Addendum to the Aptiva Handbook

This Addendum applies to the Aptiva Handbook for Aptiva personal computer model 2176-C6Z. Keep this Addendum with your Aptiva Handbook.

This Addendum contains the following topics:

- "A change in your communications software" on page 1
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- "Changes in available system resources" on page 8

A change in your communications software

Your Aptiva personal computer comes with telephone and faxing capabilities. The program named in your *Aptiva Handbook* as the Aptiva Communication Center has been replaced with a more robust program called "RingCentral."

If your Aptiva has a Zip drive

If your Aptiva personal computer has an lomega Zip drive, you may have trouble using Rapid Resume features, such as Standby and Automatic Power Off. If Rapid Resume features do not work properly after you have verified that they are enabled, disable Rapid Resume activity checking for drives 3 and 4 in the Setup Utility.

To disable activity checking for drives 3 and 4, follow these steps:

- **1.** Shut down your computer and start the Setup Utility. See the *Aptiva Handbook* for instructions on starting and using the Setup Utility. These instructions are in Chapter 4.
- **2.** From the Setup Utility Main Menu, select the Rapid Resume option to open the Rapid Resume menu.
- **3.** From the Rapid Resume menu, select the Rapid Resume Advanced Options option to open the Rapid Resume Advanced Options menu.
- **4.** Select the Disabled setting for the Check Disk Drive 3 and 4 Activity option.

- **5.** Press the **Esc** key three times to display the Exit Setup Utility menu.
- **6.** In the Exit Setup Utility menu, select the option for saving and exiting and then press the **Enter** key.

If you experience problems with Rapid Resume features and then disable activity checking for drives 3 and 4, you can help prevent unexpected suspending of your computer by setting the Standby and Automatic Power Off timers to the maximum 90 minutes. If you plan to back up your hard drive to Zip drive disks or if you plan to use the *Product Recovery CD-ROM* to recover files for your hard drive, you may want to disable your Standby and Automatic Power Off features.

If you restore factory settings in the Setup Utility or use the *Product Recovery CD-ROM* to recover files for your hard drive, activity checking for drives 3 and 4 might be enabled when you finish the restoring or recovery procedure. After you complete any restoring or recovery procedure, check the setting for the Check Disk Drive 3 and 4 Activity option in the Setup Utility.

About your Mwave card

Your Aptiva personal computer contains the latest Mwave adapter card. Since this card is Plug and Play (PnP), you do not need to move any jumpers on the card to make it work with new hardware you might install in your computer. Also, unless you install a new non-PnP device, you do not need to perform any online configuration to make the Mwave card work with the new hardware.

If you install a new adapter card in your computer, see "Viewing and reconfiguring system resources" on page 4 for information about resolving possible conflicts between PnP and non-PnP devices.

If you install a new adapter card

Since the new Mwave card installed in your computer is Plug and Play (PnP), methods for planning hardware changes and configuring system resources for hardware you may install have changed since your *Aptiva Handbook* was printed. This section of the *Addendum* replaces the following *Aptiva Handbook* sections:

- "Evaluating your new hardware" in Chapter 5
- "Planning your hardware changes" in Chapter 5
- "Resolving Mwave resource conflicts" in Chapter 7
- "Resolving Plug and Play resource conflicts" in Chapter 7

The *Aptiva Handbook* Chapter 7 section titled "Setting jumpers on the Mwave card" does not apply to your computer.

Planning your hardware changes

Before you unplug your computer and pull the cover off, you should understand how your new hardware will work with your existing hardware. You should also plan a sequence for your changes and then keep records as you work.

Planning a sequence for hardware changes

If you plan to work with more than one piece of hardware, you can avoid repeated steps if you follow the recommended sequence for hardware changes. Keeping in mind that you also need to follow the instructions that came with your new hardware, follow these steps when you upgrade or replace your hardware:

 Make sure you understand how to resolve conflicts that may arise when you install the new hardware. This information is contained in "Anticipating potential conflicts" on page 4.

You may need to work with one or more online configuration utilities before you unplug your computer.

2. Turn off your computer and remove the system unit cover as instructed in the *Aptiva Handbook* Chapter 5 section titled "Opening the system unit." **3.** Complete your hardware changes as instructed in the *Aptiva Handbook* Chapters 6 and 7.

If you plan to make more than one hardware change while you have the system unit cover off, make changes in the following order:

- **a.** Make all changes on the system board.
- **b.** Add or replace any drives.
- **C.** Add or replace any adapter cards.

If you follow this sequence, you will not need to remove components you just installed to access other components.

- **4.** When you have finished working with the hardware, reassemble your computer.
- **5.** Turn on your computer.
 - If you worked with system board components and you receive any messages telling you to check the Setup Utility, follow the instructions in the section titled "Updating the Setup Utility" at the end of Chapter 6 in the *Aptiva Handbook* to verify correct configuration.
 - If you worked with adapter cards or drives and you receive any messages telling you to check the Setup Utility, follow the instructions in the section titled "Updating the Setup Utility" at the end of Chapter 7 in the *Aptiva Handbook* to verify correct configuration.

• If you receive any other messages, see Chapter 8 in the *Aptiva Handbook* for troubleshooting information and error code corrective actions.

Recording your changes

As you work, keep records of all hardware and configuration changes you make. These records will be useful if you upgrade your computer more than once or if you have trouble with the new hardware.

The information you need to record as you work includes, but is not limited to:

- Changes to jumper positions
- Connection of drive and adapter card cables to the system board
- Changes to Setup Utility settings
- Changes to settings in other online configuration utilities, such as the Windows 95 Device Manager or a configuration utility that might come with your new hardware

Viewing and reconfiguring system resources

System resources are data processing elements, such as storage locations or input/output units, that are controlled by the system and assigned for use in basic computer operations. Some system resources are used as needed, while others are assigned for use by specific devices or programs. When one device attempts to use a resource that has already been assigned to another device, your computer has a resource conflict.

If you install new hardware in your computer, the new device might attempt to use a system resource that is already assigned to hardware that was installed at the factory.

Anticipating potential conflicts

Since some system resource conflicts can interrupt basic computer operations, it's important to prevent conflicts that can be prevented before you install your new hardware. You can also prepare for conflicts that may occur without warning.

Preventing specific conflicts between Plug and Play and non-Plug and Play hardware

If you install non-PnP hardware in a computer that has any PnP hardware already installed, or if you install PnP hardware in a computer that has only non-PnP hardware already installed, you must enter the Setup Utility <u>before</u> you install the new hardware to prevent resource conflicts.

In the Setup Utility, you must assign the following Industry Standard Architecture (ISA) Legacy resources for the non-PnP hardware so that your computer's Basic Input/Output System (BIOS) does not attempt to assign those resources to PnP hardware:

- System memory regions
- Input/output (I/O) ports
- Direct memory access (DMA) channels
- Interrupt requests (IRQs)

For information about the hardware combinations that require you to assign ISA Legacy resources, see Table 1.

If the adapter card or cards currently installed are	And the adapter card you are installing is	Then do you assign resources for the non-PnP card?
None	PnP	No
	Non-PnP	No
PnP	PnP	No
	Non-PnP	Yes
Non-PnP	PnP	Yes
	Non-PnP	No
Both PnP and non-PnP	PnP	No
	Non-PnP	Yes

Table 1: Adapter card combinations requiringmanual resource assignments

Note: ISA PnP adapter cards should be clearly labelled as PnP cards. PCI adapter cards should be considered PnP cards.

For instructions on starting the Setup Utility, see Chapter 4 in the *Aptiva Handbook*. For instructions on assigning ISA Legacy resources in the Setup Utility, see the *Aptiva Handbook* Chapter 4 section titled "Changing adapter card device information."

Preparing for other possible conflicts

If you purchase hardware that is not PnP, you may not discover a possible resource conflict until you install the new hardware and receive an error message. To help prevent this problem, the new hardware's manufacturer might provide an online configuration utility or documentation to help with your installation.

A configuration utility provided by the new hardware's manufacturer can prevent conflicts if it evaluates your computer's current resource assignments before assigning resources for the new hardware. Look in any included documentation for information about any provided configuration utility's evaluation capabilities. If this information is not provided, look in the documentation for specification of resources required by the new hardware.

If you need information about your computer's default settings for system resources, see "Changes in available system resources" on page 8.

If you need information about the adapter cards installed in your computer, refer to the documentation that came with the cards. This documentation might be printed or online.

As a precaution, you may want to record the resources that are already assigned before you install your new hardware. You can use the Windows 95 Device Manager to record assigned resources. For information about the Device Manager, see "Starting and using the Windows 95 Device Manager" on page 7. If you record assigned resources before you install the new hardware, then if the hardware creates a resource conflict after you install it, you might be able to properly assign resources without removing and reinstalling the new hardware.

Working with online configuration utilities

You can use the Setup Utility and the Windows 95 Device Manager to view and correct system resource settings. You may also be able to use other configuration utilities provided with new hardware.

Automatic and manual updates to the Setup Utility

Your computer's Basic Input/Output System (BIOS) automatically detects most hardware changes and then updates the related configuration settings in the Setup Utility. If the Setup Utility is not automatically updated, then you usually receive a message reminding you to check the Setup Utility.

The *Aptiva Handbook* Chapters 6 and 7 contain instructions for manually updating the Setup Utility when changes are not automatically detected. Chapter 4 contains instructions for working with the Setup Utility.

Starting and using the Windows 95 Device Manager

You can use the Windows 95 Device Manager to record, verify, or change resource settings for many of the hardware devices installed on your computer. You can resolve resource conflicts, such as those that might occur with input/output (I/O) address, interrupt request (IRQ), and direct memory access (DMA) resources.

Device Manager lists the hardware devices installed in your computer at the factory, such as a modem or Mwave card, and many devices you might install later, such as sound and musical instrument digital interface (MIDI) devices and video and game devices.

If you reassign resources in Device Manager, you may receive a message instructing you to restart your computer.

To start the Device Manager, follow these steps:

- **1.** From the Windows 95 desktop, double-click on the **My Computer** icon.
- 2. In the My Computer window, double-click on the **Control Panel** icon.
- **3.** In the Control Panel window, double-click on the **System** icon.
- 4. In the System Properties window, click on the **Device Manager** tab.

You can print resource reports from Device Manager. These reports can include information about all the resources used by your computer or information about the resources used by selected devices or groups of devices. You can send these reports to the printer or save them to files.

For help with the Device Manager, including instructions for printing information about your hardware, follow these steps:

- **1.** From your Windows 95 desktop, click on the **Start** button.
- **2.** Click on the **Help** option.
- 3. Click on the Index tab.
- 4. Search on Device Manager.

If you need help once you have started the Device Manager, press the **F1** key to view the online help. You can also click on the window's help icon (the question mark in the upper right corner) and then click on a window area to get help for that area.

Changes in available system resources

In the *Aptiva Handbook*, Appendix A contains default system resources for you computer. These resource listings include:

- System memory regions
- System input/output (I/O) addresses
- System interrupt requests (IRQs)
- Direct memory access (DMA) channel assignments
- Serial port addresses

Since a new Plug and Play (PnP) Mwave card is now installed in your computer, the default system resources available for new hardware have changed. To view or print the latest list of resources used by your computer, use the Windows 95 Device Manager. For information about the Device Manager, see "Starting and using the Windows 95 Device Manager" on page 7.