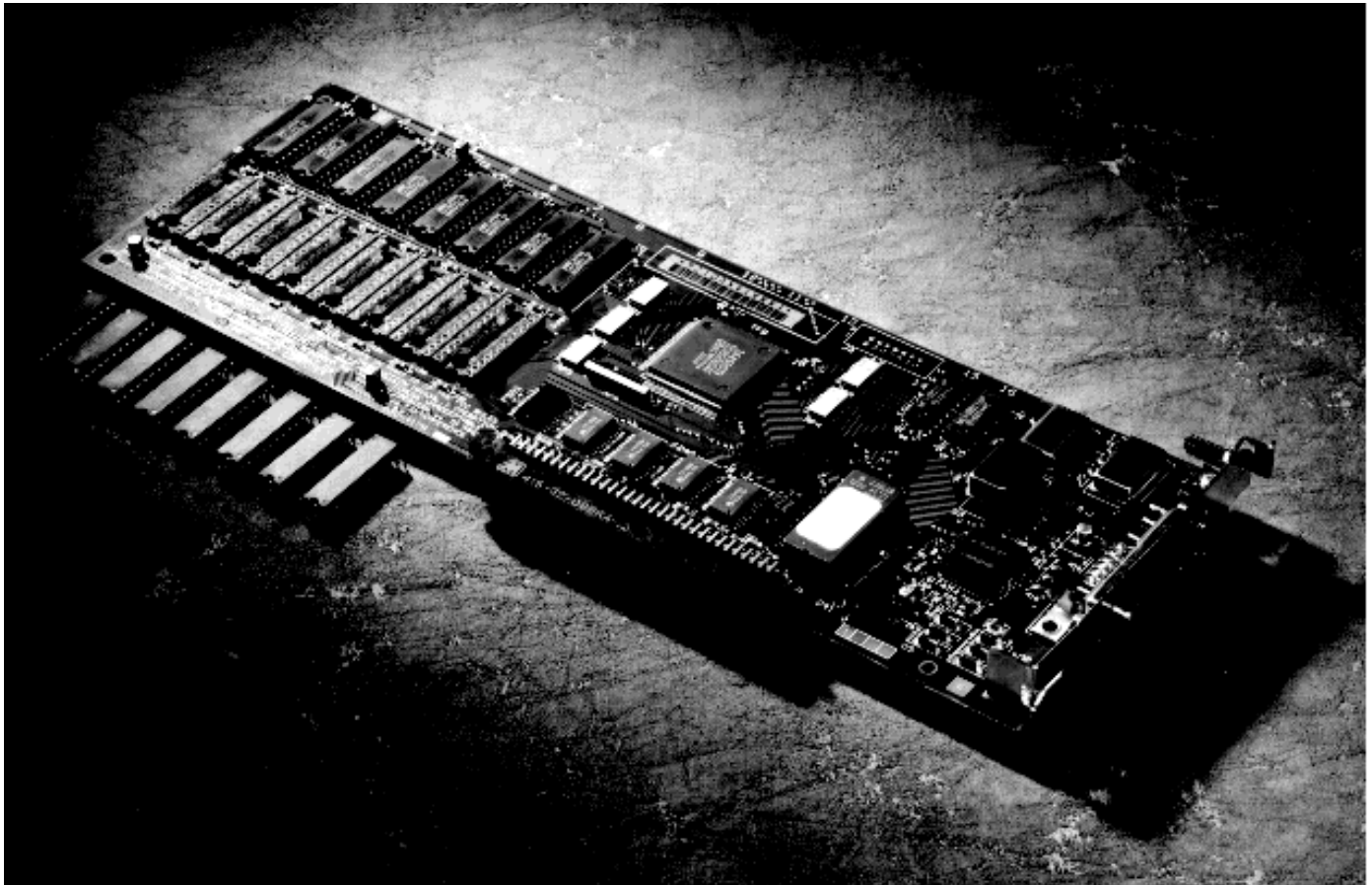# Macintosh II Portrait Display Video Card and Expansion Kit

Overview

The Macintosh® II Portrait Display Video Card provides the interface between the Apple® Macintosh Portrait Display and the Macintosh II computer. It allows for true gray-scaling, displaying as many as four levels of gray at the same time.

The optional Macintosh II Video Card Expansion Kit can increase the display capabilities of your portrait display to 16 gray levels.

Features

- Up to four shades of gray at one time

- Optional 4-bit expansion kit

- Adjustable display modes

- NuBus™ compatible

- RS-170 capability

Benefits

- Offers true gray-scaling for enhancing graphics, scanned images, and documents.

- Increases the display capability to 16 gray levels.

- Lets you use the computer's Control Panel to select 2, 4, or 16 gray levels.

- Plugs into any Macintosh II slot.
- Is self-configuring.

- Provides interlaced video output compatible with many types of video equipment.

Macintosh II Portrait Display Video Card and Expansion Kit

Product Details			
Product Details	**Software-selectable display modes** Using the Control Panel desk accessory, you can set the Macintosh II Portrait Display Video Card to display 1 or 2 bits per pixel. This provides, respectively, 2 or 4 gray levels on the portrait display.	The ability to set a two-level display ensures that monochromatic Macintosh applications can operate as quickly as possible. **Optional 4-bit upgrade** The Macintosh II Portrait Display Video Card has a display capability of 2 bits	per pixel. Upgrading this to a 4-bit-per-pixel display with the Video Card Expansion Kit lets you view up to 16 gray levels on your monitor's screen. The upgrade consists of eight video RAM chips, which fit into sockets on the Macintosh II Portrait Display Video Card.

System Requirements		
System Requirements	To use the Macintosh II Portrait Display Video Card, you need:	► A Macintosh II personal computer with an available NuBus slot

Technical Specifications			
Technical Specifications	**Interface** ► NuBus—plugs into any Macintosh II slot **Output signals** ► Modes: RGB (analog) and gray scale ► Video: RS-343 standard and RS-170 timing-standard interlaced video ► Sync: separate horizontal and vertical sync, negative-going, TTL	**Connector** ► D-style with three internal coaxial connectors and 10 pins **Display modes** ► 1 or 2 bits per pixel (2 or 4 gray levels) ► Upgradable to 4 bits per pixel (16 gray levels) with the Macintosh II Video Card Expansion Kit	**Raster rates** ► Vertical: 75 hertz ► Horizontal: 68.9 kilohertz **Power consumption** ► 10 watts

Ordering Information			
Ordering Information	**Macintosh II Portrait Display Video Card**	Order No. M0119	With your order, you'll receive: ► Macintosh II Portrait Display Video Card ► Limited warranty statement
	Macintosh II Video Card Expansion Kit*	Order No. M0213	With your order, you'll receive: ► Expansion kit—eight video RAM chips ► Limited warranty statement *Dealer installation is required.

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