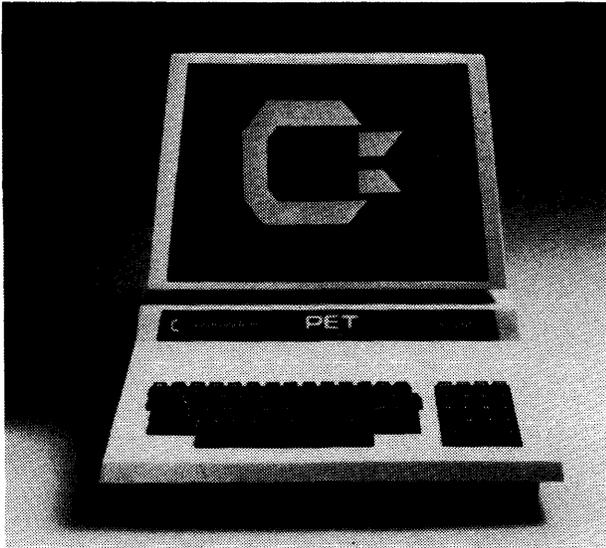


# Commodore PET 4001 Series



The 32KB PET, shown here with its integrated 12-inch green phosphor display screen, has a typewriter-style, tactile keyboard with a built-in numeric keypad. The system can be configured with a variety of peripherals to support business, education, and entertainment applications.

## BACKGROUND INFORMATION

*Commodore Business Machines, Inc., Computer Systems Division, 681 Moore Road, King of Prussia, PA 19406. Telephone (215) 337-7100.*

Commodore Business Machines, Inc. was formed in 1976 following acquisition by Commodore of MOS Technology, Inc.—the maker of the microprocessor that is the heart of the PET systems. CBM's first product was a 4KB version of the PET. The present PET product lineup consists of 16KB and 32KB systems selling for \$995 and \$1,295, respectively. These PET's are self-contained units with an integral green phosphor screen mounted atop the keyboard unit. Weighing less than 50 lbs., an entire PET system is readily transportable.

Until the end of 1979, all of CBM's computers were referred to by the firm as PET's. Then, the CBM systems were introduced. These systems are 16KB and 32KB versions of the PET with an optional 11-key numeric keypad and both upper and lower case alphabetic characters supported on the keyboard. They are targeted at the business system market while the PET's remain targeted at home, hobby, and educational markets.

With about 242,000 Commodore systems of all types sold to date through more than 700 dealers nationwide, and a shipment rate of over 8,000 per month, the Commodore computer users base is one of the largest in the personal computer marketplace. Over 30 PET users' groups have

**Current models:** PET 4016, 4032.  
**Memory:** 16KB-32KB RAM; 340KB-1MB diskette.  
**Workstations:** one local.  
**Base list price:** \$995-\$1,295 (processor/memory).  
**Typical list prices:** \$1,069.95—16K RAM, processor, keyboard/display, cassette recorder; \$2,885—32K RAM, processor, keyboard/display, 1MB diskette storage, 65 cps printer.  
**Primary uses:** home/hobby, education, professional.  
**Popular options:** from Commodore—printer, floppy disk, modem, cassette recorder.  
**Principal programming language:** Basic.  
**Principal applications software:** business, education, word processing.  
**First shipment:** 1977.  
**Number installed to date:** about 175,000.  
**Current shipment rate:** information not available.  
**Available through:** about 700 dealers nationwide.

been formed, and a substantial number of independent peripherals and software packages can be used with the PET.

## SYSTEM CHARACTERISTICS

For the first two years after its introduction, the PET was supplied by Commodore in a bare bones fashion, consisting of two units: a non-typewriter-style keyboard with a built-in cassette, and a B/W screen. No peripherals and little software was available. In spite of these handicaps, the PET's were enthusiastically received in the marketplace.

By the end of 1979, Commodore filled in some of the biggest gaps in the PET product line by adding two printers, a dual diskette unit, numerous manuals, and a large selection of software—offered in some cases by agreement with independent software firms. Also, Commodore introduced the CBM business series with optional built-in numeric keypad, and upgraded the PET's to include a high-quality typewriter-style keyboard that no longer contained a built-in cassette unit.

Four plug connections are provided on the PET keyboard chassis, allowing the attachment of two Commodore digital cassette units, an 8-bit parallel I/O device, and an IEEE-488 compatible I/O device. Through the use of the IEEE plug, up to 10 I/O devices or subsystems can be connected to the PET in daisy-chain fashion. An integral memory expansion connector is also provided for user-furnished memory add-on.

Commodore does not support memory upgrades for installed systems, although entire 16KB or 32KB processor/memory boards can be replaced and upgraded by Commodore boards with larger memories by the user. In these cases, local dealers may grant the user a trade-in allowance for the old board, but this is not an official Commodore policy.

## Commodore PET 4001 Series

### HARDWARE/PACKAGING

#### PROCESSOR/MEMORY

Model: MOS Technology 6502 microprocessor; 8 bits  
RAM: 16KB to 32KB  
ROM: 18KB  
System prices: 16KB (\$995); 32KB (\$1,295)

#### DISPLAY

Type: Video Display Unit  
Number: one provided; maximum of one available  
Screen size: 12-inch  
Chars./screen: 1000; 40 chars./line, 25 lines  
Char. type: upper/lower case, 8 x 8 matrix  
Features: normal, inverse, or flashing characters; automatic vertical scrolling, accessible by Basic Peek/Poke commands  
Graphics: 128 full-screen character graphics  
Interface: integral connection

#### KEYBOARD

Type: typewriter style graphics keyboard  
No. of keys: 64, ASCII character set with graphics chars., plus integral 20-key numeric pad  
Interface: integral connection

#### DIRECT ACCESS STORAGE

|                   | CBM 4040                    | CBM 8050                    |
|-------------------|-----------------------------|-----------------------------|
| Model:            | Dual Drive<br>Mini-Diskette | Dual Drive<br>Mini-Diskette |
| Type:             | 5/4"                        | 5/4"                        |
| Capacity/drive:   | 170KB                       | 509KB                       |
| Drives/system:    | 0-16; 2/controller          | 0-16; 2/controller          |
| Avg. access time: | 383 milliseconds            | 383 milliseconds            |
| Transfer rate:    | 62.5 KBS                    | 62.5 KBS                    |
| Interface:        | IEEE-488                    | IEEE-488                    |
| Price:            | \$1,295 with controller     | \$1,795 with controller     |

#### PRINTER

Model: CBM 4022 Printer  
Type: matrix, impact  
Paper: fan-fold, tractor, 10"  
Char. set: 256, 6 x 10 dot matrix  
Chars./line: 80  
Speed: 80 cps bidirectional  
Interface: IEEE-488  
Price: \$795

#### DATA COMMUNICATIONS

Model/price: 8010 CBM Modem (\$279.95)  
Trans. mode: half/full duplex  
Protocols: asynchronous  
Lines: 1  
Speed: 300 bps  
Interface: IEEE-488

#### OTHER I/O

Magnetic tape: C2N CBM External Cassette Recorder/Player (\$74.95)  
Voice: CBM Voice Synthesizer (\$279)

#### I/O ELECTRONICS

Structure: 4 integral peripheral plug connectors; IEEE-488 bus, 8-bit parallel I/O port, 2 cassette ports; memory and I/O expansion connectors

### SOFTWARE

#### LANGUAGES

Basic: Microsoft Floating Point Basic (standard in ROM); Compiled Integer Basic (\$150)  
Assembler: Assembler Development Package (\$100)

#### OPERATING SYSTEM

Name: Operating System in ROM  
System requirements: base system  
Concurrent tasks: one  
Other functions: I/O device handling; keyboard and screen editing; file manager, machine language monitor

#### UTILITIES

Sort: available from independent sources  
Text Editor: yes, WORDCRAFT '80 (\$395)

#### DATABASE MANAGEMENT SYSTEMS

Name: Database Utility (no charge)

COMMUNICATIONS SUPPORT: terminal emulator from independent vendors

#### APPLICATIONS PROGRAMS:

Business: Dow Jones Portfolio Management System (\$149.95), Information Retrieval and Management Aid (\$495), Legal Time Accounting (\$595), Tax Preparation System (\$495), Medical Accounting System (\$595)  
Word Processing: WORDCRAFT (\$395)  
Entertainment: Galaxy One (24 games) (\$49.95)  
Numerous other software packages from independent sources are detailed in The Commodore Software Encyclopedia (\$9.95)

### SUPPORT SERVICES

#### DOCUMENTATION

Range: a monthly PET users club newsletter (\$15/yr.); about 12 manuals available for between \$6.95 and \$19.95 apiece.

#### SUPPORT

Training and education: none from Commodore; available at discretion of dealer  
Maintenance: third party maintenance agreement through TRW, 200 locations nationwide

#### TERMS AND CONDITIONS

Lease terms: none  
Discounts: none officially available at retail level; some dealers and mail order houses will offer up to 15% off list  
Warranties: 90-day parts and labor  
Software terms: outright purchase ■