

The background features several large, light gray, abstract geometric shapes. On the left, a large shape resembles a stylized house or a large letter 'E'. To its right, there are various curved and angular lines and shapes, including a horizontal bar with rounded ends, a wavy line, and a complex shape that looks like a stylized 'P' or a circuit component. These shapes are layered and partially overlap each other.

Technical Information

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Specifications for Power Macintosh 7600 series computers

Technical Information

Main unit

Processor

A PowerPC™ 604e processor with the following features:

- 200 megahertz (MHz)
- 50 MHz system bus
- built-in floating point unit (FPU)

Memory

- 32 megabytes (MB) of dynamic random-access memory (DRAM), supplied in removable Dual Inline Memory Modules (DIMMs), capacity to support expansion to a maximum of 512 MB
- 2 MB of built-in video RAM (VRAM) supplied in removable DIMMs, capacity to support expansion to a maximum of 4 MB
- 4 MB of read-only memory (ROM)
- 8 kilobytes (KB) of nonvolatile parameter memory
- one 256 KB DIMM of static RAM used as a level 2 cache

For more information and instructions on expanding your DRAM, VRAM, or cache, see Chapter 8, “Installing PCI Expansion Cards and Additional Memory,” in your *Power Macintosh User’s Manual*.

Monitor	VIS*	Resolution	Maximum colors†		Screen refresh rates	
			2 MB VRAM	4 MB VRAM	Vertical (Hz)	Horizontal (kHz)
14" AudioVision	11.5"	640 x 480	Millions	Millions	67	35
16" color	14.8"	832 x 624	Millions	Millions	75	49.670
Two-page Monochrome	N/A	1152 x 870	256	256	75	68.476
Two-page RGB	11.5"	1152 x 870	Thousands	Millions	75	68.476
Multiple Scan 14	12.4"	640 x 480	Millions	Millions	67	34.971
Multiple Scan 15	13.3"	640 x 480	Millions	Millions	67	34.971
		832 x 624	Millions	Millions	75	49.670
Multiple Scan 15AV	13.75"	640 x 480	Millions	Millions	66.67	35.000
		832 x 624	Millions	Millions	75	49.700
		1024 x 768	Thousands	Millions	75	60.240
Multiple Scan 17	16.1"	640 x 480	Millions	Millions	67	34.971
		832 x 624	Millions	Millions	75	49.670
		1024 x 768	Thousands	Millions	75	60.060
Multiple Scan 1705	15.8"	640 x 480	Millions	Millions	67	34.971
		832 x 624	Millions	Millions	75	49.670
		1024 x 768	Thousands	Millions	75	60.060
AppleVision 1710	16.1"	640 x 480	Millions	Millions	67	34.971
		832 x 624	Millions	Millions	75	49.670
		1024 x 768	Thousands	Millions	75	60.060
		1152 x 870	Thousands	Millions	75	68.476
		1280 x 1024	256	Thousands	75	79.964
AppleVision 1710AV	16.1"	640 x 480	Millions	Millions	67	34.971
		832 x 624	Millions	Millions	75	49.670
		1024 x 768	Thousands	Millions	75	60.060
		1152 x 870	Thousands	Millions	75	68.476
		1280 x 1024	256	Thousands	75	79.964
Multiple Scan 20	19.1"	640 x 480	Millions	Millions	67	34.971
		832 x 624	Millions	Millions	75	49.670
		1024 x 768	Thousands	Millions	75	60.060
		1152 x 870	Thousands	Millions	75	68.476
		1280 x 1024	256	Thousands	75	79.964

* Viewable image size

† 256=image depth of 8 bits, thousands=image depth of 16 bits, millions=image depth of 32 bits

‡ Refer to the manual that came with your monitor to determine VIS

N/A=not available



Video support

All video input ports support 24-bit RGB format as well as 16-bit component (YUV) format.

Video input ports

Connector	Standard	Resolution
Composite/S-video	NTSC	Up to 640 x 480
Composite/S-video	PAL/SECAM	Up to 768 x 576

Internal disk drives

The following drives come factory-installed in your computer:

- Apple SuperDrive 1.4 MB high-density floppy disk drive
- Apple SCSI hard disk drive (“Fast” SCSI)
- 12x-speed CD-ROM drive

For more information about “Fast” SCSI, see “SCSI Interfaces” later in this booklet.

Clock/calendar

- CMOS custom circuitry with long-life battery

WARNING Do not attempt to replace the clock battery yourself. If the clock begins to lose accuracy, have an Apple-authorized service provider replace the battery. The service provider will dispose of the battery according to the local environmental guidelines.

Keyboard

- Supports all Apple Desktop Bus (ADB) keyboards

Mouse

- Supports all models of the ADB mouse

Interfaces

- One ADB port supporting up to three ADB input devices (such as a keyboard, mouse, or trackball) daisy-chained through a low-speed, synchronous serial bus
- Monitor port supporting color and grayscale monitors of various sizes and resolutions (See “Graphics Modes” earlier in this booklet.)
- Three internal expansion card slots supporting PCI expansion cards. Install only expansion cards that come with Macintosh drivers and are compliant with the PCI 2.0 standard. NuBus™ cards cannot be used in these expansion slots.
- One printer port and one modem port. Both ports are RS-232/RS-422 serial ports, 230.4 kilobit (Kbit) per second maximum (up to 2.048 megabit [Mbit] per second if clocked externally), and are compatible with GeoPort devices.
- One built-in 10Base-T Ethernet connector for direct connection to 10Base-T networks (If both AAUI and 10Base-T connectors are plugged in, the computer uses the 10Base-T connector by default.)
- One built-in AAUI Ethernet connector for connecting to high-speed Ethernet networks. Requires the appropriate AAUI transceiver adapter (10Base-T, thin coaxial, or thick coaxial).
- One 3.5-mm sound output port for headphones or line-level devices
- One 3.5-mm sound input port for stereo sound input. The sound input port supports the Apple PlainTalk Microphone that comes with some Macintosh computers. The sound input port also supports a standard stereo (miniplug-to-RCA) cable adapter for connecting stereo equipment to your computer.

The sound input port does not support the omnidirectional microphone (the round microphone shipped with some earlier models of Macintosh) or the attenuated RCA adapter provided with some Macintosh models.
- One pair of RCA-type audio ports for stereo input (left and right)
- One pair of RCA-type audio ports for stereo output (left and right)
- Two video input ports that support the NTSC, PAL, and SECAM video standards



SCSI interfaces

Your computer has two SCSI interfaces:

- an internal “Fast” SCSI chain
- an external standard SCSI chain

The internal SCSI chain supports the internal hard disk and CD-ROM drive. An Apple-authorized dealer or service provider can connect one additional 3.5-inch SCSI device to the internal SCSI interface. The SCSI device must be no more than 1.625 inches (41.3 mm) high.

The internal SCSI chain supports “Fast” SCSI, which is capable of transferring data at up to 10 MB per second (twice the rate of the external standard SCSI chain). If you obtain a SCSI device that supports “Fast” SCSI, you should receive faster performance if it is connected to the internal SCSI chain.

The external SCSI chain supports up to seven external SCSI devices. For information on connecting external SCSI devices to your Macintosh, see your *Power Macintosh User’s Manual*.

All devices on the same SCSI chain must have unique ID numbers, but devices on different SCSI chains may use the same SCSI ID number. (For example, you could have a CD-ROM drive with ID number 3 connected to the internal SCSI chain and a tape drive with ID number 3 connected to the external SCSI chain.)

The drives that were installed in your computer at the factory, as well as the computer itself, have already reserved certain SCSI ID numbers. Other ID numbers are available for assignment to SCSI devices that are added after you buy your computer, as described in the following table.

SCSI chain	SCSI ID number	Device
Internal*	0	Factory-installed hard disk (terminated)
	1	Available
	2	Available
	3	Factory-installed CD-ROM drive
	4	Available
	5	Available
	6	Available
	7	Power Macintosh computer (terminated)
External	0	Available
	1	Available
	2	Available
	3	Available
	4	Available
	5	Available
	6	Available
	7	Power Macintosh computer (terminated)

* Although five SCSI ID numbers are available for assignment, only one other SCSI device can be connected to the internal SCSI chain.

IMPORTANT The factory-installed internal hard disk and the Power Macintosh computer are both terminated. If another SCSI device is attached to the internal SCSI interface, it must not be terminated. If you attach a terminated device to the internal SCSI interface, damage to the computer's main logic board can occur.

IMPORTANT Some older SCSI devices may require updated drivers to work with your computer. (A "driver" is special software that is installed in your System Folder.) Contact the device manufacturer for information on obtaining driver software.



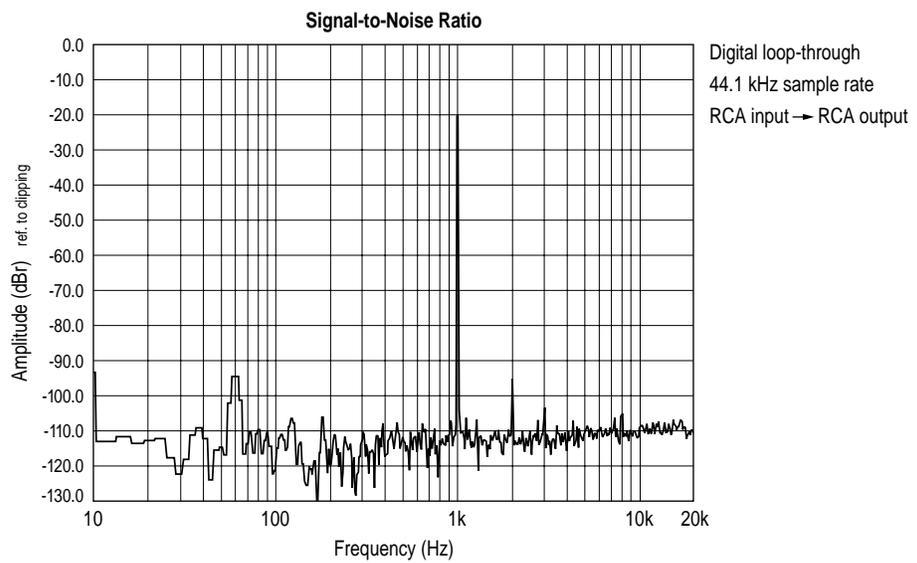
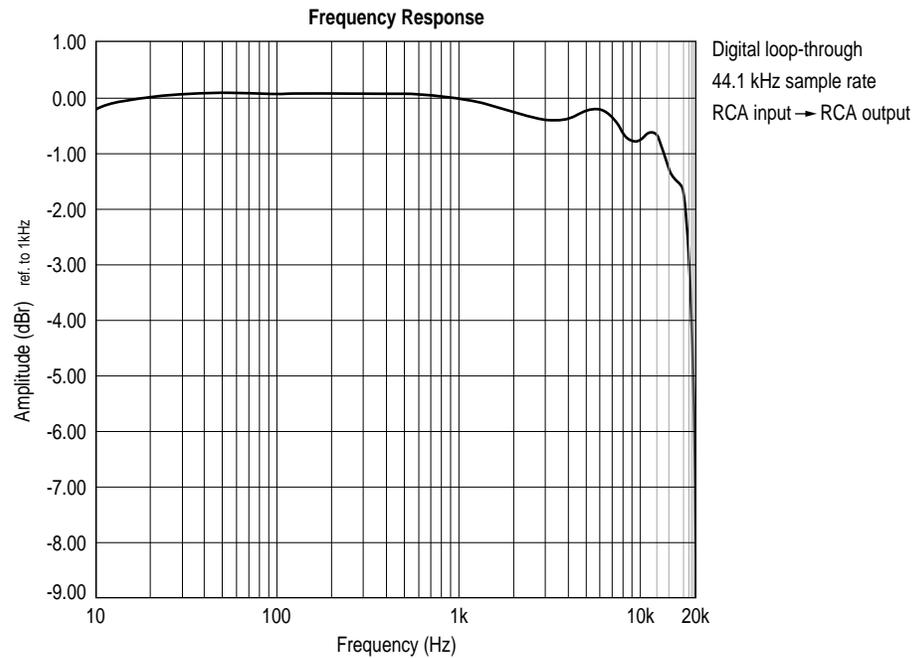
Audio system

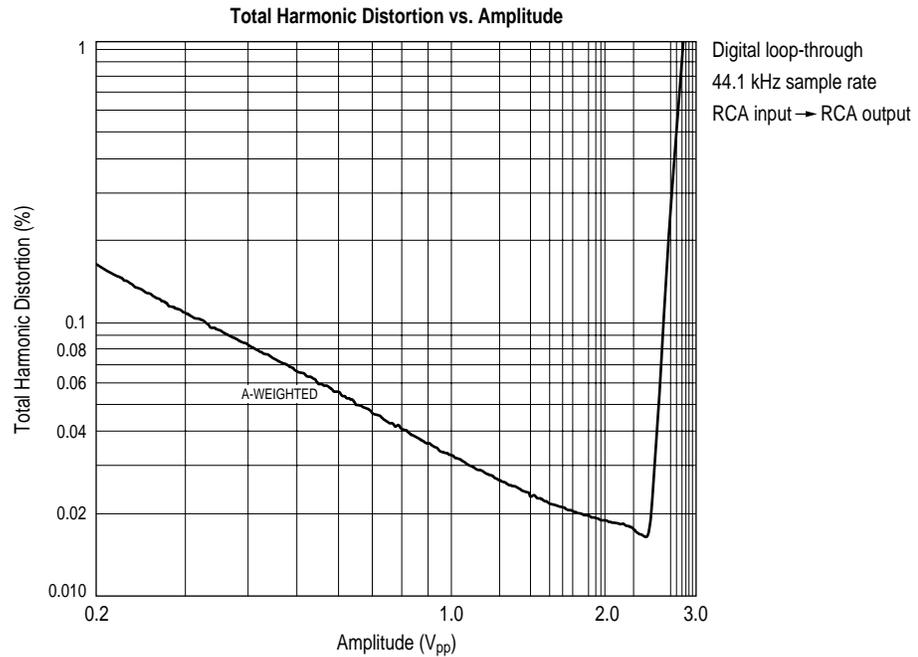
- Custom sound circuitry, including a stereo generator (digital-to-analog converter, or DAC)—capable of driving stereo miniplug headphones or audio equipment—and stereo sampling hardware (analog-to-digital converter, or ADC) for recording stereo sound
- 16-bit stereo input and output
- Sample rates of 44.1 and 22.05 kilohertz (kHz)

Typical specifications

- Sound input connector line level: 2.8 volts peak-to-peak (V_{pp}) nominal, into 30-kilohm (k Ω) impedance (minimum)
- RCA-type input connector line level: 2.4 V_{pp} nominal into 13.5-k Ω impedance (minimum)
- Sound output connector line level: 2.7 V_{pp} nominal, into 32-k Ω impedance
- RCA-type output connector level: 2.9 V_{pp} nominal into 2-k Ω impedance (minimum)
- Sound input signal-to-noise ratio (SNR): greater than (>) 83 decibels (dB) A-weighted with no audible discrete tones
- RCA-type input SNR: >77 dB A-weighted with no audible discrete tones
- Sound output SNR: >84 dB A-weighted with no audible discrete tones
- RCA-type output SNR: >84 dB A-weighted with no audible discrete tones
- Bandwidth: 10 Hz to 18 kHz (+0.1 dB, -3.0 dB) at 44.1-kHz sample rate
- RCA-type input total harmonic distortion plus noise (THD + N): less than (<) 0.018 percent A-weighted; measured 10 Hz to 30 kHz with a 2.4-V_{pp} sine wave input

The following graphs show typical audio data for the Power Macintosh 7600. (Your computer's data may vary, depending on the equipment you have connected.)





Video system (video input)

- Type: composite or S-video
- Timing: industry standard NTSC/PAL/SECAM
- Polarity: sync negative
- Voltage level: 0.7 Vpp minimum, 1.0 Vpp typical, 1.4 Vpp maximum
- Impedance: 75 ohms (Ω) internally terminated
- DC offset: no more than +1.0 volts (V)

AC line input

- Line voltage: 100–130 volts (V) AC and 200–270 V AC, RMS single phase, manually configured
- Frequency: 50–60 Hz
- Power: 298 watts (W) maximum continuous; 453 W peak input

AC line output

- Output receptacle: 100–120 V, 3 amperes (A) AC, 220–240 V, 1.5 A AC RMS (determined by actual input voltage); 3 A maximum at 100 V

DC power

- Continuous output: 150 W
- Peak output (for 12 seconds at startup): 189 W

Output voltage	Maximum current*
+5 V	20 A†
+5 V (trickle)	0.1 A
+3.3 V	10 A†
+12 V	5 A
-12 V	0.75 A

* Total power output cannot exceed 150 W.

† Not more than 25 A total combined current.

Power requirements for devices you can connect

Apple Desktop Bus (ADB)

- The mouse draws up to 10 milliamperes (mA).
- The keyboard draws 25–80 mA (varies with keyboard model used).
- The maximum current available for all ADB devices: 500 mA.

Note: The ADB port can support up to three daisy-chained ADB devices.

Audio and telecommunications devices

The following table shows power allowances for external devices connected to input ports.

Device	Voltage	Current	Power
Microphone	+5 V	20 mA	100 mW
A device connected to the printer port or modem port	+5 V	500 mA	2.5 W
S-video input device	+12 V	250 mA	3 W

Expansion cards and other internal devices

If you add an expansion card or a 3.5-inch storage device to your computer, make sure the component's power requirements don't exceed the maximum power allowances allocated to it by the computer.

The maximum power allowances for expansion cards in your computer can accommodate three 15-watt or two 25-watt cards. Detailed guidelines are presented in the following table.

Device	Voltage	Current	Power
Expansion card (15 watts)*	+5 V	3 A	15 W
	+12 V	0.500 A	6 W
	-12 V	0.100 A	1.2 W
	+3.3 V	2 A	6.6 W
Expansion card (25 watts)†	+5 V	5 A	25 W
	+12 V	0.500 A	6 W
	-12 V	0.100 A	1.2 W
	+3.3 V	2 A	6.6 W
Storage device (such as a hard disk)	+5 V	9 A	45 W
	+12 V	3 A	36 W
	+12 V	7.5 A peak‡	—

* 15-watt expansion cards should not consume more than 15 watts of total power.

† 25-watt expansion cards should not consume more than 25 watts of total power.

‡ Peak power is for startup only and must not occur in normal operation.

Size and weight

Weight	Height	Width	Depth
Main unit			
9.98 kg*	156 mm	365 mm	430 mm
22 lbs.*	6.15 in.	14.37 in.	16.93 in.
Mouse			
0.11 kg	33 mm	61 mm	107 mm
4 oz.	1.3 in.	2.4 in.	4.2 in.

* Weight varies depending on type of hard disk and may be greater if optional devices are installed.

Maximum supportable monitor weight: 70 lbs. (31.75 kg)

Environment

- Operating temperature: 10° C to 40° C (50° F to 104° F)
- Storage temperature: -40° C to 47° C (-40° F to 116.6° F)
- Relative humidity: 5% to 95% (noncondensing)
- Altitude: 0 to 3048 m (0 to 10,000 ft.)



CD-ROM drive

Disc speed

- 12x (twelve-times speed)

Disc diameters supported

- 120 mm (4.7 inches)
- 80 mm (3.2 inches)

Data capacity

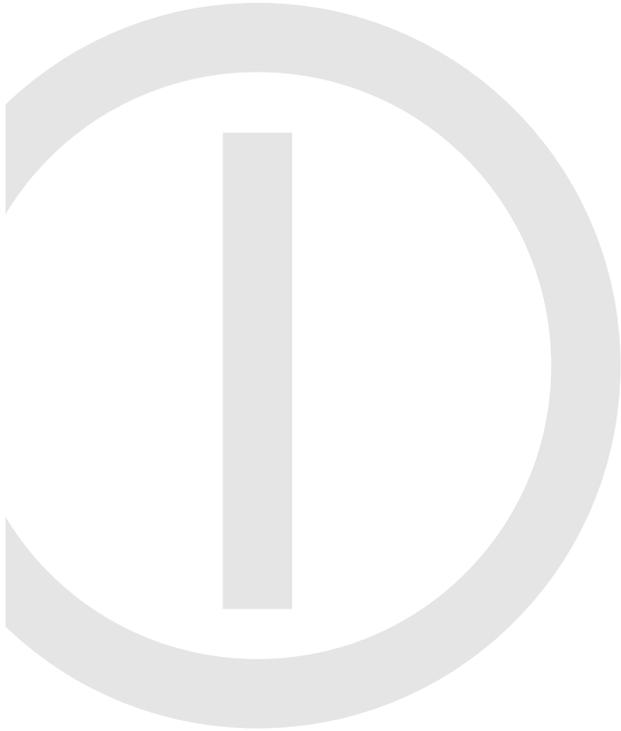
- 656 MB, Mode 1
- 748 MB, Mode 2

Modes supported

- Audio CD
- CD-ROM: Modes 1 and 2
- CD-ROM XA: Mode 2, Forms 1 and 2
- CD-I: Mode 2, Forms 1 and 2
- Photo CD: Single-session and multisession
- Video CD

Laser

- Type: Semiconductor GaAlAs laser
- Wavelength: 795 ± 25 nanometers
- Output power: 0.2 to 0.6 milliwatts
- Beam divergence: 55°



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