

Welcome to Invisible Universe.

We hope you enjoy this Voyager title.

TECHNICAL REQUIREMENTS

PC-compatible computer with a 486SX-33 or higher processor
8 MB of installed RAM (minimum)
640x480, 256-color display
MPC2-compatible CD-ROM drive (double-speed)
MPC2-compatible sound card with speakers or headphones
Mouse
MS-DOS operating system version 5.0 or later
Microsoft Windows version 3.1 1 or Windows 95
MS-DOS CD-ROM Extensions (MSCDEX) version 2.2 or later
QuickTime for Windows (version 2.0.3 or greater)

SETTING UP

These instructions assume a basic familiarity with Windows 3.1 or Windows 95 interface conventions. If you're just getting started with your computer, and find the operations described below confusing, please refer to the documentation that came with your computer.

You can install the *Invisible Universe* software from the Windows 3.1 Program Manager or the Windows 95 Desktop. No matter which method you use, the installer will add an *Invisible Universe* icon to the Voyager-95A program group.

Installing the Software from the Windows 3.1 Program Manager

1. Insert the *Invisible Universe* CD into your CD-ROM drive according to the drive manufacturer's instructions.
2. Choose Run from the File menu.
3. Type d:\setup.exe, where d: is your CD-ROM drive.
4. Click OK.
5. Follow directions in the Setup dialog boxes to complete the installation

Installing the Software from the Windows 95 Desktop

1. Insert the *Invisible Universe* CD into your CD-ROM drive according to the drive manufacturer's instructions.
2. Choose Run from the Start menu.
3. Type d:\setup.exe, where d: is your CD-ROM drive.
4. Click OK.
5. Follow the directions in the Setup dialog boxes to complete the installation.

GETTING STARTED

To launch *Invisible Universe*, make sure the *Invisible Universe* CD is in your CD-ROM drive and double-click the *Invisible Universe* icon in the Voyager-95A group in the Program Manager.

HELP

There is on-line help available in *Invisible Universe*. From all sections of the program, you can click CTRL-H and a help screen will appear that explains how to use the various screen elements.

FIND

Invisible Universe has a Find feature that lets you easily access any glossary definition or program item. From all sections of the program, click CTRL-F and a Find screen will appear. You can toggle between the Definitions list and the Items list by clicking the

appropriate button. Then, either type the term or part of the term you want to find in the text entry field and press ENTER, or scroll through the list until you see the term you want to find. To go to your term, click on it and then click on the Go To button.

GLOSSARY

Invisible Universe contains a glossary with definitions for many of the technical terms used throughout the program. From all sections of the program, click CTRL-G and the glossary will appear. Click on the first letter of your term at the top of the glossary to view the glossary items that start with that letter. Use the left and right arrows to move through the list.

Terms that appear in the glossary are underlined in the Celestial Objects text. Simply click on any underlined word to open the glossary and read the definition for that word.

UNIVERSE SHOW

You can view a self-running show that presents every Celestial Object. Select Universe Show from the menu bar to start it. Each image will appear in a random order for several seconds. To view the next image immediately, press SHIFT. Press CTRL to toggle the image name in the upper left corner.

QUIT

To quit *Invisible Universe*, select Quit from the menu bar or press CTRL-Q.

PERFORMANCE TIPS

Here are some tips for best performance.

Exit all other applications except Program Manager before running *Invisible Universe*.

While *Invisible Universe* will run on a computer with 8 MB of RAM, performance can be rather sluggish. *Invisible Universe* will run best on a machine with 12 MB or more of RAM.

Do not press the ESC key or ALT key while running *Invisible Universe*.

SWAP FILE SETTINGS

If you have 8 MB of RAM installed in your computer, set the swap file to "Permanent" and set the swap file size to 10,000 KB.

If you have more than 8 MB of RAM, we recommend simply turning the swap file OFF.

To change the swap file settings:

- 1) Double-click the Control Panel in the Main group of the Program Manager.
- 2) Double-click the "386 Enhanced" icon.
- 3) Click "Virtual Memory".
- 4) Click "Change".
- 5) Under "Type" choose "Permanent".
- 6) In "New Size" type "10000" KB.
- 7) Click "OK".
- 8) Click "Yes" when asked "Are you sure you want to make changes to virtual-memory settings?"
- 9) Exit Windows and restart the machine.

To turn the swap file OFF:

- 1) Double-click the Control Panel icon in the Main group of the Program Manager.
- 2) Double-click the "386 Enhanced" icon.
- 3) Click "Virtual Memory".
- 4) Click "Change".
- 5) Under "Type" choose "None".

- 6) Click "OK".
- 7) Click "Yes" when asked "Are you sure you want to make changes to virtual-memory settings?"
- 8) Exit Windows and restart the machine.

TROUBLESHOOTING

Invisible Universe installs approximately 4.5 MB of files on your hard drive. To see a list of these files and other changes made to your system during installation, find the file called UNIVERSE.TXT in the directory where you installed *Invisible Universe* and double-click it. If you ever delete or move any of the files on this list, *Invisible Universe* will not run properly. If you try to start *Invisible Universe* and it does not start because it cannot find the appropriate files, you should reinstall *Invisible Universe* and try again.

AUDIO PLAYBACK SYNCHRONIZATION

This title takes advantage of 16-bit stereo audio. Apple's QuickTime for Windows 2.0 is not fully compatible with all sound cards installed in Windows machines. Therefore, these cards may be unable to play back the full 16-bit stereo audio and maintain synchronization with the movie's video.

If you notice the audio loses synchronization with the video, there are some changes you can make to the QTW.INI file that will drop the sound quality down to 8-bit stereo, but may improve the synchronization.

To make this change to the QTW.INI file:

- 1) Find the QTW.INI file in the Windows directory on your computer.
- 2) Double-click on it to open it.
- 3) Add the following statements to the end of this file:

```
[Sound]
ChannelControl=8
```

- 4) Save the new file under the same name, QTW.INI, and close it.
- 5) The added statements have now been saved in the QTW.INI file.

If this change does not improve the audio playback to your satisfaction, you may want to purchase an audio card that is fully supported by QuickTime for Windows 2.0. Apple specifies the following audio cards as fully supported:

Creative Labs SoundBlaster Pro
Creative Labs SoundBlaster Pro 16
Creative Labs ThunderBoard
Media Vision ProAudio Spectrum
Media Vision ProAudio Spectrum Plus
Media Vision ProAudio Spectrum 16
Media Vision Audio Port
Microsoft Sound System
Cardinal Technologies Sound Studio
Orchid Sound Producer Pro.
Turtle Beach MultiSound
ATI Stereo F/X

A complete QuickTime for Windows hardware compatibility list appears below. Please refer to it for driver versions and dates.

SOFTWARE REGISTRATION

Please register your software for technical support and so that we can keep you posted on the ever-growing Voyager catalog. To register this Voyager title, double-click on the SOFTREG.TXT file in the REGISTER directory on the CD-ROM.

You can return this information by e-mail to register@voyagerco.com or by fax to (914) 591-6481.

SOFTWARE SUPPORT

For technical support on Voyager products, call (212) 219-2522. You can also reach Voyager technical support via online services or e-mail.

Internet Address: techsupport@voyagerco.com

America Online: voyager@aol.com
or go to the AOL Voyager forum: keyword is "voyager"

CompuServe: 75300,1635@compuserve.com
or go to the Multimedia A Vendor forum

QuickTime for Windows does not support all Windows video and sound cards. Voyager has included the following information from Apple which outlines hardware support, compatibility and incompatibility. If you experience problems when running *Invisible Universe*, please check to see if your video and sound cards are supported under QuickTime for Windows.

QuickTime for Windows 2.0 Hardware Compatibility List July 27, 1994

This document is meant to be an aid to developers who are working with and distributing QuickTime for Windows per their license agreement. The list is by no means comprehensive but has grown substantially over the past year. The Video and Audio Hardware adapters are divided into three basic classifications Supported, Compatible and In-Compatible.

Supported hardware/driver combinations are those that have been tested as part of the QTW development plan and are considered benchmarks to the product.

Compatible hardware/drivers are those combinations that have been tested but not as thoroughly as Supported items but appear to function adequately.

In-Compatible hardware/driver combinations are those recognized as having significant problems in appearance or behavior with QTW.

Another category that we've added to our report is Optimized. Optimized video hardware/driver combination allows QTW to write directly to the video memory speeding up video performance significantly. Whenever possible, the name of the manufacturer, product name, driver date or version when known, and depth in the case of video drivers is listed.

Supported Video Adapter	Driver	Depth	Resolution	Optimized?
Standard VG	Windows VGA	4	640x350	No
Standard EGA	Windows EGA	4	640x480	No
IBM 8514	Windows	8	1024x768	No

IBM XGA	07/27/92	4	640x480	No
IBM XGA	07/27/92	16	1024x768	No

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

ATI VGA X	04/09/92	4	800x600	Yes
ATI VGA XL	04/10/92	8	1024x768	Yes
ATI VGA XL	04/20/92	16	800x600	Yes
ATI ULTRA	04/22/92	8	1024x768	No
ATI ULTRA	OEM	16	640x480	No
ATI Mach 32	01/05/93	8	640x480	Yes
ATI Mach 32	01/05/93	16	1024x768	Yes
Orchid IIs	03/01/92	8	800x600	Yes
Orchid IIs	03/01/92	16	800x600	Yes
Video 7 VRAM2 ERGO	03/10/92	8	800x600	Yes
Orchid Fahrenheit VA	02/19/93	8	640x480	Yes
Orchid Fahrenheit 1280	08/10/92	8	640x480	Yes
Orchid Fahrenheit 1280	08/10/92	16	800x600	Yes
Diamond Stealth	09/25/92	8	640x480	Yes
Diamond Stealth	09/25/92	16	640x480	Yes
Diamond SpeedStar 24x	04/28/92	8	1024x768	Yes
Diamond SpeedStar 24x	04/28/92	16	800x600	Yes
Diamond SpeedStar 24x	04/28/92	24	640x480	Yes

Supported Audio Adapter	Driver	Date
Creative Labs SoundBlaster Pro	SBPSND.DRV	05/15/92
<i>This driver has a know bug that effects all Windows applications that use sound where at times a portion of the sound will be repeated several times.</i>		
Creative Labs SoundBlaster Pro	SBPSND.DRV	02/05/92
<i>This driver some times 'sticks' on a sound.</i>		
Creative Labs SoundBlaster Pro 16	SB16SND.DRV	04/14/93
Creative Labs ThunderBoard	SNDBLST2.DRV	03/10/92
Creative Labs ThunderBoard	SNDBLST2.DRV	05/13/92
Media Vision ProAudio Spectrum	MVPROAUD.DRV	02/03/93 1.3
Media Vision ProAudio Spectrum Plus	MVPROAUD.DRV	02/03/93 1.3
<i>Make the following modifications to the QTW.INI file.</i>		
[Sound]		
RequestedRate=22095		
ActualRate=22536		
Media Vision ProAudio Spectrum 16	MVPROAUD.DRV	02/03/92
Media Vision Audio Port	MVAPORT.DRV	04/14/92
<i>Does not support sound sampled at above 11khz.</i>		
<i>Make the following modifications to the QTW.INI file.</i>		
[Sound]		
RequestedRate=11025		
ActualRate=11025		
Microsoft Sound System	SNDSYS.DRV	09/21/92 1.0
Cardinal Technologies Sound Studio	TAPIGSS1.DRV	12/28/92
Orchid Sound Producer Pro.	PRODUCER.DRV	01/13/93

Orchid Sound Producer Pro.
Turtle Beach MultiSound
ATI Stereo F/X

PRODUCER.DRV
MULTISND.DRV
SFX.DRV

10/01/92
08/27/92 1.1
05/04/92

Compatible Video Adapter	Driver	Depth	Resolution	Optimized?
Actix Graphics Engine Ultra Plus	03/25/93	16	1024x768	No
Actix Graphics Engine Ultra Plus	03/25/93	8	1024x768	No
Actix Graphics Engine Ultra Plus	03/25/93	16	800x600	No
Actix Graphics Engine Ultra Plus	03/25/93	8	800x600	No
Actix Graphics Engine Ultra Plus	03/26/93	24	640x480	No
Actix Graphics Engine Ultra Plus	03/25/93	16	640x480	No
Actix Graphics Engine Ultra Plus	03/25/93	8	640x480	No
ATI VGA XL	08/14/92 1.42	16	640x480	No
ATI VGA XL	04/20/92	8	800x600	Yes
ATI VGA XL	04/10/92	16	640x480	Yes
ATI VGA XL	04/20/92	8	640x480	Yes
ATI VGA XL	06/25/92	8	1024x768	Yes
ATI VGA XL	06/25/92	8	800x600	Yes
ATI VGA XL	07/28/92	16	640x480	Yes
ATI VGA XL	06/25/92	8	640x480	Yes
ATI VGAWONDER XL24	06/25/92	8	1024x768	Yes
ATI VGAWONDER XL24	07/28/92	16	800x600	Yes
ATI VGAWONDER XL24	06/25/92	8	800x600	Yes
ATI VGAWONDER XL24	07/28/92	16	640x480	Yes
ATI VGAWONDER XL24	06/25/92	8	640x480	Yes
ATI Graphics Ultra	08/14/92	4	800x600	No
ATI Graphics Ultra	08/14/92	4	640x480	No
ATI Graphics Ultra	06/25/92	8	640x480	No
ATI Graphics Ultra Pro	03/10/92	8	8514/a	No
ATI Graphics Ultra Pro	03/13/93	8	1280x1024	Yes
ATI Graphics Ultra Pro	03/13/93	16	1024x768	Yes
ATI Graphics Ultra Pro	03/13/93	8	1024x768	Yes
ATI Graphics Ultra Pro	03/13/93	24	800x600	No
ATI Graphics Ultra Pro	03/13/93	16	800x600	No
ATI Graphics Ultra Pro	03/13/93	8	800x600	Yes
ATI Graphics Ultra Pro	03/13/93	16	640x480	No
ATI Graphics Ultra Pro	03/19/93	24	640x480	No
ATI Graphics Ultra Pro	03/19/93	16	640x480	No
ATI Graphics Ultra Pro	03/19/93	8	640x480	Yes
ATI Graphics/Pro	11/27/92	8	1024x768	No
ATI Graphics/Pro	11/27/92	16	640x480	No
Dell 466/M S3	09/04/92 (1.2)		41280x1024	Yes
Dell 466/M S3	09/04/92 (1.2)		81024x768	Yes
Dell 466/M S3	09/04/92 (1.2)		8800x600	Yes
Dell 466/M S3	09/04/92 (1.2)		4800x600	Yes
Dell 466/M S3	09/04/92 (1.2)		15640x480	Yes
Dell 466/M S3	09/04/92 (1.2)		8640x480	Yes
Diamond Stealth Pro	12/07/92	8	1280x968	No
Diamond Stealth Pro	12/07/92	8	1280x1024	No
Diamond Stealth Pro	12/16/92	16	1024x768	No
Diamond Stealth Pro	01/06/93	8	1024x768	No
Diamond Stealth Pro	12/18/92	16	800x600	No
Diamond Stealth Pro	01/06/93	8	800x600	No
Diamond Stealth Pro	02/23/93	24	640x480	No

Diamond Stealth Pro	01/06/93	16	640x480	No
Diamond Stealth Pro	01/06/93	8	640x480	No
Diamond SpeedStar 24	04/14/92	8	1024x768	Yes
Diamond SpeedStar 24	04/14/92	15	800x600	No
Diamond SpeedStar 24	04/14/92	8	800x600	Yes
Diamond SpeedStar 24	04/14/92	15	640x480	No
Diamond SpeedStar 24	04/14/92	8	640x480	Yes
Diamond Viper VLB	04/27/93	8	1152x900	Yes
Diamond Viper VLB	04/27/93	16	1024x768	Yes
Diamond Viper VLB	04/27/93	8	1024x768	Yes
Diamond Viper VLB	04/27/93	24	800x600	No
Diamond Viper VLB	04/27/93	16	800x600	Yes
Diamond Viper VLB	04/27/93	8	800x600	Yes
Diamond Viper VLB	04/27/93	24	640x480	No
Diamond Viper VLB	04/27/93	16	640x480	Yes
Diamond Viper VLB	04/27/93	8	640x480	Yes

Support for the P9000 was added in QTW 1.1.1.

Genoa Windows VGA 8500	02/16/93	8	1024x768	Yes
Genoa Windows VGA 8500	10/23/92 (turbo)	16	800x600	Yes
Genoa Windows VGA 8500	08/24/92	16	800x600	Yes
Genoa Windows VGA 8500	10/28/92	8	800x600	Yes
Genoa Windows VGA 8500	12/01/92 (turbo)	24	640x480	No
Genoa Windows VGA 8500	10/14/92	24	640x480	No
Genoa Windows VGA 8500	11/11/92 (turbo)	16	640x480	Yes
Genoa Windows VGA 8500	08/24/92	16	640x480	Yes
Genoa Windows VGA 8500	10/28/92	8	640x480	Yes

Support for the Cirrus Logic CL-GD5426 GUI was added in QTW 1.1.1

IBM XGA2	07/27/92	8	640x480	No
IBM XGA2	07/27/92	16	640x480	No
IBM XGA2	07/27/92	8	800x600	No
IBM XGA2	07/27/92	16	800x600	No

QTW supports IBM XGA2 starting with version 1.1.

Orchid Fahrenheit VA	02/19/93 10:00	16	1024x768	Yes
Orchid Fahrenheit VA	02/19/93 10:00		24640x480	Yes
Orchird VLB (Local Bus)	02/19/93	16	800x600	Yes
Orchird VLB (Local Bus)	02/19/93	15	800x600	Yes
Orchird VLB (Local Bus)	02/19/93	8	800x600	Yes
Orchird VLB (Local Bus)	02/19/93	24	640x480	No

Movies shifted to the left, a few pixels in 24 bit mode . Rebooting fixes the problem

Orchird VLB (Local Bus)	02/19/93	16	640x480	Yes
Orchird VLB (Local Bus)	02/19/93	15	640x480	Yes
Orchird VLB (Local Bus)	02/19/93	8	640x480	Yes
Orchid Fahrenheit 1280	08/10/92 10:00	15	800x600	No
Orchid Fahrenheit 1280	08/10/92 10:00		8800x600	Yes
Orchid Fahrenheit 1280	08/10/92 10:00	16	640x480	No
Orchid Fahrenheit 1280	08/10/92 10:00	15	640x480	No
Orchid Pro designer IIs/D 1.1	04/7/92	15	800x600	No
Orchid Pro designer IIs/D 1.1	04/7/92		8800x600	Yes
Orchid Pro designer IIs/D 1.1	04/7/92	8	640x480	Yes
Orchid Pro II	03/01/92	8	1024x768	Yes
Orchid Pro II	03/01/92	15	800x600	No
Orchid Pro II	03/01/92	8	800x600	Yes

Orchid Pro II	03/01/92	15	640x480	No
Orchid Pro II	03/01/92	8	1024x768	Yes
Sigma Legend GX	04/01/92 (1.13)	8	1024/768	No
Sigma Legend GX	04/01/92 (1.13)	8	800x600	No
Sigma Legend GX	03/31/92 (1.13)	8	640x480	No
Sigma Legend GX	04/01/92 (1.13)	8	640x480	No
Sigma Legend 24X	11/13/92	8	1024x768	No
Sigma Legend 24X	11/13/92	16	800x600	No
Sigma Legend 24X	11/13/92	8	800x600	No
Sigma Legend 24X	11/14/92	24	640x480	No
Sigma Legend 24X	11/13/92	16	640x480	No
Sigma Legend 24X	11/13/92	8	640x480	No
Matrox 1024	08/21/92 2.07	24	1024x768	No
MiroCrystal 8S	04/13/93	8	1024x768	No
MiroCrystal 8S	04/13/93	16	800x600	No
MiroCrystal 8S	04/13/93	8	800x600	Yes
MiroCrystal 8S	04/15/93	16	640x480	No
MiroCrystal 8S	04/13/93	8	640x480	Yes

Compatible Audio Adapter	Driver	Date
Creative Labs ThunderBoard	SNDBLST2.DRV	03/10/92
Creative Labs ThunderBoard	SNDBLST2.DRV	05/13/92
Creative Labs Sound Blaster 2.0 <i>Sound 'Sticks' with this driver.</i>		02/16/93
DigispeechPortAble Sound Plus	PRTSND.DRV	04/14/93
IBM M/Audio <i>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 Sound is played at 44khz by doubling the samples.</i>	ACPA.DRV	10/29/92 11:38
IBM M/Audio <i>Limited volume control from keyboard.</i>	ACPA.DRV	8/28/92
MediaVision Thunder and Lightning <i>Make the following modifications to the QTW.INI file. [Sound] RequestedRate=22222</i>	TLWAVE.DRV	08/25/92

Incompatible Video Adapter	Driver	Depth	Resolution	Optimized?
ATI VGAWONDER XL24 <i>In the 24 bit mode (16 Million Colors) Reds and Blues seem to be reversed.</i>	07/29/92	24	640x480	Yes
ATG CatsEye/X <i>Field reports of systems hanging when movies are played with is board.</i>				
Compaq Q-Vision				

We have field reports that QTW does not work with is card.

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. All other functions are normal.

MediaVision

We have a field report that QTW does not work with the origina IMediaVision video display adapter. The report indicates that the movies sound is played but the movie can not be seen. Problem persists when Optimize is set to driver.

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 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 BusPackard Bell Machines.

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 is adapter.

Video 7 SPEA 7 OEM

We have field reports that the Optimize = Driver must added to theQTW.INI before the movie will appear in the movie window frame. Audioand all other actions seems to be OK with out the change

Incompatible Audio Adapter

Driver

Date

Media Vision Thunder and Lighting *
QTW has very poor through-put with this card.

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

Media Vision CDPC II
QTW does not work well with is 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'

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 trys to play a movie. Removing the card seems to fix the problem.