

# ***KELVIN VIDEO64***



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For information on how to use Help, press F1.

# **WELCOME!**

Welcome to the Kelvin Video64 on-line Help! We hope you will find our on-line help very useful. Press F1 at any time for information on how to use on-line Help.

Thank you for purchasing Kelvin Video64. Care has been taken to ensure that it will provide you with years of trouble-free operation. We believe you will be pleased with your purchase.

# INTRODUCTION

Kelvin Video64® is a 64-bit graphics and digital video accelerator featuring full motion video playback support. With Kelvin Video64 you can scale MPEG, AVI and other digital video files to full screen at resolutions up to 1024x768, and maintain 30 frames per second playback. You can complement your high-speed graphics with a high-fidelity audio Orchid sound card.

Kelvin Video64 supports up to 2MB of DRAM memory and is designed for PCI and Pentium systems. Installation is simple, jumperless and all configuration settings are under software control.

Supporting resolutions up to 1600x1200, 16.7 true color depth, and refresh rates up to 90Hz, Kelvin Video64 accelerates all graphics modes and provides full VESA compliance. Kelvin Video64 also offers full support for the Green PC specification using VESA's DPMS (Display Power Management Signaling) standard.

In addition, Kelvin Video64 provides customized Windows and CAD drivers. These drivers improve performance and functionality and come with user-friendly utilities such as the Orchid Setup Control Panel, Virtual Desktop and the XingMPEG Player for digital video playback.

# ***KELVIN VIDEO64 ON-LINE MANUAL***

[Copyright Notice](#)

[Before You Begin](#)

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# CONFIGURING KELVIN VIDEO64

[Windows 3.1x Control Panel](#)  
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# DIGITAL VIDEO SCALING

With Kelvin Video64, a Windows digital video clip can be scaled and sized up to full screen. No longer will your video viewing be restricted to postage stamp-sized displays. You get smooth video playback without dropping frames. The scaling feature can be used in all resolutions except 640x480x16 colors and 800x600x16 colors.

Kelvin Video64 features both horizontal and vertical digital video scaling. The accelerated video hardware allows Kelvin Video64 to display AVI files to full screen while maintaining smooth motion and improving image quality.

By incorporating the new DCI standard, Kelvin Video64 can take on many of the tasks generally shared with the Windows display software. The DCI standard allows Kelvin Video64's accelerator hardware to act independently during scaling and displaying operations, and for implementing color-space conversion. These tasks are accomplished much more quickly using hardware methods, and the resulting displays can then be scaled for full-screen playback.

# MPEG VIDEO

MPEG is a full-motion video compression technology that allows you to play back high-quality video. It records changes between frames of data. Rather than storing information about each individual frame, only the changed data is stored during recording and reassembled during playback.

With Kelvin Video64 you can view MPEG, AVI and other digital video formats at up to 30 frames per second. Kelvin Video64 features the Xing Software MPEG codec for full-screen, full-motion playback of MPEG digital video. This codec algorithm attains the highest playback quality while optimizing file management. It also uses high-quality scaling and pixel interpolation algorithms.

The Kelvin Video64 uses your computer's CPU for MPEG decoding. MPEG playback performance is directly related to processor speed, the current screen resolution and color depth. We recommend a true 75MHz MPC III (Multimedia Personal Computer) system for optimum MPEG and AVI performance. The MPEG decoding software can be used in all resolutions except 16 color modes and 1600x1200 resolutions.

MPEG Video files can be played using the XingMPEG Player or any Windows MCI (Media Control Device) application. MCI is a standard control device for multimedia devices and files. NOTE: The Kelvin Video64's MPEG feature is not compatible with CD titles written exclusively for the Sigma Designs RealMagic products.



# TECHNICAL SUPPORT

Technical assistance is available through the Orchid Technical Support Department. Updates for this software may be downloaded from the Orchid Bulletin Board Service (BBS). You may also send your support questions and requests via FAX to the number listed below.

In the United States:

Technical Support Department	(510) 661-3000
Technical Support Department FAX	(510) 651-6982
Orchid's BBS, 14400 baud, N, 8, 1	(510) 651-6837
Orchid's RMA Department	(510) 683-0300

In Europe:

France Technical Support	+33 (1) 47.80.70.50
France Technical Support FAX	+33 (1) 47.82.51.79
France Technical Support BBS	+33 (1) 47.84.70.57
United Kingdom Technical Support	+44 (0) 1256 844 899
United Kingdom Technical Support FAX	+44 (0) 1256 54476
United Kingdom Technical Support BBS	+44 (0) 1256 63373
Germany Technical Support	+49 89 42 90 41
Germany Technical Support FAX	+49 89 42 95 17

Orchid provides a high-capacity electronic bulletin board service (BBS). All lines are accessed through one phone number. You can use any baud rate up to 14.4K baud. YMODEM and ZMODEM are the recommended file transfer protocols. Orchid's modem settings are:

Parity=NONE (N)  
Data Bits=8  
Stop Bits=1

Technical Support hours are: Monday to Friday 7:00a.m. to 5:00p.m. PST.

## CompuServe

Orchid Technology Technical Support is also available through CompuServe. Logon to CompuServe and type: GO ORCHID

## **World Wide Web**

Look for us on the World Wide Web! Orchid provides information ranging from the latest technology, new product releases, customer service and other categories of information. Access the Internet and type: <http://www.Orchid.COM>

# FEATURES AND BENEFITS

<b>Feature</b>	<b>Benefit</b>
Affordable 64-bit DRAM graphics solution	Cost effective, 64-bit accelerated operation
Full motion digital video scaling up to 1024x768 and software based MPEG playback	Full screen AVI and MPEG full motion digital video playback at high resolutions
16.7 million color support up to 800x600 resolution	True color mode at higher screen resolution
Virtual Desktop	Stretch out to a larger desktop area. If your monitor only supports 640x480, you can stretch out to 1024x768!

# SOFTWARE DEVICE DRIVERS

High resolution device drivers are included for popular software applications. The drivers that come with Kelvin Video64 are:

Windows 3.1x	Windows 95	3D Studio ADI
Microstation	AutoCAD ADI	

Kelvin Video64 also features the Xing Software MPEG Player for Windows 3.1x and Windows 95. Other drivers are available through Orchid Technical Support, or may be downloaded from the Orchid Bulletin Board System or CompuServe.

NOTE: Refer to [Section 2](#) in the on-line manual for details on installing these drivers.

# RESOLUTIONS AND REFRESH RATES

Mode #	Resolution	Colors	Horz.	Vert.	Polarity	
04	320 x 200	4	31.5	70	-	+
05	320 x 200	4	31.5	70	-	+
06	640 x 200	2	31.5	70	-	+
0D	320 x 200	16	31.5	70	-	+
0E	640 x 200	16	31.5	70	-	+
0F	640 x 350	Mono	31.5	70	+	-
10	640 x 350	16	31.5	70	+	-
11	640 x 480	2	31.5	60	-	-
12	640 x 480	16	31.5	60	-	-
13	320 x 200	256	31.5	70	-	+

Video Text Modes

Mode #	Resolution	Colors	Horz.	Vert.	Polarity	
00	40 x 25	16	31.5	70	-	+
01	40 x 25	16	31.5	70	-	+
02	80 x 25	16	31.5	70	-	+
03	80 x 25	16	31.5	70	-	+
07	80 x 25	Mono	31.5	70	-	+

VGA Video Graphics Modes



Enhanced Video Graphics Modes

