

## **QuickTime for Windows**

Version 2.1

12 December, 1995

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### **NOTE**

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### **KEY FEATURES**

- 32-Bit QuickTime for Windows
  - Windows NT 3.51 build 1057 compatible
  - Windows 95
- Multifunctional 16/32-bit Control Panel.
- Option for automatic deletion of older versions of QTW.
- New single file QuickTime installer for more reliable installs.
- 16- and 32-bit QuickTime for Windows can coexist on Win95 and WinNT.
- Support for text tracks.
- Support for MPEG file playback via Sigma Designs Real Magic Board.
- Support for MIDI Music track.
- Support for QuickTime VR for Windows. (16-bit QuickTime for Windows only - see known issues).
- Support for IMA 4:1 compressed audio.
- Support for video hardware frame buffer access components.
- Movie Player application can copy selected portions of text track and current visual to clipboard.
- Support for ATI Mach64 Graphics accelerator.
- Support for Tseng W32P Graphics accelerator.
- Support for 16- and 32-bit DCI (Display Control Interface) primary frame buffer access protocol.

- Support for P9000 Graphics accelerator.
- Support for the Cirrus Logic CL-GD54xx GUI accelerator.
- Support for the WD 90C33 Graphics accelerator.
- OLE 1.0 (Object Linking & Embedding). The Movie Player is an OLE server, enabling QuickTime movies to be placed and played in 16- or 32-bit applications.
- QuickTime offers MCI (Media Control Interface) that provides media integration in applications like Windows' Media Player and various multimedia authoring applications.
- Visual Basic 2.0, 3.0 and 4.0 are supported with 16-bit VBX file for QuickTime Movie control.

#### **KNOWN ISSUES**

- 1) When you are running Windows 95, if the screen color depth is set to True Color (24-bit), you may lose the drag window when dragging in the Movie Player. Windows 95 makes the drag window border color the same as the default gray background.
- 2) When you are running Windows 95 and you assign a sound to the Open Program execution for the very first time, you may get a system halt when you launch the 16-bit QTW Movie Player. The problem does not occur after the initial system halt.
- 3) The game Critical Path requires MCIQTW.DRV in its directory. When you install QTW 2.1 and delete the old version, this file is removed. You must copy C:\{windows\system}\MCIQTW.DRV to the default Critical Path directory x:\{Critical Path\QTW} for the game to work.
- 4) Only the 16-bit QuickTime for Windows supports QuickTime VR. The 32-bit cannot view QTVR scenes or objects.

#### **MAKING MOVIES PLAYABLE ON BOTH MACINTOSH AND WINDOWS**

To make a movie playable on a PC and the MAC:

- 1) Open a movie file using MoviePlayer 2.0 or above on the Macintosh
- 2) Choose Save As from the File menu.
- 3) In the resulting dialog box, click the radio button labeled "Make Movie Self-contained". This tells the utility to sever any links to other movies after incorporating the relevant video into this movie.
- 4) Select the checkbox labeled "Playable on non-Apple computers". This causes the movie to be saved as a single forked movie.
- 5) Rename the movie using PC naming conventions. The filename can be 8 characters. Use the extension .mov. For example: MYMOVIE.MOV

The resulting movie is a QuickTime cross-platform file that can be played on any x86-based computer including Windows 3.x, Windows NT and Windows 95. **\*\*IMPORTANT!** Remember to follow the DOS naming conventions to avoid problems.

#### **PRODUCT SUBMISSIONS ENCOURAGED**

Apple Computer encourages developers of products that use QuickTime for Windows to send evaluation copies. Products such as CD-ROM titles, movie clip libraries, applications and utilities are often reviewed and considered for co-marketing opportunities. Two copies of the product are requested, one for marketing evaluation and one for technical evaluation. These products will aid us in ensuring that full compatibility with future versions of QuickTime for Windows is maintained. Please submit products, with appropriate product and company information, to:

QuickTime for Windows Product Submission  
Apple Computer, Inc.  
1 Infinite Loop, MS: 302-3KS  
Cupertino, CA 95014

#### **OLE 1.0 SUPPORT**

The QuickTime for Windows 2.1 Movie Player (both 16- and 32-bit) can act as an OLE 1.0 Server. The following products have been tested and basic compatibility has been verified. Be aware that because of inconsistent implementation of OLE from application to application, some anomalies may occur.

- \*Microsoft Windows 3.1 Write
- \*Microsoft Windows 95 WordPad
- \*Microsoft Word for Windows 6.0a
- \*Microsoft Excel 5.0
- \*Microsoft Works for Windows

#### **INTEL INDEO DECOMPRESSOR IS BUNDLED**

Intel's Indeo 3.2 decompressor is provided with QuickTime for Windows 2.1. Please call Intel Customer Support at 1-800-468-3548 for any Indeo specific questions.

#### **MACINTOSH FEATURES THAT ARE NOT CURRENTLY SUPPORTED ON QTW.**

- Capture
- Compression\*
- PhotoCD
- SMPTE Time codes
- Data references
- Sound Manager
- Text Descriptors.

\*Although compression is not an option within QuickTime for Windows' Movie Player, applications such as Adobe's Premiere and Autodesk's Animator Studio can create QuickTime movies that can be played on both the PC and the Mac.

#### **\*MINIMUM PC CONFIGURATION**

386SX at 20 MHz  
4 MB RAM  
80 MB hard disk  
VGA or better display card  
Windows compatible sound card  
CD-ROM recommended  
Windows 3.1x, Windows 95 & Windows NT 3.5 or later  
DOS 5.0. or higher (double space is supported).

\* MPC 1 and above rated machine.

#### **COMPONENTS OF QUICKTIME FOR WINDOWS 2.1**

DLLs  
Movie Player application and OLE 1.0 server  
Picture Viewer application  
On-line help  
Control Panel\*

\*The Control Panel provides detailed information and configuration

options for all the components of QuickTime for Windows.

**TO LICENSE QUICKTIME FOR WINDOWS FOR DISTRIBUTION**

Contact:

Apple Software Licensing  
2420 Ridgepoint Drive  
MS: 198-SWL  
Austin, TX 78754  
phone: 512-919-2645  
fax: 512-919-2120  
AppleLink: SW.LICENSE

Please provide the following information to receive a license agreement:

contact person  
mailing address  
phone number  
fax  
#email

Provide a complete description of the product, a description of how QuickTime for Windows is used in the product, and the distribution plans for the product.

A QuickTime for Windows License Kit containing the Apple License Agreement and license information will be sent to you.

**WHERE TO GET QUICKTIME FOR WINDOWS**

QuickTime for Windows is bundled with various third-party products that support QuickTime for Windows, such as movie clip libraries, software applications and CD-ROM titles. Look for the QuickTime for Windows logo on the packaging of products such as these:

- Adobe Premiere 4.0 for Windows
- Adobe Acrobat 2.1 CD Sampler
- Adobe Acrobat Exchange 2.1 for Windows
- Adobe Acrobat Pro 2.1 for Windows
- Adobe Acrobat for Workgroups 2.1
- Macromedia Action 2.5 for Windows
- Macromedia Authorware Pro 2.0 for Windows

QuickTime for Windows 2.1 is also available via ftp by visiting the QuickTime WWW server: <http://quicktime.apple.com/>. Additional information about QuickTime is also provided at the site.

The QuickTime Developer's Kit v. 2.0 (APDA, #R0147LL/D), provides you with a Hybrid (PC/Mac) ISO format CD-ROM that contains the DLLs, sample applications and source code, movie files, on-line documentation, help files, and the QuickTime for Windows programmers manual.

Also look for future QuickTime for Windows retail products.

**QuickTime VR for Windows**

QuickTime VR for Windows does not come with QuickTime for Windows. The component QTVRW.QTC is distributed separately. You will normally find it with commercial titles that use QTVR technology or you can get it off

of our ftp site listed above.

It works only with the 16-bit QTW and will not work with the 32-bit QTW. Because you can have 16/32-bit QTW in your Win95 or WinNT at the same time this shouldn't pose any problems.

When you get the component you should place it in your Windows\system subdirectory, e.g. Win95\System. QuickTime for Windows will automatically activate and use the VR technology. If you load a QuickTime VR scene through the QTW Movie Player, you can scan the VR scene by placing your mouse over the VR scene, pressing the left mouse button, and then dragging the mouse.

#### **RECOMMENDED FOR DEVELOPMENT**

In addition to the QuickTime for Windows Development Kit, the following is useful in the development of cross-platform QuickTime support.

- QuickTime for Macintosh Development Kit (APDA)
- QuickTime Movie Exchange Toolkit (APDA #R0190LL/A)  
Convert multimedia data created on other workstation platforms to QuickTime movies playable on a Macintosh.

For development kits and developer information contact:

APDA  
Apple Computer, Inc.  
P.O. Box 319  
Buffalo, NY 14207-0319

USA (800) 282-2732  
Canada (800) 637-0029  
Intl (716) 871-6555  
AppleLink : APDA  
Compuserve : 76666,2405  
America OnLine: APDA  
Internet : APDA@applelink.apple.com

#### **QuickTime for Windows 2.1**

Hardware Compatibility List  
12 December, 1995

This information is a guide to developers who are working with and distributing QuickTime for Windows per their license agreements. The list is not comprehensive but continues to grow.

All listed adapters have been tested as fully as possible, but there are some caveats due to numerous variations in the number of combinations of CPUs, hard drives, video cards, sound cards and RAM.

Compatible hardware/drivers are those combinations that have been tested as fully as possible and which appear to function adequately.

The OPTIMIZED category indicates whether that particular video hardware/driver combination allows QTW to write directly to the video memory for optimal performance.

When possible the name of the manufacturer, product name, driver date and/or version, and depth (in the case of video drivers) is listed.

**Compatible Videocards and OEM Videos**

Videocard	Driver Version	Res.	Colors	Optimized?
Standard EGA	Windows EGA	640x400	16	no
Standard VGA	Windows VGA	640x480	16	no
Standard SVGA	Default Win95	640x480	16	no
	Default Win3.x		256	no
		800x600	16	no
			256	no
		1024x768	16	no
			256	no

IBM:

8514	Win3.x	1024x768	256	no
XGA	07/27/92	640x480	16	no
		1024x768	(16bit)	no

Only XGA20 supports 16-bit color. Do NOT use the drivers supplied with Windows 3.1. Instead, use the drivers supplied by IBM.

XGA2	07/27/92	640x480	256	no
			(16bit)	no
		800x600	256	no
			(16bit)	no

Actix:

Graphics Engine Ultra Plus	03/25/93	640x480	256	no
			(64K 16bit)	no
			(24bit)	no
			(turbo)	no
		800x600	256	no
			(64K 16bit)	no
		1024x768	256	no
			(64K 16bit)	no

ATI Technologies:

ATI Mach32 VGA Wonder	v3.0	640x480	256	yes
			(16bit)	yes
			(24bit)	yes
		800x600	256	yes
			(16bit)	yes
			(24bit)	yes
		1024x768	256	yes
			(15bit)	yes

ATI Mach64 VLB	Flexdesk v2.0	640x480	256	yes
			(15bit)	yes
			(16bit)	yes
			(24bit)	yes
		800x600	256	yes
			(15bit)	yes
			(16bit)	yes
			(24bit)	yes

			1024x768	256 (15bit)	yes yes
VGA XL	04/09/92 04/20/92		800X600	16 (16bit)	yes yes
			1024x768	256	yes
Ultra (OEM)	04/09/92		640x480	(16bit)	yes
			1024x768	256	yes
VGA XL	08/14/92 1.42 07/28/92		640x480	256 (16bit)	yes yes
			800x600	256 (16bit)	yes yes
			1024x768	256	yes
ATI VGAWONDER XL24	06/25/92		640x480	256 (16bit)	yes yes
			800x600	256 (16bit)	yes yes
			1024x768	256	yes
ATI Graphics Ultra	08/14/92		640x480	16	no
				256	no
			800x600	16	no
ATI Graphics Ultra Pro	03/10/92		640x480	256 (16bit)	yes no
				(24bit)	no
			800x600	256 (16bit)	yes no
				(24bit)	no
			1024x768	256 (16bit)	yes yes
ATI Graphics/Pro	11/27/92		640x480	(16bit)	no
			1024x768	256	no
Compaq:					
Presario CDS 992 v4.0 (Win95)			640x480	16	yes
(OEM video CL-GD5429/30/34 2MB VRAM)				256	yes
local bus				(16bit)	yes
				(24bit)	yes
				(32bit)	yes
			800x600	16	yes
				256	yes
				(16bit)	yes
				(24bit)	yes
				(32bit)	yes
			1024x768	16	yes
				256	yes
				(16bit)	yes
			1280x1024	16	yes
				256	yes

Dell:				
466/M OEM Video	v1.7 (Win3.x)	640x480	16	yes
(S3 86C801/86C805)	v4.0 (win95)		256	yes
ISA			(15bit)	yes
			(16bit)	yes
		800x600	16	yes
			256	yes
		1024x768	16	yes
			256	yes

Diamond Multimedia:				
Speedstar 24	4/14/92	640x480	16	yes
ISA	(wspdtsf.DRV)		256	yes
			(15bit)	yes
			(24bit)	no*

\*Movies render as a thin line at the top of the screen in 24-bit mode.  
(For compatibility, with some loss of performance, make the following  
modifications in the control panel video tab:

"Draw Method=Video Driver")				
		800x600	16	yes
			256	yes
			(15bit)	yes
		1024x768	16	yes
			256	yes

SpeedStar 24x		640x480	(24bit)	yes
ISA		800x600	(16bit)	yes
		1024x768	256	yes

Stealth	09/25/92	640x480	256	yes
ISA			(16bit)	yes

Stealth Pro	12/07/92	640x480	256	no
			(16bit)	no
			(24bit)	no
		800x600	256	no
			(16bit)	no
		1024x768	256	no
			(16bit)	no

Viper VLB*	04/27/93	640x480	256	yes
			(16bit)	yes
			(24bit)	no
		800x600	256	yes
			(16bit)	yes
			(24bit)	yes
		1024x768	256	yes
			(16bit)	yes

Viper PCI* Win 3.x		640x480	256	yes
Weitek P9000	9-27-93		(16bit)	yes
			(24bit)	yes
		800x600	256	yes
			(16bit)	yes
			(24bit)	yes
		1024x768	256	yes
			(16bit)	yes

\*As of Dec 6, 1995, Viper's Windows 95 drivers are not available.



Genoa:

8500 v1.41 (Win3.x)	640x480	16	yes
WindowsVGA 24 (Cirrus GD540x-2x)		256	yes
ISA		(16bit)	yes
		(24bit)	yes
		(turbo)	yes
	800x600	16	yes
		256	yes
		(16bit)	yes
	1024x768	16	yes
		256	yes

Matrox:

Matrox 1024 08/21/92 2.07	1024x768	High Color(24bit)	no
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Miro:

8S v2.21 (Win3.x)	640x480	16	yes
(S3 86C801)		256	yes
ISA		(15bit)	yes
		(16bit)	yes
		(24bit)	yes
	800x600	16	yes
		256	yes
		(15bit)	yes
		(16bit)	yes
	1024x768	16	yes
		256	yes

Orchid Technology:

Prodesigner IIs v1.5 (Win3.x)	640x480	16	yes
(1MB ET4000)		256	yes
ISA		(15bit)	yes
	800x600	16	yes
		256	yes
		(15bit)	yes
	1024x768	16	yes
		256	yes

Fahrenheit VA	02/19/93	640x480	256 (24bit)	Yes yes
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Fahrenheit 1280	08/10/92	640x480	256 (16bit)	Yes yes
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7 VRAM2 ERGO	03/10/92	800x600 1024x768	256 (16bit)	Yes yes
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Fahrenheit	08/10/92	640x480 800x600	(16bit) 256 (15bit)	no yes no
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Pro Designer II	03/01/92	640x480 800x600 1024x768	(15bit) 256 (15bit) 256	no yes no yes
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Packard Bell:				
Executive 5190CDT	v4.0 (Win95)	640x480	16	yes
(OEM video CL-GD54xx)	v1.10b (Win3.x)		256	yes
local bus			(16bit)	yes
			(24bit)	yes
		800x600	16	yes
			256	yes
			(16bit)	yes
		1024x768	16	yes
			256	yes
SIMGA:				
Legend GX	04/01/92 (1.13)	640x480	256	no
		800x600	256	no
		1024x768	256	no
Legend 24X	11/13/92	640x480	256	no
			(16bit)	no
			(24bit)	no
		800x600	256	no
			(16bit)	no
		1024x768	256	no
Western Digital:				
Windows' Accelerator	v3.1	640x480	16	yes
(WD 90C33)	1/7/93		256	yes
ISA	3/11/93		(16bit)	yes
		800x600	16	yes
			256	yes
			(16bit)	yes
		1024x768	16	yes
			256	yes

### Compatible Sound

Adapter	Driver	Date/Version
Creative Labs:		
SoundBlaster Pro	SBPSND.DRV	5/15/92
(This driver has been known to repeat sounds under stressed data throughput like CD-ROM players that can't maintain a reasonable data rate.)		
SoundBlaster Pro	SBPSND.DRV	02/05/92
SoundBlaster Pro 16	SB16SND.DRV	4/14/93
SoundBlaster AWE32	Wave/MIDI	v3.02
ThunderBoard	SNDBLST2.DRV	3/10/92
ThunderBoard	SNDBLST2.DRV	5/13/92
Media Vision:		
ProAudio Spectrum	MVPROAUD.DRV	02/03/93 v1.3
ProAudio Spectrum Plus	MVPROAUD.DRV	02/03/93 v1.3
(Make the following modifications in the control panel audio tab:		
RateAlgorithm=Manual override		
RequestedRate=22095		

ActualRate=22536)  
ProAudio Spectrum 16                   MVPROAUD.DRV                   02/03/92  
Audio Port                               MVAPORT.DRV                   04/14/92  
(Does not support sound sampled at above 11kHz.  
Please make the following modifications in the control panel audio tab:  
RateAlgorithm=Manual override  
RequestedRate=11025  
ActualRate=11025)

Microsoft Sound System                SNDSYS.DRV                   09/21/92 v1.0

Cardinal Technologies:  
Sound Studio                            TAPIGSS1.DRV                12/28/92

Orchid  
Sound Producer Pro                    PRODUCER.DRV                01/13/93  
  10/01/92

Turtle Beach:  
MultiSound                             MULTISND.DRV                08/27/92 v1.1  
Monte Carlo                             V2.03

ATI Stereo F/X                         SFX.DRV                      05/04/92

Packard Bell:  
Executive 5190CDT Win95  
(OEM sound card:                      Win 3.xx Sound 16A           v1.0  
Aztech Sound Galaxy Washington 16)

Compaq:  
Presario CDX 992\*                     Win95                         yes  
(OEM sound card:                      Win 3.xx                     yes  
Compaq ESS ES688 AudioDrive)

Please make the following modifications in the control panel audio tab:  
RateAlgorithm=Manual override  
RequestedRate=22050  
ActualRate=22100)

Creative Labs       ThunderBoard                    SNDBLST2.DRV                03/10/92  
Creative Labs       ThunderBoard                    SNDBLST2.DRV                05/13/92

Creative Labs       Sound Blaster 2.0                                02/16/93  
Sound 'sticks' with this driver.

Digispeech        PortAble Sound Plus                    PRTSND.DRV                04/14/93

IBM    M/Audio    ACPA.DRV                    10/29/92 11:38  
Adjusting the volume from the Movie Controller may cause the volume to  
be muted. To restore the volume, stop and restart the movie.  
Sound may skip when resizing window.

IBM    M/Audio    ACPA.DRV                    8/28/92  
Limited volume control from keyboard.

MediaVision Thunder and Lightning                    TLWAVE.DRV                08/25/92  
Please make the following modifications in the control panel audio tab:  
RateAlgorithm=Manual override

RequestedRate=22222  
ActualRate=22222)

### Incompatible Video

ATI VGAWONDER XL24            07/29/92                    24        640x480        Yes  
In the 24-bit mode (16 Million Colors)    Reds and Blues seem to be  
reversed .

ATG CatsEye/X

We have field reports of systems hanging when movies are played with  
this board.

Compaq Q-Vision

Updated drivers from Compaq will fix the problem.

Diamond SpeedStar 24 \*    04/14/92                    24            640x480    Yes  
Movies render as a thin line at the top of the screen in 24-bit mode.  
(For compatibility, with some loss of performance, make the following  
modifications in the control panel video tab:  
"Draw Method=Video Driver")

MediaVision

We have a field report that QTW does not work with the original  
MediaVision video display adapter. The report indicates that the movie's  
sound is played but the movie cannot be seen. Problem persists when  
"Draw Method=Video Driver" is set via the control panel video tab.

OmiCorp Texan

We have field reports of sound but no movie (video) with this card.

PackardBell

We have several field reports dealing with a PackardBell. Reports of a  
"shutters" type effect on local bus systems with Headlands HT-216 video  
chips have been noted. The shutters effect is where a few lines of movie  
can be seen, then a few lines of background, then a few lines of movie,  
and so on. The reports also state that the image is also shifted down  
and to the right about 10 pels.

Further reports tell of a lack of Movie image when running on Local Bus  
Packard Bell Machines. All reported problems can be cured with some  
loss of performance, by making the following modifications in the  
control panel video tab: "Draw Method=Video Driver"

Sigma WindStorm	08/21/92	8	1024x768	No
Sigma WindStorm	08/21/92	16	800x600	No
Sigma WindStorm	08/21/92	8	800x600	No
Sigma WindStorm	08/21/92	24	640x480	No
Sigma WindStorm	08/21/92	16	640x480	No
Sigma WindStorm	08/21/92	8	640x480	No

QTW has very poor performance with this adapter.

Video 7 SPEA 7

OEM

With some loss of performance, the following modification must be made  
in the control panel video tab: "Draw Method=Video Driver"

### **Incompatible Sound Cards**

Media Vision Thunder and Lighting \*  
QTW has very poor throughput with this card.

Media Vision CDPC \*  
QTW does not work well with this system with movies over 10 seconds in length.

Media Vision CDPC II  
QTW does not work well with this system with movies over 10 seconds in length.

Sigma Design WinStorm 8/21/92  
Very poor QTW performance when running audio and video together.

Tandy 'Gold Card'  
We have only one unconfirmed report on this line of cards. A developer states that he has a Tandy "Gold Card" and QTW crashed when ever he tries to play a movie. Removing the card seems to fix the problem.

### **MODIFYING QTW.INI FOR COMPATIBILITY**

Please use QuickTime's Control Panel to modify any configurable item.

**END OF QUICKTIME FOR WINDOWS 2.1 READ ME**