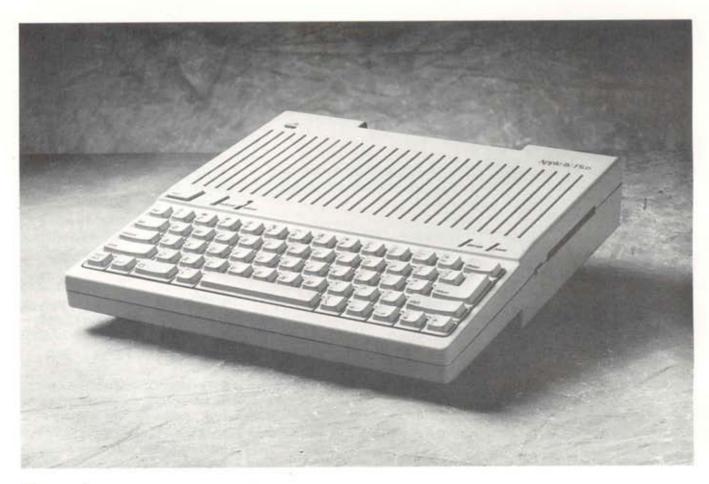
## Apple IIc Plus





### Overview

The Apple® IIc Plus personal computer gives you all the most important benefits of the Apple II family—versatility, expandability, ease of use, and software compatibility—in one compact, lightweight, elegantly designed package. In addition, it has over five times the disk storage capacity of previous Apple IIc models, and up to four times the processing speed.

The Apple IIc Plus offers highquality color graphics, built-in connectors for easy accessory expansion, a full-size keyboard, and a 3.5-inch high-capacity (800 kilobytes) disk drive. A completely self-contained power supply makes the computer highly transportable, and the handle locks downward to provide a stable, inclined keyboard for typing convenience. Naturally, the IIc Plus also offers the ease of use that has characterized the Apple II family since its inception.

If you're a first-time computer buyer who wants a system that will just "plug in and go," the Apple IIc Plus is a smart choice.

## Features

# Benefits

► Computer, keyboard, disk drive, and power supply in one unit	Eliminates complicated setup—just attach a monitor and a power cord, and the Apple IIc Plus is ready to go.
➤ Selectable 4 megahertz or 1 megahertz clock speed	Allows productivity programs to calculate your data up to four times faster than on previous Apple IIc models.
➤ 128 kilobytes of user memory (RAM), expandable to more than 1 megabyte	Lets you increase the memory as needed for faster access to large docu- ments and powerful applications.
► 800-kilobyte disk drive (uses 3.5-inch disks)	➤ Provides faster, quieter disk access and over five times the storage capacity of previous Apple IIc models.
▶ Disk drive connector	Allows you to "daisy-chain" as many as three external 3.5-inch and/or 5.25-inch disk drives,* for easy access to thousands of applications for the Apple II family.
► Additional built-in peripherals ports	<ul> <li>Lets you easily customize your system with a mouse, printer, modem, joystick, or other accessories.</li> <li>Provides a flexible growth path for future expansion—without requiring interface cards.</li> </ul>
► Built-in color graphics	<ul> <li>Lets you design graphics in up to 16 colors for home, school, and business applications.</li> </ul>
► Complete set of interactive tutorials on one 3.5-inch disk	➤ Gets you up and running quickly, even if you've never used a computer before.
➤ Built-in Applesoft BASIC programming language, plus an on-disk tutorial	<ul> <li>Makes it easy and fun to program your computer.</li> <li>See the Apple IIc Plus Owner's Guide for allowable configurations.</li> </ul>

#### Technical Specifications

#### Central processing unit (CPU)

- ▶ Microprocessor: 65C02
- Clock speed: 1 to 4 megahertz (user selectable)
- Address bus: 16 bits
- Address range: 65,536 bytes (64K)
- ► Data bus: 8 bits
- Registers (8-bit): accumulator, two index registers, stack pointer, and processor status register

#### Memory

- ▶ 128K of RAM (random-access memory), optionally expandable to 1.15 megabytes
- 32K of ROM (read-only memory), containing:
- -System monitor
- —Applesoft BASIC interpreter
- —80-column display firmware

#### Text display modes

- ▶ 80-column text (80 columns by 24 lines)
- ▶ 40-column text (40 columns by 24 lines)
- ► All text can appear on the screen as normal, inverse, flashing, or MouseText characters

#### Graphics display modes

- ➤ Double high-resolution (560 dots horizontally by 192 dots vertically; 16 colors)
- High-resolution (280 dots horizontally by 192 dots vertically; 6 colors)
- ► Low-resolution (40 dots horizontally by 48 dots vertically; 16 colors)
- All graphics modes can be configured to allow four lines of text at the bottom of the screen

#### Keyboard

- ▶ 63-kev full-size keyboard
- ► Full 128-character ASCII, including 96 uppercase and lowercase alphanumeric characters, and 32 control characters
- Special-purpose keys: Shift, Caps Lock, Control, Escape, Return, Tab, Delete, up arrow, down arrow, left arrow, right arrow, Reset, Open Apple
- Keyboard is switchable between Sholes (QWERTY) and Dvorak layouts
- Includes speaker-volume slide control

#### Disk drive

- ▶ Disk size: 3.5 inches
- ▶ Capacity: 800 kilobytes
- ► Recording surfaces: 2
- ▶ Tracks per surface: 80
- ▶ Blocks per disk: 1,600
- Push button for motorized eject

#### Interfaces

- ► External disk drive port, using 19-pin D-style connector; allows daisy-chain connection of up to three additional drives (Apple 3.5 Drive, UniDisk\* 3.5, and/or Apple 5.25 Drive)
- Two RS-232 serial ports with 8-pin minicircular connectors (for printer, modem, and other accessories)
- NTSC (composite) color video, via RCA phono jack
- ▶ 15-pin D-style connector for video expansion
- 9-pin D-style connector for mouse, joystick, hand controllers, or other accessories
- ► Internal 34-pin connector for memory expansion up to 1.15 megabytes
- Standard 3-pin grounded power plug

#### Electrical requirements

- ► Line voltage: 90 to 130 volts AC
- ▶ Line frequency: 50 to 60 hertz
- Maximum power consumption: 20 watts continuous
- Supply voltages:
- +5 volts (±5%)
- +12 volts (±10%)
- -12 volts (±10%)
- Maximum supply currents:
- +5 volts 1.5 amps
- +12 volts 0.9 amps continuous
  - 1.5 amps intermittent
- -12 volts 100 milliamps

## Environmental requirements

- ▶ Operating temperature: 50° to 104° F (10° to 40° C)
- ➤ Relative humidity: 20% to 95%

#### Safety and EMI qualifications

- FCC Part 15 Class B Computing Devices
- ► UL 114—Office Appliances and Business Equipment

#### Size and weight

- ▶ Height: 2.5 in. (6.35 cm)
- ▶ Width: 12 in. (30.48 cm)
- ▶ Depth: 11.5 in. (29.2 cm)
- ▶ Weight: 7 lb. (3.2 kg)



## Apple IIc Plus

#### Ordering Information

Apple IIc Plus Order No. A2S4500 With your order, you'll receive:

- ► Apple IIc Plus personal computer with built-in 800K disk drive
- ► Apple II System Disk
- ▶ Tutorial disk
- ► Owner's guide
- ➤ Apple II System Disk User's Guide
- ► A Touch of Applesoft BASIC manual
- ▶ Power cord
- ► Limited warranty statement

