEN-LED specification.

SOFTWARE TYPE AND STRUCTURE

We divide type into four categories:

BUSINESS
FINANCE
EDUCATION
ENTERTAINMENT

We divide structure into eleven categories:

TITLE
PRODUCT CODE & VERSION
DESCRIPTION
PRICE
ORDER CODE
HARDWARE REQUIRED
OPTIONAL HARDWARE
COMMAND MODULE REQUIRED
OPTIONAL SOFTWARE
DOCUMENTATION
FILES

Manuals may be bought for most software if you desire a closer look. There are also application notes and guides available. Though we may not supply all information for all products, we assume the intelligence of our customers and if there are specific questions you may write Wilson Inc. or call (317)-462-9511.

WHAT FOLLOWS

For reference, we provide sorts by hardware system, sort by individual hardware product, accessories, documentation (documentation not already specified in hardware system), software sort by system and product (as described above), individual software (your own building blocks), software libraries, combination hardware and software expansion, calculators; software; and documentation, other products, arcade products and games (after all we like fun too).

REMEMBER

HARDWARE TYPE (A) CARD EXPANSION
HARDWARE TYPE (B) MODULE EXPANSION
HARDWARE TYPE (C) ADD-ON

SOFTWARE TYPE (1) CARTRIDGE
SOFTWARE TYPE (2) CASSETTE
SOFTWARE TYPE (3) DISKETTE

(and just think, this catalog is designed for the 99/4 user)

HARDWARE BY SYSTEM

99/4A COMPUTER	SYS 1	349.95
99/4A COMPUTER + MONITOR	SYS 2	699.95
99/4A COMPUTER + TV	SYS 3	649.95
CASSETTE EXPANSION	CAS 1000	69.95
SINGLE DISK EXPANSION TYPE (A)	SDE 1000	699.95
SINGLE DISK EXPANSION TYPE (B)	SDE 2000	629.95
ADDITIONAL DISK TYPE (C)	DSK 1000	399.95
PRINTER EXPANSION TYPE (A)	PRT 1000	749.95
PRINTER EXPANSION TYPE (B)	PRT 2000	789.95
COMBINATION EXPANSION TYPE (A)	CDB 1000	1399.95
COMBINATION EXPANSION TYPE (B)	CDB 2000	1399.95
COMBINATION EXPANSION TYPE (A)	CDB 3000	1799.95
COMBINATION EXPANSION TYPE (B)	CDB 4000	1799.95
PASCAL	PAS 1000	1299.95
LOGO TYPE (A)	LOG 1000	419.95
LOGO TYPE (B)	LOG 2000	379.95
PILOT	PLT 1000	69.95
EDITOR/ASSEMBLER TYPE (A)	EAS 1000	269.95
EDITOR/ASSEMBLER TYPE (B)	EAS 2000	389.95
TELECOMMUNICATIONS TYPE (A)	TCS 1000	499.95
TELECOMMUNICATIONS TYPE (B)	TCS 2000	389.95
80 COLUMN PRINTER TYPE (C)	PHP 2500	599.95
SPEECH SYNTHESIZER TYPE (C)	SPH 1000	119.95

HARDWARE BY ITEM

PERIPHERAL EXPANSION SYSTEM	PHP 1200	199.95
RS232 CARD	PHP 1220	139.95
DISK CONTROLLER CARD	PHP 1240	199.95
EXPANSION DISK DRIVE	PHP 1250	319.95
32K MEMORY CARD	PHP 1260	199.95
PASCAL CARD	PHP 1270	199.95
SPEECH SYNTHESIZER	PHP 1500	119.95
MODEM	PHP 1600	179.95
RS232 MODULE	PHP 1700	179.95
DISK CONTROLLER MODULE	PHP 1800	239.95
STAND ALONE DISK DRIVE	PHP 1850	399.95
32K MEMORY MODULE	PHP 2200	319.95
80 COLUMN PRINTER	PHP 2500	599.95
10" COLOR MONITOR	PHA 4100	369.95
GE COLOR TV	PHA 5000	299.95
GE CASSETTE RECORDER	CRR 1000	29.95

ACCESSORIES

TV ADAPTOR CABLE	PHA 2010	39.95
MONITOR CABLE	PHA 2010	15.95
CASSETTE CABLE	PHA 2000	12.95
HEADPHONE ADAPTOR CABLE	PHA 2020	15.95
PRINTER CABLE (MALE TO MALE)	CAB 1000	19.95
JOYSTICKS	PHP 1100	29.95

DOCUMENTATION

99/4 BEGINNER'S BASIC	PHA 2600	7.95
99/4 USER'S GUIDE	PHA 2601	7.95
99/4A BEGINNER'S BASIC	PHA 2602	7.95
99/4A USER'S GUIDE	PHA 2603	7.95
COMPUTER COMPETENCY VOL. I	PHA 2606	7.95
COMPUTER COMPETENCY VOL. II	PHA 2607	7.95
COMPUTER COMPETENCY VOL. III	PHA 2608	7.95
COMPUTER ALLSTAR PROJECTS	PHA 2609	7.95
LOGO CURRICULUM GUIDE	PHA 2611	39.95
9900 FAMILY SYSTEMS	PHA 3000	19.95

MASTER SOFTWARE SORT

BUSINESS

TYPE (1) CARTRIDGE

NONE

(all business software requires extended basic cartridge PHM 3026)

TYPE (2) CASSETTE

BUSINESS PROFORMA	BPA:1.0-CASS	49.95
CASSETTE INVENTORY I	CASS-INVI:1.0	39.95
CASSETTE PAYROLL	CASSPAY:1.0	99.95
MAIL LIST	MLIST:2.0-CASS	49.95
BUSINESS AIDS LIBRARY	PHT 6038	46.95

TYPE (3) DISKETTE

BUSINESS PROFORMA	BPA:1.0-DISK	49.95
GENERAL LEDGER 1 DISK	GEN-LED:3.0-1DISK	99.95
2 DISK	GEN-LED:3.0-2DISK	129.95
INVENTORY I 1 DISK	DISK-INVI:2.0-1	49.95
2 DISK	DISK-INVI:2.0-2	69.95
3 DISK	DISK-INVI:2.0-3	79.95
INVENTORY II 1 DISK	DISK-INVII:2.0-1	49.95
2 DISK	DISK-INVII:2.0-2	69.95
3 DISK	DISK-INVII:2.0-3	79.95
ACCOUNTS RECEIVABLE 1 DISK	ACCTREC:2.0-1	99.95
2 DISK	ACCTREC:2.0-2	129.95
ACCOUNTS PAYABLE 1 DISK	ACCTPAY:2.0-1	99.95
2 DISK	ACCTPAY:2.0-2	129.95
PAYROLL I 1 DISK	PAYI:2.0-1DISK	129.95
2 DISK	PAYI:2.0-2DISK	149.95
MAIL LIST	MLIST:2.0-DISK	69.95
POINT OF SALE (ORDER/ENTRY)	POS:2.0-2DISK	149.95
POINT OF SALE (ORDER/ENTRY)	POS:2.0-3DISK	
BUSINESS AIDS LIBRARY	PHD 5038	54.95

FINANCE

TYPE (1) CARTRIDGE

HOME FINANCIAL DECISIONS	PHM 3006	23.95
HOUSEHOLD BUDGET	PHM 3007	31.95
SECURITIES ANALYSIS	PHM 3012	44.95
PERSONAL RECORD KEEPING	PHM 3013	39.95
TAX/INVESTMENT	PHM 3016	54.95
PERSONAL REAL ESTATE	PHM 3022	54.95
STATISTICS	PHM 3014	36.95

TYPE (2) CASSETTE

PERSONAL PROPERTY MANAGER	PPM: 1.0-CASS	49.95
SECURITIES MANAGER	SMAN: 1.0-CASS	49.95
PERSONAL FINANCIAL AIDS	PHT 6003	11.95
MARKET SIMULATION	PHT 6018	11.95

TYPE (3) DISKETTE

PERSONAL PROPERTY MANAGER	PPM: 1.0-DISK	49.95
SECURITIES MANAGER	SMAN: 1.0-DISK	49.95
DIVIDEND MANAGER	DMAN: 1.0-DISK	49.95
VALUE LINE DATABASE MANAGER	VLDM: 2.0-DISK	29.95
FINANCE MANAGEMENT	PHD 5022	31.95
MARKET SIMULATION	PHD 5018	15.95

EDUCATION

TYPE (1) CARTRIDGE

EARLY LEARNING FUN	PHM 3002	23.95
BEGINNING GRAMMER	PHM 3003	23.95
NUMBER MAGIC	PHM 3004	15.95
VIDEO GRAPHS	PHM 3005	15.95
PHYSICAL FITNESS	PHM 3010	23.95
MUSIC MAKER	PHM 3020	31.95
WEIGHT CONTROL AND NUTRITION	PHM 3021	46.95
TOUCH TYPING FOR 99/4A	PHM 3064	31.95

(Scott, Foresman & Company)

EARLY READING	PHM 3015	44.95
READING FUN	PHM 3043	44.95
READING ON	PHM 3046	44.95
READING ROUNDUP	PHM 3047	44.95
READING RALLY	PHM 3048	44.95
READING FLIGHT	PHM 3082	44.95

(Scholastic, Inc)

SPELLING LEVEL 3	PHM 3059	46.95
LEVEL 4	PHM 3060	46.95
LEVEL 5	PHM 3061	46.95
LEVEL 6	PHM 3062	46.95

TYPE (2) CASSETTE

99/4 LITERACY	99/4:2.0-CASS	19.95
ADDITION	ADD:1.0-CASS	19.95
SUBTRACTION	SUB:1.0-CASS	19.95
MULTIPLICATION	MUL:1.0-CASS	19.95
DIVISION	DIV:1.0-CASS	19.95
TEACH YOURSELF BASIC	PHT 6007	23.95
MUSIC SKILLS TRAINER	PHT 6009	19.95
COMPUTER MUSIC BOX	PHT 6011	11.95
TEACH YOURSELF EXTENDED BASIC	PHT 6019	15.95
SPEAK AND MATH	PHT 6031	19.95
SPELL TUTOR	PHT 6042	19.95
BASIC TUTOR	PHT 6067	19.97
PROGRAMMING AIDS I	PHT 6004	7.95
MATH ROUTINES	PHT 6006	19.95
ELECTRICAL ENGINEERING	PHT 6008	19.95
GRAPHING PACKAGE	PHT 6013	11.95
STRUCTURAL ENGINEERING	PHT 6016	19.95
AC CIRCUIT ANALYSIS	PHT 6044	19.95

EDUCATION (cont)

TYPE (3) DISKETTE

EDUCATION MASTER	EM: 1.0-DISK	49.95
99/4 LITERACY	99/4: 2.0-DISK	24.95
ADDITION	ADD: 1.0-DISK	24.95
SUBTRACTION	SUB: 1.0-DISK	24.95
MULTIPLICATION	MUL: 1.0-DISK	24.95
DIVISION	DIV: 1.0-DISK	24.95
TEACH YOURSELF BASIC	PHD 5007	27.95
MUSIC SKILLS TRAINER	PHD 5009	23.95
COMPUTER MUSIC BOX	PHD 5011	15.95
TEACH YOURSELF EXTENDED BASIC	PHD 5019	19.95
SPEAK AND SPELL	PHD 5030	23.95
SPEAK AND MATH	PHD 5031	23.95
SPELL WRITER	PHD 5042	23.95
BASIC TUTOR	PHD 5067	23.95

(Minnesota Education Computing Consortium)

METRIC AND COUNTING	PHD 5078	23.95
ELEMENTARY ECONOMICS	PHD 5079	23.95
ELEMENTARY MATH AND SCIENCE	PHD 5080	23.95
ASTRONOMY	PHD 5081	23.95
WORD BEGININGS	PHD 5082	23.95
EXPLORING	PHD 5083	23.95
MATH PRACTICE	PHD 5084	23.95
SCIENCE FACTS	PHD 5085	23.95
NATURAL SCIENCE	PHD 5086	23.95
SOCIAL SCIENCE	PHD 5087	23.95
PROGRAMMING AIDS I	PHD 5004	11.95
PROGRAMMING AIDS II	PHD 5005	19.95
PROGRAMMING AIDS III	PHD 5012	15.95
MATH ROUTINES	PHD 5006	23.95
ELECTRICAL ENGINEERING	PHD 5008	23.95
GRAPHING PACKAGE	PHD 5013	15.95
STRUCTURAL ENGINEERING	PHD 5016	23.95
AC CIRCUIT ANALYSIS	PHD 5044	23.95

ENTERTAINMENT

TYPE (1) CARTRIDGE

VIDEO CHESS	PHM 3008	54.95
FOOTBALL	PHM 3009	23.95
VIDEO GAMES I	PHM 3018	23.95
HUNT THE WAMPUS	PHM 3023	19.95
INDOOR SOCCER	PHM 3024	23.95
MIND CHALLENGERS	PHM 3025	19.95
A-MAZE-ING	PHM 3030	19.95
TOMBSTONE CITY	PHM 3052	31.95
TI INVADERS	PHM 3053	31.95
CAR WARS	PHM 3054	31.95
MUNCH MAN	PHM 3057	31.95
TUNNELS OF DOOM (cass/disk)	PHM 3042	46.95
ALPINE	PHM 3056	31.95
CHISHOLM TRAIL	PHM 3110	31.95
PARSEC	PHM 3112	31.95

(Milton Bradley Company)

ATTACK	PHM 3031	31.95
BLASTO	PHM 3032	19.95
HUSTLE	PHM 3034	19.95
ZEROZAP	PHM 3036	15.95
HANGMAN	PHM 3037	15.95
CONNECT FOUR	PHM 3038	15.95
YAHTZEE	PHM 3039	19.95

(Scott Adams Company)

ADVENTURE (cass/disk)	PHM 3041	39.95
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(Gabriel Industries)

OTHELLO	PHM 3067	31.95
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TYPE (2) CASSETTE

POKER	POKER: 1.0-CASS	19.95
A DAY AT THE RACES	ADR: 1.0-CASS	19.95
BRIDGE BIDDING I	PHT 6026	19.95
II	PHT 6039	19.95
III	PHT 6041	19.95
MYSTERY MELODY	PHT 6010	7.95
GAMES I	PHT 6015	11.95
II	PHT 6017	15.95

ENTERTAINMENT (cont)

TYPE (2) CASSETTE

(Scott Adams Company)

ADVENTURELAND	PHT 6046	23.95
MISSION IMPOSSIBLE	PHT 6047	23.95
VOODOO CASTLE	PHT 6048	23.95
THE COUNT	PHT 6049	23.95
STRANGE ODYSSEY	PHT 6050	23.95
MYSTERY FUN HOUSE	PHT 6051	23.95
PYRAMID OF DOOM	PHT 6052	23.95
GHOST TOWN	PHT 6053	23.95
SAVAGE ISLAND I AND II	PHT 6054	31.95
GOLDEN VOYAGE	PHT 6056	23.95

TYPE (3) DISKETTE

POKER	POKER: 1.0-DISK	24.95
A DAY AT THE RACES	ADR: 1.0-DISK	24.95
TALKING BINGO MASTER	BING: 1.0-DISK	49.95
BRIDGE BIDDING I	PHD 5026	23.95
II	PHD 5039	23.95
III	PHD 5041	23.95
TI TREK	PHD 5002	11.95
MYSTERY MELODY	PHD 5010	11.95
GAMES I	PHD 5015	15.95
II	PHD 5017	19.95

(Scott Adams Company)

ADVENTURELAND	PHD 5046	23.95
MISSION IMPOSSIBLE	PHD 5047	23.95
VOODOO CASTLE	PHD 5048	23.95
THE COUNT	PHD 5049	23.95
STRANGE ODYSSEY	PHD 5050	23.95
MYSTERY FUN HOUSE	PHD 5051	23.95
PYRAMID OF DOOM	PHD 5052	23.95
GHOST TOWN	PHD 5053	23.95
SAVAGE ISLAND I AND II	PHD 5054	31.95
GOLDEN VOYAGE	PHD 5056	23.95

OTHER TYPE (1) CARTRIDGE SOFTWARE

DIAGNOSTIC
SPEECH EDITOR
EXTENDED BASIC
MINI-MEMORY

	PHM 3000	23.95
	PHM 3011	36.95
	PHM 3026	79.95
	PHM 3058	79.95

[Faint, mostly illegible text, likely bleed-through from the reverse side of the page. Some words like 'PHM 3000', 'PHM 3011', 'PHM 3026', 'PHM 3058' are visible.]

SOFTWARE LIBRARIES

BUSINESS

title: Cassette System

order code: LIB 1000

description: includes cassette inventory, payroll, and mail list.

price: \$159.95

hardware required: SYS 1 or SYS 2 or SYS 3, CAS 1000, PRT 1000 or PRT 2000, PHM 3026.

title: order/entry, Inventory I

order code: LIB 2000

description: includes Point of Sale, Inventory I.

price: \$179.95

hardware required: CDB 3000 or CDB 4000, PHM 3026

title: order/entry, Inventory II

order code: LIB 2010

description: includes Point of Sale, Inventory II.

price: \$179.95

hardware required: CDB 3000 or CDB 4000, PHM 3026

title: SBA small business accounting

order code: LIB 2020

description: includes LIB 2000 or LIB 2010 (specify), accounts receivable, accounts payable, and general ledger (all two disk systems).

price: \$499.95

hardware required: CDB 3000 or CDB 4000, PHM 3026

title: SBA (LIB 2020) with payroll

order code: LIB 2030

description: LIB 2020 with two disk payroll.

price: \$599.95

hardware required: CDB 3000 or CDB 4000, PHM 3026

SOFTWARE LIBRARIES (cont)

FINANCE

title: Personal property and Securities (cassette)

order code: LIB 1100

description: includes personal property manager, securities manager,
personal financial aids, and market simulation.

price: \$109.95

hardware required: SYS 1 or SYS 2 or SYS 3, CAS 1000, PHM 3026

title: Property, Securities, Dividends, Value Line Database

order code: LIB 2040

description: property manager, securities, dividends, Value Line Database,
finance management, market simulation.

price: \$209.95

hardware required: SDE 1000 or SDE 2000, printer recommended.
(PRT 1000 or PRT 2000)

title: Home financial manager

order code: LIB 7001

description: includes home financial decisions, household budget,
personal real estate.

price: \$109.95

hardware required: SYS 1 or SYS 2 or SYS 3, CABS 1000

LIBRARIES (cont)

EDUCATION

title: 99/4 literacy and the four basics
order code: LIB 1200

description: includes 99/4 literacy, addition, subtraction,
multiplication, and division.

price: \$89.95

hardware required: SYS 1 or SYS 2 or SYS 3, CASS 1000, PHM 3026

title: SMU Electrical Engineering Course Trainer
order code: LIB 3045

description: designed to be used with Circuit Analysis I Textbook,
course contains 12 diskettes.

price: \$239.95

hardware required: SDE 1000 or SDE 2000, printer recommended.
(PRT 1000 or PRT 2000)

title: Elementary Educator
order code: LIB 7003

description: includes beginning grammar, addition, subtraction, early
learning fun.

price: \$79.95

hardware required: SYS 1 or SYS 2 or SYS 3, speech synthesizer.

title: Music Educator
order code: LIB 7004

description: includes music maker, music skills trainer.

price: \$49.95

hardware required: SYS 1 or SYS 2 or SYS 3, CASS 1000

title: Speaking Reading Teacher
order code: LIB 7007

description: includes early reading, and reading fun.

price: \$99.95

hardware required: SYS 1 or SYS 2 or SYS 3, speech synthesizer.

(PHM 3026 IS EXTENDED BASIC)

LIBRARIES (cont)

EDUCATION

title: Speaking Spelling Teacher
order code LIB 7008

description: includes Scholastic Spelling level 3, 4, 5, 6.

price: \$179.95

hardware required: SYS 1 or SYS 2 or SYS 3, speech synthesizer.

ENTERTAINMENT

title: Arcade 1
order code: LIB 7002

description: includes attack, a-maze-ing, hunt the wampus.

price: \$54.95

hardware required: SYS 1 or SYS 2 or SYS 3, joysticks.

title: Arcade 2
order code: LIB 7009

description: includes tombstone city, TI invaders, car wars.

price: \$99.95

hardware required: SYS 1 or SYS 2 or SYS 3, joysticks.

title: Arcade 3
order code: LIB 7010

description: includes blasto, hustle, zerozap, connect four, yahtzee.

price: \$99.95

hardware required: SYS 1 or SYS 2 or SYS 3, joysticks.
