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Armada 6500 Pre-Install Refresh

Abstract: The purpose of this White Paper is to provide information on the software updates for Armada 6500 notebook. The scope of the initiative is to provide upgrades to a number of key software components as well as introduce new software functionality over and above that which was included with earlier units.

All software component upgrades referred to in this document have been tested and are supported. Upgraded software components are available for download from the Compaq Web site and the Compaq Support Software CD. This document supersedes the previously titled “Armada 6500 Software Overview” White Paper.

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Armada 6500 Pre-install Refresh
White Paper prepared by Portables Software Marketing

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Document Number [PRT007A/0199]

Highlights

The following list defines the software upgrades made after the initial shipment of the Armada 6500. These upgrades can be found on Compaq Computer Corporation's Web Site.

Windows 95 -

- ESS Audio Driver- Rel 1.9 - the original version on the Pre-Install was version 1.5. This version also works on Windows 98. This new version fixes the following problems:
 - Added support for Suspend/Resume functionality
 - Fixed problem with running Compaq Diagnostics when CD ROM or DVD drive is installed
- ATAPI - Rel 1.97 - The original version was 1.8. For those customers that order the DVD as an Option, you will receive Version 1.97 on a diskette. Version 1.97 has also been included on the latest version of the Armada 6500 Windows 95/Windows 98 Software CD. It addresses the following issues:
 - Fixed problems associated with DVD and LS120
 - Failure of DVD Express to start, stop or replay properly.
- Xircom 2.31 -Rel 1.6 - The original release was 1.5. This new release fixes the following issues:
 - After a suspend/resume event, the user may experience problems browsing the network.
 - Immediately after resuming from suspend, there may be a 7 to 8 second system pause. During this time the mouse may stop responding and the system could appear as if it's locked up.
- Microsoft Windows 95 Retail/OSR1 and Windows 3.1x are no longer supported.

Windows 98

- ESS Audio Driver- Rel 1.9 -The original version on the Pre-Install was version 1.7. This version also works on Windows 95. This new version addresses the following issues:
 - Fixed problem with running Compaq Diagnostics when CD ROM or DVD drive is installed.
- ATI - Rel 1.6 - The original version was 1.2. This version fixes the following issues:
 - Japanese Advanced Display Properties Buttons.
 - Added a silent install for Macrovision Release.
 - Supports TV Out
- Xircom 2.31 -Rel 1.7 - The original release was 1.6. This new release fixes the following issues:
 - After a suspend/resume event, the user may experience problems browsing the network.
 - Immediately after resuming from suspend, there may be a 7 to 8 second system pause. During this time the mouse may stop responding and the system could appear as if it's locked up.

Windows NT

- ATI - Rel 1.4 - The original version was 1.3. This version addresses the following issues:
 - Video Corruption on Japanese systems
 - Supports TV Out.
- Xircom 2.31 -Rel 1.4 - The original release was 1.3. This new release addresses the following issues:
 - After a suspend/resume event, the user may experience problems browsing the network.
 - Immediately after resuming from suspend, there may be a 7 to 8 second system pause. During this time the mouse may stop responding and the system could appear as if it's locked up.
- The latest System BIOS is Version 1.54.
- The latest Keyboard Binary is Version 35.
- DOS Diagnostics, Windows NT Diagnostics and Windows 9X Diagnostics have been made available.

- Clientworks has been made available.
- Carbon Copy has been made available

Software Delivery

Armada 6500 QuickRestore CD

The Compaq QuickRestore CD is shipped with each Armada 6500 notebook. The CD provides an easy to use and complete restore solution. The pre-installed operating system (i.e. Windows 95, Windows NT 4.0, or Windows 98) and all Compaq software enhancements are provided on the CD. The solution allows customers to perform a complete restore that will format the hard drive and reinstall the original factory preinstall image. The Compaq QuickRestore CD is shipped with each notebook and cannot be provided through fulfillment.

Armada 6500 Software CD

Included in the box with every Armada 6500, the Software CD contains documentation, applications, drivers, and utilities. The user interface has been translated into five languages: English, French, Italian, German, and Spanish. The contents are discussed in the Software Enhancements section below.

Compaq Support Software CD

The Compaq Support Software CD includes the latest updates to drivers and utilities for Armada Portable, Desktop and Workstation PCs. Key drivers and utilities for the Armada 6500 are included on the Compaq Support Software CD. The user interface is translated in English, French, Italian, German, Spanish and Japanese. The Compaq Support Software CD is updated monthly and is available either via an annual subscription or as a one-time purchase. The Armada 6500 software has been included on the Compaq Support Software CD since the November 1998 edition was released. Subscriptions can be purchased through Compaq Customer Support or your dealer.

Compaq World Wide Web Site and Download Facility

Individual drivers and utilities can be downloaded, in the form of SoftPaqs, from the Compaq Download Facility, the Compaq web site (<http://www.compaq.com/support/> or <ftp://ftp.compaq.com>) or through other online services such as AOL, Prodigy, and CompuServe. SoftPaqs are a way for Compaq to distribute driver and ROM updates as well as product software enhancements. It allows for multiple files and bootable diskettes to be distributed conveniently and electronically via floppy diskette or the web.

Software Enhancements

The following table summarizes the current components and revisions included on the Armada 6500 preinstall.

Table 1 – Armada 6500 Software Enhancements

Software Component	6500 Windows 95 Updates	6500 Initial Windows 95 Release	6500 Windows NT Updates	6500 Initial Windows NT Release	6500 Windows 98 Updates	6500 Initial Windows 98 Release
ATI Display Driver	None	Rel 1.4 (v4.10) SP 8181	1.4 SP 7776	1.3 SP 8208	1.6 SP 10037	1.2 SP 8214
ESS Maestro Audio Drivers	1.9 (4.05.00.0447) SP 8212	1.5 (4.05.00.0421) NO SP	None	1.2 SP 8203	1.9 (4.05.00.0447) SP 8212	1.7 SP 8178

Software Component	6500 Windows 95 Updates	6500 Initial Windows 95 Release	6500 Windows NT Updates	6500 Initial Windows NT Release	6500 Windows 98 Updates	6500 Initial Windows 98 Release
Microsoft DirectX	None	5.0 SP 8180	None	3.0 NO SP	None	6.0 SP 7774
Microsoft Internet Explorer (All languages except Japanese)	4.01a (via CD from MS)	4.01 NO SP	4.01a (via CD from MS)	4.01 NO SP	4.01a (via CD from MS)	4.01 NO SP
Microsoft Internet Explorer-Japanese	4.01a (via CD from MS)	4.01 NO SP	None	4.01A NO SP	NA	NA
Xircom CEM Combo Ethernet (10/100) Modem Drivers	1.6 V2.31 SP 7771	1.5 SP 8182	Rel 1.4 v2.31 SP 7773	1.3 SP 8209	1.7 v2.31 SP 7772	1.6 SP 8215
ATAPI/IDE CDROM	1.97 SP 8217	1.8 SP 8179	None	1.7 SP 8200	None	2.03 SP 8213
Plug and Play Driver	Not Needed	Not Needed	None	1.8 SP 8206	Not Needed	Not Needed
Award CardWare	Not Needed	Not Needed	None	2.2 V6.00.011 SP 8204	Not Needed	Not Needed
Advanced Power Management Drivers	Not Needed	Not Needed	None	2.4 SP 8205	Not Needed	Not Needed
ROM BIOS	1.54 SP 10036	1.20 NO SP	1.54 SP 10036	1.36 SP 8216	1.54 SP 10036	1.45 SP 8218
QuickLink III for Windows	See website www.smithmicro.com	3.20	See website www.smithmicro.com	3.20	See website www.smithmicro.com	3.20
IntelliSync 97 for Windows	See Website www.pumatech.com	Eng -1.6 FIGSJ- 1.51	See Website www.pumatech.com	Eng -1.6 FIGSJ- 1.51	See Website www.pumatech.com	Eng -1.6 FIGSJ- 1.51
ClientWorks	3.1.1 SP 8183	NA	3.1.1 SP 8183	NA	None	3.1.1 SP 8183
Carbon Copy 32	5.00.22 SP 8219	NA	5.00.22 SP 8219	NA	5.00.22 SP 8219	NA
AudioRack32 for Windows	NONE	3.05 SP8185	NONE	3.05 SP8185	NONE	3.05 SP8185
Diagnostics -DOS (All languages except Japanese)	10.32B SP 9077	NA	10.32B SP 9077	NA	10.32B SP 9077	10.32a NO SP
Diagnostics -DOS (Japanese)	10.32B (J) P1 SP 7767	NA	10.32B (J) P1 SP 7767	NA	10.32B (J) P1 SP 7767	10.32A (J) NO SP
Diagnostics - Windows (All languages except Japanese)	2.10b SP 8198	NA	2.01 A P1 SP 7769	NA	NONE	2.10b SP 8198
Diagnostics - Windows - (Japanese)	2.13B P2 SP 7766	NA	2.01A P1 SP 7770	NA	NONE	2.13B P2 SP 7766
Synaptics TouchPad Driver for Windows	None	5.0.10.02 NO SP	None	5.0.9 SP 8207	None	5.0.10.02 NO SP
MPEG Video Player Windows 95	Removed	1.12	NA	NA	NA	NA

Display Driver

The Armada 6500 features the ATI Rage Pro video chipset along with software drivers to enable all functionality of the chipset. Driver support is complimented by a Display Utility that provides easy access to video settings through the Windows Control Panel as well as a System Tray accessible icon that allows the user to change video resolution and color depth without requiring the computer to be power cycled.

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Multimedia

Premiere Audio

The Armada 6500 audio device drivers enable the ESS PCI Maestro 2E audio chipset to run multimedia applications using Microsoft DirectSound audio capability. The DirectSound interface provides significantly more control over the audio controller in the Armada 6500. In addition to playing WAV and MIDI files, DirectSound also provides a high-quality wave mixing facility, as well as an industry-standard MIDI playback system. Additionally, DirectSound provides added control over the memory utilization of the sound controller, allowing user-selection of sounds to be cached.

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Microsoft Multimedia Support

The versions of Windows 95, Windows 98 and Windows NT 4.0 preinstalled on the Armada 6500 include Microsoft DirectShow (a component of IE 4.01), which enables the following types of video playback:

- .AVI, .MOV and MPEG1 playback support
- Indeo4-compressed AVI playback support
- MCI support for both 16 and 32-bit applications

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Internet Explorer 4.01

Internet Explorer 4.01 (IE4) integrates the PC and the Internet which eliminates the need to use one tool to browse the Web and another to use the PC. Microsoft labels this concept as the Web PC. IE4 introduces a host of new features that solve some of the problems previously experienced by customers. The features include a Search Bar to IE4 that lists search results in view while the user explores the sites listed. Another feature of IE4 is the AutoComplete function in which the Address Bar automatically completes addresses for users based on sites already visited and also corrects syntax errors. In addition, Microsoft has included an Offline Reading feature which lets users set up favorite Web sites to be downloaded to their hard drive according to a customizable schedule for off-line viewing at a later time. Compaq has designed its own commercial channel, *The Compaq Channel for Business*, which is available for download on the Compaq Web site. It provides users with up-to-date access to helpful technical support, product information and announcement news, timely articles, and the latest software and driver downloads. More detailed information about IE 4.0 can be found in the White Paper titled *Internet Explorer 4.0 for Compaq Commercial Portable and Desktop Products*, October 1997.

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Power Management

The Armada 6500 uses Advanced Power Management (APM) version 1.2 to provide power conservation features under Windows 95, Windows 98 and Windows NT 4.0

Compaq Option Floppy Compaq Software CD Compaq Support Software CD Compaq Web Site

MultiBay Interchange Support

MultiBay Interchange Support is provided for both Windows 9X and Windows NT 4.0. This feature allows for hot swapping of the MultiBay CD-ROM and floppy disk drive, or any of the other MultiBay option drives such as DVD, LS-120 or second hard drive.

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Setup

Fn+F3 during POST will load the Armada 6500's ROM based Setup. It is operating system-independent software that allows customers to customize the configuration of their notebook.

Setup allows the user to resolve resource conflicts among devices and enable many Compaq-specific features without resorting to an operating system-dependent Compaq utility.

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Security

Passwords in ROM Setup

Supervisor

The Supervisor Password will protect the computer's ROM BIOS settings. It can also be used in lieu of the User Password for any of the User Password protected features.

User

The User Password also can control access to Setup. Additionally, passwords will protect the computer from unauthorized access when booting, when undocking, and when resuming from Standby.

ClientWORKS

ClientWORKS is the client management and networking tool supported on the Armada 6500. ClientWORKS provides a powerful set of utilities and Desktop Management Interface (DMI - 2.0 compliant) software designed to help you get the most out of your networking environments. It is similar in functionality to the Compaq Insight Management (IM) Agents, and can be used to manage Armada 6500s in an IM site.

Please refer to the white paper entitled "*Intelligent Manageability for Armada Portable PCs* for more details about ClientWORKS(<http://www.compaq.com/support/techpubs/whitepapers/na112a0598.html>).

Compaq QuickRestore CD Compaq Software CD Compaq Support Software CD Compaq Web Site

Armada 6500 Software CD Contents

Documentation

The first and most important portion of the Software CD is the Online Reference Guide. The Online Reference Guide includes information about all aspects of the computer including, but not limited to, identifying connectors, inserting and removing hardware, major hardware subsystems, upgrades, and troubleshooting. It is translated into English, French, Italian, German, Spanish, and Japanese.

When installed it is in a folder called "Documentation." The Online Reference Guide is in Adobe Acrobat (PDF) format and will require the installation of the Adobe Acrobat software which is located in the Applications section of the Software CD.

The Safety & Comfort Guide explains to the user how to properly use items like the keyboard and mouse to reduce the potential of repetitive motion injuries like Carpal Tunnel Syndrome.

There is an HTML Online Help manual to provide answers to common questions and provide information on the features and capabilities of the Armada 6500.

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Applications

Adobe Acrobat Reader

The Adobe Acrobat Reader will allow the user to view documents that are in the Portable Document Format (PDF) either stand-alone by running the Reader application or in their web browser.

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Puma Intellisync 97

For Windows 9X only, Intellisync is provided to enhance functionality for customers wishing to transfer information over the Infrared Port. Additionally, it provides PIM synchronization for Schedule+, Lotus Organizer, Lotus Organizer 97 and Outlook. It may also be used to replace Microsoft's Direct Cable Connection.

Intellisync 97 also provides the ability to get Fast Infrared transfer rates up to 4MBs on Window 95 and Windows 98.

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ESS Audio Rack 32

Audio Rack 32 is an enhanced sound playback application. It plays WAV, MIDI, or audio CD-ROMS. Additionally, it includes refined volume controls.

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Smith Micro QuickLink III

QuickLink III is a 32-bit, TAPI compliant data/fax application. It has the ability to send faxes within any Windows application. Users familiar with Windows HyperTerminal will enjoy the more robust data features of QuickLink III including automated script writing and additional file transfer protocols.

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Drivers

All of the hardware enabling drivers are located in this section. They are: Audio, Video, Dual Channel ATAPI IDE Driver, PCMCIA/CardBus¹, Infrared¹, Modem/Network, DirectX^{1,2}, USB (Universal Serial Bus)¹, TouchPad, PNP (Plug and Play)³, Power Management³, and Cardware³ drivers.

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Utilities

Documentation

Instructions for enabling the booting of the CD-ROM and floppy as well as how to enable the Euro font and currency symbol may be found here.

Compaq QuickRestore CD Compaq Software CD Compaq Support Software CD Compaq Web Site

Programs

Make Boot Diskette – This will run a batch file that will format a diskette with operating system files as well as the real mode CD-ROM and touchpad drivers.

Japanese 3-mode Floppy – This will copy an INF and VXD file needed for support of Japanese 3-mode formatted diskettes.

Compaq Diagnostics – This is the standard Diagnostics for Windows application that is found on all Armada portables. Compaq Diagnostics for Windows is an application that displays detailed PC information in a user-friendly manner. The user can retrieve data on the processor, memory, operating system, storage capacity, video, communication, input devices, serial numbers, asset tag, and others. Diagnostics is also the only application that can locally retrieve very detailed Compaq-specific information.

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¹ Windows 95 only.

Frequently Asked Questions

What are the primary differences with the software deployment strategy between the Armada 6500 and other Armada portables?

Unlike other Armada portable products that have all of the software preinstalled, the Armada 6500 only has the operating system, hardware enabling drivers and Internet Explorer 4.01 preinstalled. All value-added applications, such as fax software, are delivered on the Armada 6500 Software CD.

What hardware-enabling drivers are preinstalled?

Audio, video, Network /Modem, PCMCIA extensions including CardBus, USB, CD-ROM, PNP (Plug and Play), ATAPI/IDE .

What deliverables are on the Armada 6500 Software CD?

In addition to all of the preinstalled drivers, you will find: Adobe Acrobat Reader, Puma Intellisync 97, ESS Audio Rack 32, Smith Micro QuickLink III, Compaq Diagnostics, Clientworks, and documentation.

What software is only available on the Armada 6500 Software CD or the Compaq Support Software CD?

The Adobe Acrobat Reader, QuickLink III, and Intellisync97 are only available on CD-ROM and will not be made available on the Compaq web site.

How is the internal hard drive partitioned on the Armada 6500?

On Armada 6500 notebooks pre-installed with Windows 95 or Windows 98, the hard drive comes formatted using FAT32 in a single partition. FAT32 provides a number of advantages over its predecessor, FAT16, including support for partitions larger than 2GB and smaller cluster size. Customers who purchase models with Windows 9X pre-installed and later choose to install Windows NT 4.0 will need to repartition the hard drive using either FAT16 or NTFS. This can be accomplished using FDISK and then reformatting the hard drive. In order to avoid having to do a destructive format there are applications available on the market which will convert from one file system without requiring the user to re-format the hard drive.

On Armada 6500 notebooks pre-installed with Windows NT 4.0, the hard drive comes formatted using NTFS with a single partition. Windows NT 4.0 does not support FAT32 since NTFS (NT File System) provides comparable or better features.

Will Compaq be providing a data/fax application under Windows NT 4.0 for the Armada 6500?

Compaq provides the Smith Micro QuickLink III for faxing under Windows NT Workstation and Windows 9X. It is located on the Armada 6500 Software CD and is not preinstalled.

Is the Armada 6500 DMI 2.0 compliant?

Yes, the Armada 6500 is DMI 2.0 compliant with the addition of the ClientWORKS software. ClientWORKS has been available on the Compaq web site since 4Q98.