The PET™
Personal Computer

commodore

PET™ Plus ......

2001-16/32

The PET™ is now a truly sophisticated Business System with the announcement of these Peripherals.

The PET™, incorporated with the Floppy Disk and Printer makes an ideal business system for most professional and specialized fields: medicine, law, dental, research, engineering, toolmaking, printing, education, energy conservation, etc. . . The PET™ Business System as a management tool, delivers information to all levels of Business, previously attainable only with equipment many times more expensive. The PET™ Business System is one of the most cost efficient business tools today. It offers a wide range of applications from logging management strategy in major corporations to organizing accounts and inventory control of small businesses. Here are just a few of the cost-saving uses in the corporation, professional office or small business: stock control, purchasing, forecasting, manufacturing costing, customer records, mailing lists, etc. . . The PET™, Floppy Disk and Printer, a compatible business system at a reasonable price — Take a closer look at these Peripherals . . .

Specifications:

Dimensions: 16½" wide by 18½" deep, 14" overall height
Weight: 44 lbs.

MEMORY
Random Access Memory 16 or 32K bytes
Read Only Memory (operating system resident in the
    computer): 14K bytes
8K+ — BASIC interpreter
4K — Operating system
1K — Machine language monitor

VIDEO DISPLAY UNIT
9" monochrome CRT
1000 character display, 40 x 25
8 x 8 dot matrix for characters
64 standard ASCII characters; 64 graphic characters

KEYBOARD: Business or Number Pad Version
Screen Control: home, clear, up, down, left and right
Editing: Character insertion and deletion

OPERATING SYSTEM will support multiple languages
    (BASIC resident)

Machine language accessibility.
File management in operating system.
Random number generation or pseudo random sequence.

INPUT/OUTPUT
I/O supported through IEEE-488 instrument interface for
    multiple intelligent peripherals. Memory mapped
    I/O user port.
All I/O automatically managed by operating system
    software.
Single character I/O with GET command.

BASIC INTERPRETER
Expanded 8K BASIC.
Strings, integers and multiple dimension arrays.
High precision (9 significant digits).
Direct memory access through PEEK and POKE
    commands.
Additional sockets are provided on board for 8K ROM
    expansion.
ROMs for assembler or disk O.S. may be inserted.

Profession Peripherals

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Dual Drive Floppy Disk

The Dual Drive Floppy is the latest in Disk technology with extremely large storage capability and excellent file management. As the Commodore disk is an "Intelligent" peripheral, it uses none of the RAM (user) memory of the PET™. The Floppy Disk operating system used with the PET™ computer enables a program to read or write data in the background while simultaneously transferring data over the IEEE to the PET™. The Floppy Disk is a reliable low cost unit, and is convenient for high speed data transfer. Due to the latest technological advances incorporated in this disk, a total of 360K bytes are available in the two standard 5¼" disks, without the problems of double tracking or double density. This is achieved by the use of two microprocessors and fifteen memory I.C.s built into the disk unit. Only two connections are necessary — an A/C cord and PET™ interface cord.

Specifications:

Microcomputer system devices
Controller
    6504   microprocessor
    6530   I/O, RAM, and 1K ROM software
    6316   2K ROM for encoding & decoding disk data
    6522   I/O and interval timers
File interface
    6502   microprocessor
(2) 6532   RAM, I/O, interval timers
(2) 6332   4K ROM each (total 8K disk operating system)
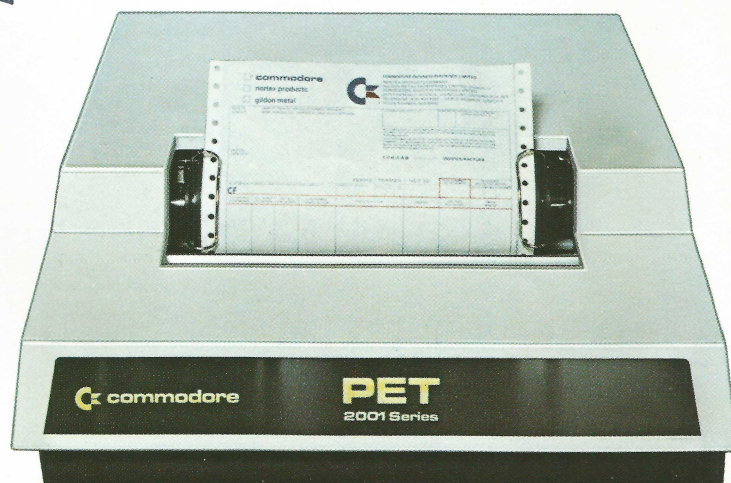Shared RAM
(8) 6114   1K x 4 bit static RAM (total 4K bytes)

Disk drives
(2) Shugart Associates SA390 drives
standard minifloppy (5¼" disk)
activity LED's light when a file is open on that drive

Power requirements
50 watts @ 120 VAC
line frequency independent
other line voltage options to be announced

(Cont'd over)

2022

Tractor Feed Printer

The Tractor Feed Printer is a high specification printer that can print onto paper (multiple copies) all the PET™ characters — letters (upper and lower case), numbers and graphics available in the PET™. The tractor feed capability has the advantage of accepting mailing labels, using standard preprinted forms (customized), cheque printing for salaries, payables, etc. Again, the only connections required are an A/C cord and PET™ connecting cord. The PET™ is programmable, allowing the printer to format print for: width, decimal position, leading and trailing zero's, left margin justified, lines per page, etc. It accepts 8½" paper giving up to four copies. Bidirectional printing enables increased speed of printing.

Specifications:

Microcomputer System Devices
6504 Microprocessor
6522 I/O, interval timer (2)
6114 1K x 4 RAM (2)
6332 4K x 8 ROM

Printer Mechanism
Manufactured by C. Itoh Electronics, Inc. Model No. 820
Tractor feed
Epson DH-70 print head
Dot matrix — 7 x 6 — 80 columns per line
Impact print — original plus 3 copies
Print rate is 84 LPM (112 CPS)
Bi-directional printing
Forms: 8.5+ plus .5+ x 2 (sprocket margins)
           Pin to pin distance   .5+ Longitudinally
                                  9.0+ Laterally
                                  5/32+ Diameter

Packaging
18 gauge all steel cabinet
Dimensions: width — 17+, depth — 18+, height — 6+
Forms enter from rear or bottom of cabinet.

Power
150 watts 120 or 220 or 240V AC
50 or 60 Hz

(Cont'd over)

Packaging
18 gauge all steel cabinet
Dimensions: width — 15", depth — 14.35", height — 6.5"
Cover hinges from base for servicing

Diskette organization
Formatting is by the drive itself — any mini-floppy
    diskette may be used
35 concentric tracks
constant density recording on each track
varying number of sectors per track —
    innermost: 17   outermost: 21
176640 bytes on a single side
Track 18 used for directory
171520 bytes for user storage
Soft-sectoring
Diskettes for dual side recording may be used

Data interface
IEEE-488
Standard 24-pin stacking connector
Device #8-15 by jumper option
full listener — talker
recognizes secondary addressing

Floppy Disk Command set (summary)
Notes
D   :=   Drive #, 0 or 1
E   :=   IEEE device # of floppy
L   :=   Logical file #
C   :=   Channel # (2<= C <=15)
CL :=   Logical file # for command channel

*   :=   Pattern symbol matches any number of characters
?   :=   Pattern symbol matches exactly one character

"?" may appear anywhere, "*" may only appear on right
    side of pattern.

Example: "N?M*" matches
                "NEW", "NUM", "NAME", "NUMBER"
Files must begin W/ cap letter from A to Z & may have
    16 characters.

Pattern matching W/ file names may be used only when:
    Loading directory ($)
    Scratching files
    Opening read channels
    Loading programs

Default drive #'s may be used in most cases.
Using a ":" without a drive # indicates a default to the
    previously determined drive #. A file name with no drive
    # or ":" indicates that the file is to be looked up on both
    drives, beginning with the previously determined
    drive #. A ":" must separate commands from file
    names as described above.
Commands may be abreviated to any form that retains
    the 1st char.

Data Interface
IEEE-488
Standard 24-pin stacking connector
Device #4-7 by jumper option
Listener only
Recognizes secondary addressing

Character Set
Upper case ASCII
Lower case ASCII
PET™ graphics

Control Characters
- Enhance printing (doubles size)
- Enable automatic line count and paging
- Page eject
- Print reverse field
- Overprint a line
- Switch to graphics character set
- Switch to lower case character set
- Print programmable character

IEEE Secondary Address Commands
- Print data exactly as received
- Accept characters as a format
- Edit data to format
- Alter number of lines per page
- Enable diagnostic messages to print
- Accept data for programmable character

Data Formatting Capability
- Field width and decimal position specified
- Leading or trailing sign
- Fixed or floating dollar sign
- Forced leading zeroes
- Literal characters always printed
- Alpha fields left justified

Diagnostic Messages
- Can be turned on when desired
- Print on paper
- Describe problems with format and data

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