



# **Apple Displays**

See for yourself why Apple's all-digital flat-panel displays are the choice of the most demanding creative professionals. With deeply saturated, accurate colors and the industry's best wide-viewing technology, Apple displays are the perfect complement to your Power Mac G4.

# **Key Features**

## Three all-digital active-matrix LCDs.

- The 17-inch Apple Studio Display provides the equivalent workspace of a 21-inch CRT monitor.
- The 20-inch Apple Cinema Display shows more than two full pages of text and graphics, or DVD movies in wide format.
- The 23-inch Apple Cinema HD Display supports high-definition content with room to spare.

**Pure digital interface.** Ensures distortion-free images that never need adjusting, unlike other flat-panel displays.

## Industry-best wide-viewing technology.

Provides maximum color quality even when viewed off-axis.

**Fast pixel response.** Provides the ideal environment for full-motion video editing and playback.

Consistently accurate colors. Supports a wide color gamut; maintains true color from edge to edge and over time; and is immune to heat, humidity, and electromagnetic fields.

**Easy to calibrate.** Supports measurement devices such as the GretagMacbeth Eye-One calibrator to create ICC profiles for the Apple ColorSync color management system.

**Reduced energy bills.** Consumes one-third the power of a comparably sized CRT monitor and emits a fraction of the heat.

**Clutter-free.** Simplifies setup and eliminates clutter with the convenient single-connection Apple Display Connector and two integrated USB ports.

#### **Specification Sheet**

Apple Displays

# **Technical Specifications**

#### Screen size (diagonal viewable image size)

- Apple Studio Display: 17 inches
- · Apple Cinema Display: 20 inches
- Apple Cinema HD Display: 23 inches

#### Screen type

Thin film transistor (TFT) active-matrix liquid crystal display

#### **Optimum resolutions**

- Apple Studio Display: 1280 by 1024 pixels
- · Apple Cinema Display: 1680 by 1050 pixels
- Apple Cinema HD Display: 1920 by 1200 pixels

#### Display colors (maximum)

• 16.7 million

#### Viewing angle (typical)

• 170° horizontal; 170° vertical

#### Brightness (typical)

- Apple Studio Display: 200 cd/m²
- Apple Cinema Display: 230 cd/m<sup>2</sup>
- Apple Cinema HD Display: 200 cd/m<sup>2</sup>

#### Contrast ratio (typical)

• 350:1

#### Pixel pitch

- Apple Studio Display: 0.264 mm
- Apple Cinema Display: 0.258 mm
- Apple Cinema HD Display: 0.258 mm

#### Screen treatment

Antiglare hardcoat

## User controls (hardware and software)

- System power on, sleep, wake
- Brightness
- · Monitor tilt

#### Connectors and cables

- Apple Display Connector carries digital video, USB, and power
- Two-port, self-powered USB hub

#### **Electrical requirements**

- Input voltage: 24.5V to 28V DC carries digital video, USB, and power
- Maximum power when operating: 40W (Apple Studio Display); 60W (Apple Cinema Display); 70W (Apple Cinema HD Display)
- Energy saver mode: 3W or less

#### **Environmental requirements**

- Operating temperature: 50° to 95° F (10° to 35° C)
- Storage temperature: -40° to 116° F (-40° to 47° C)
- · Operating humidity: 20% to 80% noncondensing
- Maximum operating altitude: 10,000 feet

#### Agency approvals

- FCC Part 15 Class B
- EN55022 Class B
- EN55024
- VCCI Class B
- · AS/NZS 3548 Class B
- CNS 13438 Class B
- ICES-003 Class B
- ISO 13406
- MPR II
- IEC 60950
- UL 60950
- CSA 60950
- EN60950
- ENERGY STAR
- TCO 95

# Size and weight

17-inch Apple Studio Display

- Height: 17.3 inches (43.9 cm)
- Width: 17.6 inches (44.7 cm)
- Depth: 6.9 inches (17.6 cm) minimum; 9.8 inches (24.9 cm) maximum
- Weight: 14.6 pounds (6.6 kg)

### 20-inch Apple Cinema Display

- Height: 17.3 inches (43.9 cm)
- Width: 21.34 inches (54.2 cm)
- Depth: 6.93 inches (17.6 cm) minimum;
  10.43 inches (26.5 cm) maximum
- Weight: 18.9 pounds (8.6 kg)

#### 23-inch Apple Cinema HD Display

- Height: 19.2 inches (48.8 cm)
- Width: 24.2 inches (61.4 cm)
- Depth: 7.3 inches (18.7 cm) minimum; 11.1 inches (28.0 cm) maximum
- Weight: 25.3 pounds (11.5 kg)

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Model	Apple Studio Display M7649ZM/B	Apple Cinema Display M8893ZM/A	Apple Cinema HD Display M8537ZM/A
Screen size and type	17-inch (viewable) active-matrix LCD	20-inch (viewable) active-matrix LCD	23-inch (viewable) active-matrix LCD
Maximum resolution	1280 by 1024 pixels	1680 by 1050 pixels	1920 by 1200 pixels
Viewing angle	170° horizontal; 170° vertical	170° horizontal; 170° vertical	170° horizontal; 170° vertical
Color support	16.7 million colors	16.7 million colors	16.7 million colors
Input/Output ports	Apple Display Connector; two-port, self-powered USB hub	Apple Display Connector; two-port, self-powered USB hub	Apple Display Connector; two-port, self-powered USB hub
Agency approvals	ENERGY STAR, TCO 95	ENERGY STAR, TCO 95	ENERGY STAR, TCO 95

# System Requirements

- The Apple Studio Display requires Mac OS X v10.1.3 or Mac OS 9.2.2 or later, and one of the following systems:
- Power Mac G4 with an Apple Display Connector
- PowerBook G4 with a DVI port and an Apple DVI to ADC Adapter
- The Apple Cinema Display requires Mac OS X v10.2 or later, and one of the following systems:
- Power Mac G4 with an NVIDIA GeForce2 MX, GeForce3, GeForce4 MX, or GeForce4 Titanium graphics card;
  or with an ATI Radeon 7500, 9000 Pro, or 9700 Pro graphics card
- PowerBook G4 with a DVI port and an Apple DVI to ADC Adapter
- The Apple Cinema HD Display requires Mac OS X v10.1.3 or Mac OS 9.2.2 or later, and one of the following systems:
- Power Mac G4 with an NVIDIA GeForce2 MX, GeForce3, GeForce4 MX, or GeForce4 Titanium graphics card;
  or with an ATI Radeon 7500, 9000 Pro, or 9700 Pro graphics card
- PowerBook G4 with a DVI port and an Apple DVI to ADC Adapter
- A second Apple display can be used with a Power Mac G4 via the DVI port on the NVIDIA GeForce4 MX, GeForce4 Titanium, ATI Radeon 7500, Radeon 9000 Pro, or Radeon 9700 Pro graphics card and the Apple DVI to ADC Adapter.

# **Extended Service and Support**

Purchase the AppleCare Protection Plan to extend your service and support to up to three full years. The plan provides support for your Mac, the Mac OS, and many Apple consumer applications, so just one phone call can help resolve most issues. Power Mac and PowerBook customers can also enroll one display for coverage, provided that the display is purchased at the same time as the covered computer. For more information, visit www.apple.com/support/products or call 800-823-2775.

## For More Information

For more information about this product or to purchase Apple products, visit the Apple Store online (www.apple.com or 800-MY-APPLE), an Apple Store near you, or an authorized Apple reseller.

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