The Apple II Plus
Personal Computer System

The Most Popular Personal Computer in Its Class

The Apple II Plus computer has been specifically designed to make your working time more productive, your learning time more exciting, and your leisure time more entertaining and creative. Whether you use your Apple II Plus in your office, your classroom, your laboratory or your home, you'll be impressed with its powerful capabilities and ease of operation.

Special Solutions for Special Needs
You'll discover that a variety of applications are just a few keystrokes away. For example, you can...

■ *write, revise, edit and print reports, letters, term papers and other documents quickly and easily...*
■ *establish, maintain, and update a general ledger, accounts receivable and payable records for a small business, eliminating hours of paperwork...*
■ *control and monitor a shop's inventory automatically, reducing losses and increasing profits...*
■ *teach computer science, including languages such as Pascal, BASIC and more, while eliminating the problems associated with timesharing systems...*
■ *introduce young children to computers through exciting and instructive quizzes, drills, and games, better preparing them for the future in this high-technology age...*
■ *solve scientific calculations in a minimum amount of time and store them for future use, saving countless hours of repetitive work...*
■ *create and update a personal investment portfolio, maintaining transaction records on stocks, bonds, and other financial assets...*

■ *access the Dow Jones News/ Retrieval Service to obtain selected business news—from 90 seconds to 90 days ago—day or night...*
■ *write computer programs tailored specifically to your needs, even if you have no programming experience.*
Consult your dealer for the system configuration that suits your application requirements.

Apple Makes It Easy
To help meet your specific needs, Apple and many other companies offer a wide variety of programs for your Apple II Plus system. Programs from the Apple Software Bank are packaged with detailed reference manuals which will teach you, step-by-step, how to use each program. Simply read through each manual, following the instructions and completing all the exercises. Your hands-on experience makes it easy to become an expert.

Discover the World of Programming
If you can't find a suitable program for your needs, or if you simply want to explore and master today's newest technology, you can free your creative spirit and write your own computer programs—even if you've never written one before. Programming is exciting and easy with the Apple Computer System. The only requirement is that you "talk" to the computer in a language it understands.
    The Applesoft Floating Point BASIC language is built into each Apple II Plus

Computer System. A reference manual, included with your purchase, defines and explains your Apple's simple "vocabulary" as it leads you through the Applesoft programming steps. After you have read the manual and performed the exercises, you'll be ready to program. It's easy with Apple!
    Once you have written a program, you can save it for future use simply by storing it on a floppy diskette. The program will be ready to use again and again.

Apple Offers Even More
In addition to extensive software and ease of programmability, Apple also...
■ *allows you to expand your system as your needs grow, because of its modular method of adding memory and accessories...*
■ *prompts you for input, warns you of errors, and lets you explore music and speech applications with its sound capability...*
■ *heightens your interest with its color graphics capability...*
■ *offers safety and durability, because it is UL-approved as a unit and housed in a rugged, molded case...*
■ *travels with you, because it is lightweight and portable...*
■ *assures you of low service costs, because its components are easily accessible and socket-mounted for quick replacement...*
■ *offers you exceptional reliability, because of its built-in engineering excellence.*

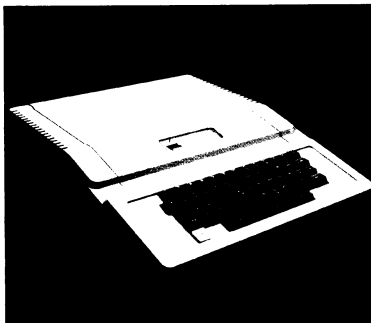## Apple II Plus Personal Computer System

Standard Features

The Apple II Plus Personal Computer System provides these standard features:

- built-in Applesoft BASIC;
- built-in disassembler;
- a ROM-based system control program;
- color graphics and sound capabilities;
- sockets for up to 48K bytes of user memory (RAM); 64K with the plug-in Language Card;
- cassette interface;
- game input/output connector, and two hand controls for games and other human-input applications;
- typewriter-style ASCII keyboard;
- high-efficiency switching power supply;
- eight accessory expansion slots.

Apple II Plus computers feature automatic start-up in BASIC, and optional automatic execution of any disk program on start-up.

Technical Specifications

Video Display:
An Apple can produce text, high-resolution graphics, and color graphics when connected to a suitable video display device (RF modulator required with TV). Apple's graphics commands allow either of two screen "pages" to be displayed, with four lines of text below the display area.

(Video monitors or televisions lacking vertical hold controls may not work with an Apple Computer System.)

- Text Mode
  —40 characters/line, 24 lines
  —5 x 7 dot matrix, upper-case characters
  —normal, inverse, or flashing characters
  —extensive display control software in ROM
  —full cursor control–protected screen feature
  —fast display–1000 cps
- Color Graphics Mode
  —40h x 48v resolution (40h x 40v with four lines text)
  —15 colors

- High-Resolution Graphics Mode
  —280h x 192v black/white resolution (or 280h x 160v with four lines text)
  —six colors: black, white, violet, green, blue, orange (color resolution is 140h x 192v or 160v).

Memory:
- User Memory (RAM)
  —organized in 16K-byte increments
  —easily expanded by inserting memory elements into plug-in sockets
  —up to 48K RAM can be installed on the main logic board
  —an additional 16K RAM can be installed through use of the Language Card, for a total of 64K RAM
- Language Memory (ROM)
  —up to 12K of language memory, organized in six blocks of 2K bytes each; 2K used for system control.

System Control:
- disassembler;
- automatic input/output device assignment;
- keyboard and screen editing features;
- register examine/modify and read/write cassette routine;
- hex add/subtract for relative branch calculations.

Inputs and Outputs:
- typewriter-style ASCII keyboard;
- cassette interface—1500 bps;
- eight peripheral board connectors, fully buffered, with interrupt and DMA priority structure;
- game I/O: four analog-to-digital inputs, three TTL inputs and four TTL outputs.

Physical Dimensions (Nominal):
Weight: 11 lb. (5 kg.)
Height: 4½ in. (11.4 cm.)
Depth: 18 in. (45.7 cm.)
Width: 15½ in. (39.4 cm.)

The Apple II Package

Order Nos.

U.S.	European	
A2S0016	A2S0016P	(16K bytes RAM)
A2S0032	A2S0032P	(32K bytes RAM)
A2S0048	A2S0048P	(48K bytes RAM)

Apple continues to provide support for the Apple II Standard system, one of our earlier models. Peripherals and interfaces that work on the Apple II Plus will work on the Apple II as well.

The addition of Applesoft Floating Point BASIC to your Apple II Standard system will allow you to take advantage of all the latest software. It is available either on the Applesoft Firmware Card or Apple's powerful Language Card.
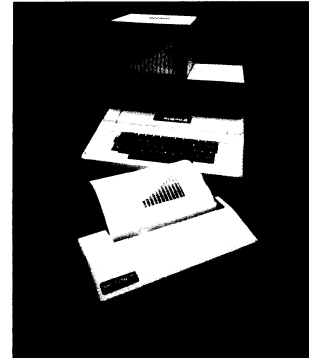
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Order Nos.

U.S.	European	
A2S1016	A2S1016P	(16K bytes RAM)
A2S1032	A2S1032P	(32K bytes RAM)
A2S1048	A2S1048P	(48K bytes RAM)

With your order for any Apple II Plus system, you will receive:
- Apple II Plus, with memory as ordered, and features as specified in **Standard Features** section above;
- AC power cord;
- Apple II Reference Manual;
- Apple II BASIC Programming Reference Manual;
- Applesoft Tutorial Manual.

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apple computer

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