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# Philips Velo™ 500 User's Manual

## Introduction

The Philips Velo™ 500 is a handheld PC (H/PC), a new kind of computer that you can carry with you and use almost anywhere. With the Microsoft® Windows® CE operating system and programs, your Velo 500 allows you to keep track of your appointments, take files with you, send and receive e-mail, connect to the World Wide Web, and do much more. This *Philips Velo 500 User's Manual* helps you set up your Velo 500 for the first time and introduces you to its important features, software, and optional accessories.

## Getting help and information

There are many sources of help and information about your Velo 500, the Windows CE operating system and programs, and Windows CE Services for your desktop computer:

- ▶ This book, the *Philips Velo 500 User's Manual*.
- ▶ *Handheld PC Companion*, another manual included with your Velo 500.
- ▶ Windows CE Services Help on your desktop computer.

To access Help, click **Windows CE Services Help Topics** on the **Help** menu in the Mobile Devices window.

- ▶ Philips Mobile Computing Technical Support.


You can reach Philips Technical Support by phone at 888-275-8356 or find answers to common questions on the Web at <http://www.mobile.philips.com/faqs/>

- ▶ Other Windows CE sites on the Web:

The Windows CE page on the Microsoft Corporation Web site at <http://www.microsoft.com/windowsce/>

The Philips Velo 500 page on the Philips Web site at <http://www.mobile.philips.com/products/hardware/velo500/>

After you're familiar with the basic operation of your Velo 500, you can also access the reminders and procedures on the device. Windows CE Help and ToolTips are available anytime, so there's no need to carry your manual with you.

- ▶ To access Windows CE Help, tap **Help** on the **Start** menu or tap  on the title bar or toolbar. When you open Help, you'll see topics for the application or system component you are using. To see a list of all the Help contents, tap **Other Help**.
- ▶ Velo 500 programs also provide shortcuts and tips for simple operations. Keyboard shortcuts for menu commands are listed on the menus to the right of the commands. To display keyboard shortcuts for toolbar buttons, tap and hold the stylus on the button until the ToolTip appears.

## Velo 500 hardware features

This section describes the location and function of the Velo 500 hardware features.



**Figure 1: View of Velo 500 with lid open**







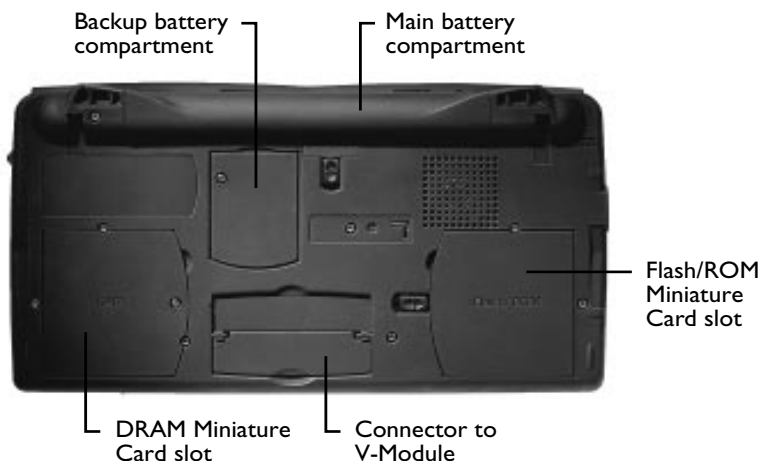
**Figure 2: Top view of Velo 500 with lid closed**

When you open the lid on your Velo 500, you have access to the touch screen, keyboard, and other important controls. These features are discussed in the sections that follow.

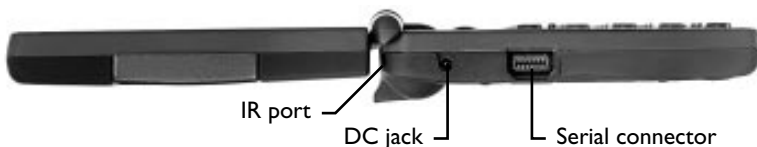
Press the Power button to turn your Velo 500 on and off. If you go several minutes without working on your Velo 500, it will preserve your work and suspend itself, shutting off automatically. Just press the Power button to start working again, right where you left off.

The three indicator lights on the front of the Velo 500 call your attention to various events:

- ▶ The green recharging indicator light  is on while the Philips Velo Rechargeable Battery pack is being recharged. The light turns off when charging is complete.
- ▶ The red serial connection light  blinks when your Velo 500 is connected to a desktop computer running Windows CE Services and a software connection has been established.
- ▶ The yellow alarm indicator light  blinks to indicate an alarm you have set. This light stops blinking when you tap  to close the alarm's dialog box or when you double-tap the alarm icon in the status area of the taskbar.



**Figure 3: Bottom view of Velo 500**



**Figure 4: Side view of Velo 500 (left side)**



## Caring for your Velo 500

Clean the casing of your Velo 500 with a damp cloth. For more persistent dirt, such as grease or oils, use a damp cloth and a solution of mild detergent in water. Do not immerse your Velo 500, and always wipe off your Velo 500 with a dry cloth after cleaning.

To clean the display, use a damp cloth or a premoistened pad designed specifically for use on computer monitors.

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**Caution** Be sure to turn off your Velo 500 before cleaning the touch screen.

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For extra protection, you may wish to purchase the optional Velo 500 carrying case. For information about the availability of carrying cases and other accessories, check the Philips Web site (<http://www.mobile.philips.com/>).

## Powering your Velo 500

The Velo 500 has two kinds of batteries. The main batteries power your Velo 500 during normal mobile use or when you are not using an external power source. The backup battery is a coin-sized lithium battery that protects your saved data when the main batteries are depleted or are temporarily removed (for example, while you replace the main batteries). The backup battery does not provide enough power to operate your Velo 500, but it will preserve your data for about 24 hours if no other power source is available. If you are close to an AC power outlet, you can connect to the power adapter that is supplied with your Velo 500.

An optional car adapter also allows you to power your Velo 500 from the DC voltage in your car. For information about the availability of car adapters and other accessories, check the Philips Web site (<http://www.mobile.philips.com/>).

## The backup battery

The backup battery was installed at the factory, but must be activated before it will protect your data.

### To activate the backup battery

- 1 Carefully pull the plastic tab free from the main battery compartment, and discard it.

### To replace the backup battery

- 1 Remove the screw from the backup battery door, and then remove the door.
- 2 Remove the old backup battery.
- 3 Insert a CR2032 (or equivalent) lithium coin cell backup battery. The side marked with a + (plus sign) faces up.
- 4 Replace the backup battery door and the screw.

## The main batteries

You can use the Philips Velo Rechargeable NiMH Battery Pack included with your Velo 500. Rechargeable AA NiCd batteries are not recommended.

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**Note** Battery life will vary depending on how you use your Velo 500.

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### To install the main batteries

- 1 Slide the battery door lock switch down to release the battery door.
- 2 Swing the battery door open until it detaches completely.
- 3 Insert the Philips Velo Rechargeable Battery Pack into the battery compartment.

A tab on the Philips Velo Rechargeable Battery Pack indicates the date of manufacture. When you insert the battery pack, position this tab so you can use it to pull the battery from the compartment.

- 4 Replace the battery door, and slide the lock switch up to lock the battery door.

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**Caution** If you remove all main and backup batteries and disconnect external power, you will lose all information in your Velo 500 and will need to restore your data from your desktop computer.

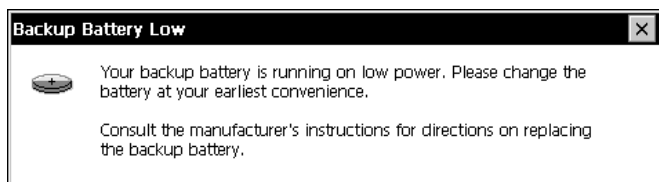
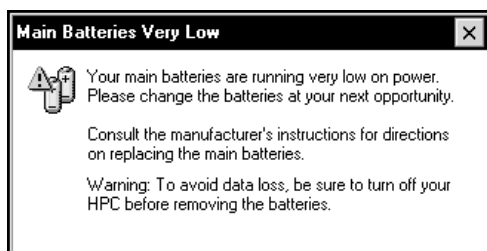
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## Low battery indicators

Your Velo 500 displays warning messages when batteries are low. Take immediate action if you see these messages.



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**Caution** To avoid data loss, do not allow the backup battery to run down. Replace it as soon as you see a message that your backup battery is low. Also, do not remove the backup battery unless the main batteries are installed and are in good condition (or you are connected to external power).

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### Tips for conserving battery power

- ▶ Do not use battery power when using PC Card accessories. PC Cards require considerable power to operate and can quickly drain your Velo 500's batteries. Always use external power when making dial-up connections with a PC Card modem. (The internal modem has very low power consumption compared to PC Card modems. It is not necessary to use external power with the internal modem.)
- ▶ Shorten auto-suspend time. To conserve battery power, your Velo 500 automatically suspends operation while on battery power after three minutes if you have not touched the keyboard or used the stylus. To maximize battery life, you can shorten this time. For more information, see "The Power control panel" in "Fine-tuning performance."
- ▶ When your Velo 500 is connected to your desktop computer, make sure the Velo Dock is connected to the AC adapter.

- ▶ Set the backlight to turn off automatically when running on battery power. Use the Display control panel to set Backlight options. For more information, see “Adjusting display properties” in “Fine-tuning performance.”
- ▶ Turn off sound events you do not require. Use the Volume & Sounds control panel to set custom sound schemes. For more information, see the Adjusting Volume and Sounds help topic on your Velo 500.

## The AC adapter

Use the AC adapter to power your Velo 500 and to recharge the Philips Velo Rechargeable Battery Pack. You can connect the AC adapter directly to your Velo 500 or use it to power the Velo Dock while your Velo 500 is connected to your desktop computer. For more information on using the Velo Dock, see “The Velo Dock” in “Connecting to a desktop computer.”

The AC adapter included with your Velo 500 is for use with 110-V AC power only. If you travel frequently or need to power your Velo 500 at other AC voltages, you can purchase an optional Philips Traveling AC Adapter. For information about the availability of AC adapters and other accessories, check the Philips Web site (<http://www.mobile.philips.com/>).

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**Warning** Use only Philips power adapters designed specifically for use with the Velo 500; otherwise, you may damage your Velo 500.


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### To connect your Velo 500 to external power

- 1 Plug the power adapter into an AC power outlet.
- 2 Plug the AC adapter into the DC jack on your Velo 500.

If the Philips Velo Rechargeable Battery Pack is installed, the batteries will be recharged while your Velo 500 is connected to AC power.

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**Note** When the Philips Velo Rechargeable Battery Pack is installed for the first time, you should connect your Velo 500 to AC power and fully charge the battery pack before you disconnect the AC adapter. Charging should take about two-and-a-half hours. While the battery pack is charging, the green recharging indicator light  is on. The light turns off when charging is complete.

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# Using your Velo 500 for the first time

## To start your Velo 500 for the first time

- 1 Slide the latch to the right and open the lid.
- 2 Press the Power button.

The Power button is just above the keyboard near the left side of the Velo 500 (see Figure 1).

- 3 The H/PC Setup Wizard will start automatically. Follow the instructions on the screen to set up your Velo 500.
- 4 If necessary, adjust the display contrast by pressing **ALT+>** or **ALT+<** on the Velo 500 keyboard.

## The H/PC Setup Wizard

The first time you use your Velo 500, the H/PC Setup Wizard will present a brief introduction to the Windows CE operating system and lead you through a few simple setup procedures:

- Calibrate the touch screen. Calibration establishes the alignment of the background image with the touch-sensitive portion of the screen and ensures the accuracy of your stylus taps.
- Set your time zone. Select your home city. Windows CE stores area codes, airport information, sunrise/sunset times, and relative distances for hundreds of cities all over the world.
- Set the date and time. Because Windows CE uses the date and time to remind you of appointments as well as to synchronize files and PIM data with your desktop computer, it's important to set the date and time correctly.
- Enter optional owner information, such as name, address and phone number. The information you type will be displayed whenever you turn on your Velo 500 and may help someone return your Velo 500 to you if it's lost.

## To begin Setup

- 1 Install the main and backup batteries according to the instructions earlier in this chapter.
- 2 Turn on your Velo 500.
- 3 Follow the H/PC Setup Wizard instructions on your screen.

Later, you can restart the H/PC Setup Wizard or use Control Panel to change any of the options you set during setup.

### To restart the H/PC Setup Wizard

- Browse to the Program Files\Accessories folder, and double-click the Welcome icon.

## Windows CE basics

Microsoft Windows CE 2.0 is similar to the Microsoft Windows 95 operating system. It includes familiar components such as the **Start** button and **Start** menu, taskbar, desktop, browser, menu bar, toolbar, Control Panel, and shortcuts.

## Using the stylus

On your Velo 500, you use the stylus in much the same way that you use a mouse with your desktop computer. Instead of clicking with the mouse, tap the stylus on the screen to select objects or activate menus. You should use the supplied stylus to touch the screen. There's no harm in using your fingertip, but many features require the stylus for finer pointing.

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**Warning** Don't use sharp objects, such as keys or pens, to touch the screen. These objects can damage the screen.

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### To use the stylus

- Slide the stylus to the right until it is out of the slot.

### To replace the stylus

- Slide the stylus into the slot, point first and ridges facing up.

Double-tap programs and documents to open them, just as you would double-click with a mouse. You can set the double-tap rate using the Stylus control panel.

### To set the double-tap rate

- 1 On the **Start** menu, point to **Settings**, and tap **Control Panel**.
- 2 Double-tap the Stylus icon.
- 3 Tap the **Double-Tap** tab.




- 4 Double-tap the checkerboard to set the speed and area of your double-tap.
- 5 Double-tap the clapper board to test your settings.

If you cannot select objects accurately with your stylus or if you notice that the accuracy of the stylus has diminished over time, you may need to record new calibration settings. You can use the Stylus control panel to recalibrate the touch screen.

### To recalibrate the touch screen

- 1 On the **Start** menu, point to **Settings**, and tap **Control Panel**.
- 2 Double-tap the Stylus icon.
- 3 Tap the **Recalibrate** tab.
- 4 Press and briefly hold the stylus on the center of the target each time it stops. It is important that the stylus is the only thing touching the screen. Be careful not to touch the screen with your fingers while calibrating.
- 5 Press the ENTER key to accept the settings, or press the ESC key to cancel the settings and start over.

If you make a mistake when calibrating the touch screen or if, over a period of time the accuracy of the touch screen diminishes, you may not be able to navigate with the stylus. To open the stylus calibration screen without using the stylus, simultaneously press CTRL+ALT+=, or press +I.

## The Windows CE taskbar

The Windows CE taskbar provides a quick way to switch between programs and open documents. Each open document or running program is shown as a button in the taskbar.

- ▶ To switch to a program or document, tap the taskbar button.
- ▶ To minimize the active program, tap the button for the active program or document.
- ▶ To minimize all programs and display the desktop, tap the desktop icon at the right edge of the taskbar.

You can set several options for the taskbar, such as whether the taskbar remains visible in all programs (Always on top and Auto hide) and whether the clock is displayed (Show Clock).

## To set taskbar options

- 1 On the **Start** menu, point to **Settings**, and tap **Taskbar**.
- 2 Select the options you want.

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**Tip** To quickly display the taskbar when it is hidden, press the  key.


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The status area on the right side of the taskbar may display several icons that indicate the status of your Velo 500, such as the state of Caps Lock, whether a connection is active, and whether the device is connected to external power. In most cases, you can double-tap a status icon for more information or to change options associated with that icon.

## Software programs

Your Velo 500 includes many useful programs that provide all the functionality you need as a mobile professional. You can also add programs from other vendors.

### Preinstalled programs

The programs included on your Velo 500 are described below. Start these programs by double-tapping the desktop shortcut or tapping the icon in the appropriate folder on the **Start** menu. Detailed procedures for common tasks are available in Help. To access Help for a specific program, start the program, and then tap **Help** on the **Start** menu, or tap  in the toolbar.

#### Accessories

**Calculator**—Perform calculations by tapping on-screen buttons or using the Velo 500 keyboard. Keep track of calculations with an on-screen “paper tape,” or copy data and paste it into documents and spreadsheets.

**World Clock**—Keep track of the current date and time, whether you're at home or away. You can set the clock to keep time for your home city and for a place you're visiting, and choose which of these time zones to use as your system time. World Clock also stores information on time zones, airports, dialing codes, and distances, and even calculates sunrise and sunset for many cities in the world.



## **Communications**

**ActiveSync**—ActiveSync enables you to connect to one or more remote computers and synchronize your calendar, tasks, contacts, and mail messages between Pocket Outlook on your Velo 500 and Microsoft Outlook or Schedule+ on the remote computer. You can also synchronize files in the Synchronize Files folder on your Velo 500 with files in the My Documents or Personal folder on your desktop computer.

**PC Link**—The PC Link program manages the connection between your Velo 500 and desktop computer. Use PC Link to connect, disconnect, or check the status of the current connection.

**Remote Networking**—Use Remote Networking to connect to an Internet service provider or to a corporate network computer that has been configured as a remote access server. After connecting to a remote computer, you can browse the Web with Pocket Internet Explorer and send and receive e-mail messages with Inbox. Remote Networking can use either PPP (point-to-point protocol) or SLIP (serial line Internet protocol) to communicate with a host computer.

**Terminal**—Use Terminal to connect to online services that require TTY or VT-100 terminal emulation. For example, you can view and download files from a bulletin board or send and receive e-mail using your Velo 500 Terminal application.

## **Microsoft Pocket Office**

**Microsoft Pocket Excel**—Calculate expenses, create reports, or manage data using this application. In addition, you can track an investment return or keep an up-to-date mileage log while you're on the road. Using Windows CE Services, you can transfer spreadsheets from your desktop computer to your Velo 500 and take them with you, or transfer spreadsheets from Pocket Excel to Microsoft Excel on your desktop computer.

**Microsoft Pocket PowerPoint**—Pocket PowerPoint lets you use your Velo 500 to view presentations created on your desktop computer. You can display presentations on the Velo 500 screen or connect to a VGA monitor using an optional V-Module and VGA PC Card.

**Microsoft Pocket Word**—Take notes, compose memos, and review reports anytime, anywhere. You can create and edit files in Pocket Word, and then transfer them to Microsoft Word for printing, or transfer Microsoft Word files to Pocket Word to review while you're traveling.

### **Microsoft Pocket Outlook**

Track contacts, manage your schedule, organize tasks, and send and receive e-mail with the integrated components of Pocket Outlook. When you are traveling or attending meetings away from your desk, use your Velo 500 to organize your day. If you also use a Microsoft information manager, such as Outlook or Schedule+, on your desktop computer, you can automatically update the information in Pocket Outlook by synchronizing your Velo 500 with your desktop computer. Pocket Outlook includes four components: Calendar, Contacts, Tasks, and Inbox. If you have an account with an Internet service provider, you can use Inbox to send and receive Internet e-mail messages via a dial-up connection. If you have Microsoft Exchange or Microsoft Outlook installed on your desktop computer, you can also transfer messages between Inbox and your desktop computer.

### **Velo Applications**

**Alarm**—With Alarm, you can use your Velo 500 as a desktop alarm clock. The Alarm program displays the system time as a full-screen digital clock. You can set an alarm to play a sound or flash the LED, and change the display to show hours and minutes or hours, minutes, and seconds.

**bFAX™ Pro and bView™**—These two full-featured programs from bSquare™ Development enable you to fax documents from your Velo 500 and to view faxes you receive from others. Use bFAX Pro for sending and receiving faxes and bView for previewing and adjusting the appearance of documents before they are faxed. You can use bFAX Pro to send documents created in other programs on your Velo 500, such as Pocket Word (.pwr) files, H/PC bitmap (.bmp) files, received fax (.tif) files, and ASCII text (.txt) files. You can customize bFAX Pro by setting options for your cover page and page layout.





**Characters**—Use the Characters program to enter international characters or symbols and characters not available on the keyboard. Select a font from the drop-down list to display the complete character set for that font, then select and copy characters directly into other programs, such as Pocket Word documents or e-mail messages.

**Database**—AllPen® Mobile Forms Database helps you organize information on your Velo 500 and share that information with your desktop computer. AllPen Mobile Forms Database lets you create, modify, and customize a database. After you have entered information into a personal database, you can update, sort, search, and manage your database with your Velo 500. You can view stored records, one record at a time or in a List view that shows all the records in the database. You can sort the information in your database or list all records that contain some piece of text in one of the fields. The information in the database is always saved in the Database folder on your Velo 500.

**FindIt**—FindIt enables you to search for files on your Velo 500. You can search for a file by file name or refine your search to look only in a certain folder, to locate files based on size, date, or type, and to search for files that contain a specific text string.

**Reset**—The Reset program (Reset.exe) provides a reliable method for resetting your Velo 500 while preserving your data after you restore data from your desktop computer or when the operating system stops responding to your commands or stylus taps. There are several methods for resetting, depending on the severity of the problem, but you should try the Reset program first. For more information, see “Resetting your Velo 500.”

**Unit Conversion**—Use the Unit Conversion program to convert between English and metric units for distance, volume, weight, and temperature or to convert currency between many international monetary units. When converting currency, you can use the approximate exchange rates provided or enter a more current exchange rate.

**Voice Memo**—Record and manage spoken memos and other sounds, without even opening your Velo 500. The button on the lid provides convenient one-touch recording anywhere. Voice memos are stored as .wav files, and you can record up to 16 minutes of sound per 1 MB of storage memory. After you record a voice memo, you can play it back, file it, or delete it when you no longer need it. Use the Audio Levels control panel to set input and output levels for the Voice Memo program.

### **Microsoft Pocket Internet Explorer**

View the wide range of information available on the World Wide Web. Like Internet Explorer on your desktop computer, Pocket Internet Explorer features a toolbar that makes it easy to enter an address, return to your start page, and save your favorite addresses. Before you can use Pocket Internet Explorer, you must have an account with an Internet service provider and create a dial-up connection to this account using Remote Networking.

## **Installing additional programs**

Programs can be purchased from many third-party vendors, such as MobileSoft (<http://www.mobilesoft.com/>). Check the Philips and Microsoft Web sites for links to other companies developing software for Windows CE. Programs must be written specifically for Windows CE. You cannot use programs designed for Windows 95 or Windows NT on your Velo 500.

Typically, when you add new software to your Velo 500, you install the program from your desktop computer. For more information, refer to the software vendor's instructions.

### **To add a program to your Velo 500**

- 1** Copy the program to your desktop computer, or insert the installation disk or CD-ROM in a drive on your desktop computer.
- 2** Connect your Velo 500 to your desktop computer. See page 25 for instructions.
- 3** On your desktop computer, double-click the installation icon, or type *a:setup*, where *a*: is the letter of the drive containing the installation program.

You can also copy fonts, sounds, and graphics from your desktop computer to your Velo 500.



## **To add fonts, sounds, or graphics to your Velo 500**

- 1 Connect your Velo 500 to your desktop computer, and start Windows CE Services.
- 2 On your desktop computer, drag the file(s) to the Windows folder on your Velo 500.

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**Note** Because fonts, sounds, and graphics can use up valuable storage memory, you should add only the files you need and delete those that you don't use.

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## **Removing programs**

You can free up storage memory on your Velo 500 by removing programs you don't use or don't need. Programs you've installed can be removed by using the Remove Programs control panel; however, you cannot remove the pre-installed programs that came with your Velo 500 and are stored in ROM.

### **To remove software from your Velo 500**

- 1 On the **Start** menu, point to **Settings**, and tap **Control Panel**.
- 2 Double-tap the Remove Programs icon.
- 3 Select the program you want to remove from the list.
- 4 Tap **Remove**.

## **Quick Start keys**

Velo 500 Quick Start keys enable you to start your favorite programs at the touch of a button. By default, the Quick Start keys are assigned to the most common Velo 500 programs, but you can reassign the keys to start any program or open any file using the Quick Start control panel.

### **To start a program with a Quick Start key**

- ▶ On the keyboard, hold down the **ALT** key, and press one of the number keys.

Default program assignments are printed on the keyboard above the numbered keys.

## To assign a program or document to a Quick Start key

- 1 On the **Start** menu, tap **Settings**, and then tap **Control Panel**.
- 2 Double-tap the Quick Start icon.
- 3 Under **Key Combination**, select the Quick Start key you want to change.
- 4 Under **File to Launch**, type the full path of the program or file you want to start, or click **Browse** to locate the file.
- 5 If you want to include parameters when the program starts, type these under **Launch Parameters**. If you're not sure or you don't want to specify parameters, leave this space blank.
- 6 Click **OK** to save your settings and exit the control panel.

## Fine-tuning performance

This section explains how to change or set several properties of the Velo 500 to suit your personal preferences and working style and provides tips on how to get the most from your Velo 500.

### The Power control panel

Use the Power control panel to check the status of the batteries in your Velo 500 and to set options for Auto Suspend. By default, your Velo 500 automatically suspends operation while on battery power after three minutes if you have not touched the keyboard or used the stylus. To maximize battery life, you can shorten this time.

#### To check battery power

- 1 On the **Start** menu, point to **Settings**, and tap **Control Panel**.
- 2 Double-tap the Power icon.
- 3 Tap the **Battery** tab to view battery status.

---

**Tip** The battery icon will appear only when the batteries begin to weaken. You can then view the battery status by double-tapping the Power icon in the status area of the taskbar.

---



### To adjust the auto-suspend time

- 1 On the **Start** menu, point to **Settings**, and tap **Control Panel**.
- 2 Double-tap the Power icon.
- 3 On the **Power Off** tab, select a time delay from the list.

---

**Note** YourVelo 500 will not suspend while it is connected to a desktop computer.

---

## Adjusting display properties

You can change several properties of the Velo 500 screen to improve visibility in different lighting conditions. This section explains how to adjust the contrast, set the screen to display either 4 or 16 shades of gray, and use the backlight so you can work when there is not enough ambient light available.

### To adjust the contrast

- ▶ On the keyboard, simultaneously press ALT+< or ALT+> until the display is at the desired contrast.

Change the Gray Scale settings to improve performance or display images with higher quality. Graphics and Web pages will look better at 16 shades of gray; however, overall performance is faster when the display is set to 4 shades of gray.

### To change the screen resolution

- 1 On the **Start** menu, point to **Settings** and tap **Control Panel**.
- 2 Double-tap the Gray Scale icon.
- 3 Select either 4 or 16 grays.

You can press ALT+SPACE to turn the backlight on and off or you can set the backlight to turn on automatically when you touch the screen or type on the keyboard.

Because the backlight consumes a significant amount of power, you can set the backlight to turn off automatically when you have not touched the screen or typed on the keyboard for awhile. Setting the backlight to turn off automatically helps extend the life of the batteries.

## To turn the backlight on or off

- 1 Simultaneously press ALT+SPACE.

## To set automatic backlight options

- 1 On the **Start** menu, point to **Settings**, and tap **Control Panel**.
- 2 Double-tap the Display icon.
- 3 Tap the **Backlight** tab.
- 4 Select the options you want.

# Memory management

The memory on your Velo 500 is allocated between *storage* memory and *program* memory. If you do not have enough space for a file, you should increase the amount of storage memory. If your Velo 500 is running slowly, try increasing the amount of program memory.

## To adjust memory allocation

- 1 Delete any unnecessary files and empty the Recycle Bin (see the following procedure).
- 2 Exit all programs.
- 3 On the **Start** menu, point to **Settings**, and tap **Control Panel**.
- 4 Double-tap the System icon.
- 5 On the **Memory** tab, adjust the memory slider, as appropriate.

---

**Note** In some cases, resetting your Velo 500 can free up additional storage and/or program memory. If you experience memory problems, quit all programs, and run the Reset program. For more information, see “Resetting your Velo 500” in this manual.

---

You can increase the amount of memory available by deleting files you no longer need. Files you delete are stored in the Recycle Bin; they are not actually removed from your Velo 500 until you “empty” the Recycle Bin. To free up memory, you should periodically empty the Recycle Bin.



### To delete a file or folder

- 1 In Windows CE Explorer or My Handheld PC, select the file or folder you want to delete.
- 2 In the toolbar, tap the delete icon [icon]. ???

### To empty the Recycle Bin

- 1 Double-tap the Recycle Bin icon.
- 2 On the **File** menu, tap **Empty Recycle Bin**.

You can customize the Recycle Bin to remove deleted files immediately or to allocate more or less space for deleted files.

### To adjust the Recycle Bin settings

- 1 Double-tap the Recycle Bin icon. Make sure no files are selected.
- 2 On the **File** menu, tap **Properties**.
- 3 To remove deleted files immediately, select the **Do not move files to the Recycle Bin** check box.
- 4 To adjust the amount of storage memory allocated to deleted files, move the slider.

## Connecting to a desktop computer

The Microsoft compact disk that came with your Velo 500 includes Windows CE Services 2.0 with ActiveSync™, a program that enables you to transfer files between your desktop computer and Velo 500, to synchronize data from the Pocket Outlook programs on your Velo 500 with Outlook or Schedule+ on your desktop computer, transfer e-mail messages from Inbox on your Velo 500 to either Outlook or Microsoft Exchange, and synchronize documents, spreadsheets, or data files. This section tells how to install Windows CE Services 2.0 with ActiveSync and gives you an overview of the functions. For detailed procedures, refer to Windows CE Services Help on your desktop computer.

In addition to Windows CE Services 2.0, the Windows CE Services compact disc contains Microsoft Schedule+ 7.0a and updates to the Windows Messaging System (Microsoft Exchange) and Windows 95 Dial-Up Networking. The installation program will check for and install these components, as necessary, to ensure that you can set up and run Windows CE Services 2.0.

## System requirements

The minimum PC requirements for running Windows CE Services 2.0 are as follows:

- Microsoft Windows NT Workstation 4.0 or Windows 95
- Desktop computer with a 486/33DX or higher processor (Pentium® P90 recommended)
- 12 MB of memory for Windows NT Workstation 4.0
- 8 MB of memory (12 MB recommended) for Windows 95
- Hard disk drive with 10 to 50 MB of available hard disk space (actual requirements will vary, based on selection of features and current system configuration)
- Available 9- or 25-pin communications port (for a 25-pin port, use the adapter included with your Velo 500.)
- CD-ROM drive
- VGA or higher-resolution graphics card (Super VGA 256-color recommended)
- Keyboard
- Microsoft Mouse or compatible pointing device

In addition, the following optional system components will allow you to use certain features of Windows CE Services:

- Audio card and speakers for sound
- Microsoft Office 97 or Microsoft Office 95
- Serial or built-in infrared adapter for synchronization
- Modem for remote synchronization
- Ethernet LAN connection for remote synchronization





## Installing Windows CE Services 2.0

The Windows CE Services 2.0 installation program includes several steps. The steps you follow depend on your operating system (Windows 95 or NT) and system configuration. When you run Setup, it tests for installed components and prompts you to install only those components you need. To ensure you install all the necessary components, simply click each button in order on the Setup screen. You may need to restart your computer after each step.

### To install Windows CE Services 2.0

- 1 Insert the Microsoft Windows CE Services compact disc in a CD-ROM drive on your desktop computer.  
Setup should begin automatically.
- 2 If Setup does not begin automatically, click **Run** on the **Start** menu, and then type *d:setup* and press ENTER, where *d:* is the letter of the drive containing the Microsoft Windows CE Services compact disc.
- 3 Follow the instructions on your screen to complete installation.

You can install optional items from the Windows CE Services compact disc as the final step of the installation process. Optional items on the Windows CE Services compact disc may include networking components and infrared device drivers for your desktop computer and/or Microsoft programs for your Velo 500. If you choose to install the H/PC programs during Setup, you will be prompted to connect your Velo 500 to your desktop computer before completing the Setup program. For more information about connecting your Velo 500 and establishing a partnership under Windows CE Services 2.0, see “Establishing a partnership.”

## The Velo Dock

Use the Velo Dock to connect to your desktop computer and to recharge your batteries (if the rechargeable battery pack is installed).



**Figure 5: The Velo Dock**

### To connect to the Velo Dock

- 1 Plug the AC adapter into the DC jack on your Velo Dock.
- 2 Connect the cable on the Velo Dock to a serial port on your desktop computer.
- 3 Place your Velo 500 in the Velo Dock, and slide the Velo 500 to the left until it snaps into place.

---

**Note** If you are having trouble connecting to your desktop computer, be sure your Velo is securely docked.

---

- 4 Never exert pressure on the cover to insert into, or remove your Velo from, the Dock. Always grip the bottom of the device.

---

**Note** You can also connect your Velo 500 to your desktop computer using the optional serial cable. For information about the availability of serial cables and other accessories, check the Philips Web site at <http://www.mobile.philips.com/>

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## Establishing a partnership

Windows CE Services 2.0 creates a partnership between your Velo 500 and your desktop computer. This allows you to synchronize documents, appointments, tasks, and contacts, as well as to back up your data and transfer files. To establish this partnership, you need to set up Windows CE Services 2.0 by connecting your Velo 500 to your desktop computer and completing the New Partnership Wizard. The wizard helps set up components for the various tasks that Windows CE Services 2.0 performs, including backing up your Velo 500 data and synchronizing data. You can learn more about backing up, synchronizing, and transferring files later in this section.

### To connect your Velo 500 to your desktop computer and establish a partnership

- 1 Insert the serial port connector of the Velo Dock into the serial port of your desktop computer which you selected during Windows CE Services 2.0 setup.
- 2 Place your Velo 500 in the Velo Dock.

Your Velo 500 will turn on automatically, and the red serial connection indicator light  will blink. After a few moments, Windows CE Services 2.0 should recognize the connection.

---

**Note** If you have enabled password protection on your Velo 500, Windows CE Services 2.0 requests that you enter a password before it will recognize the connection.

---

- 3 If you are running Windows NT on your desktop computer, the logon screen appears on your Velo 500. Type *guest* in the **User Name** box, make sure that both the **Password** and **Domain** boxes are empty, and then tap **OK**. If you or your network administrator have changed permissions for the guest account, you may have to log on using your personal NT account (including your domain and password).
- 4 Windows CE Services 2.0 starts the New Partnership Wizard. Follow the instructions on your screen.

## **Browsing your Velo 500 desktop**

When your Velo 500 is connected to your desktop computer, you can use Windows CE Services 2.0 to browse files on your Velo 500, just as you would browse files in any other folder. The only difference is that you cannot start programs that reside on the Velo 500 from Windows CE Services; double-clicking the icon for a program or file residing on your Velo 500 displays the properties for that program or file.

When you install Windows CE Services 2.0, the Mobile Devices folder is created in the root folder of your hard disk. When connected to your desktop computer, your Velo 500 appears as an icon in the Mobile Devices folder.

### **To start Windows CE Services**

- 1 Connect your Velo 500 to your desktop computer.

---

**Note** The first time you connect your Velo 500, Windows CE Services 2.0 may prompt you to select a communications port. Select the port to which your Velo Dock or serial cable is connected, and make sure the port speed is set to 19,200.

---

- 2 In My Computer, browse to the Mobile Devices folder, and double-click the Velo 500 icon.

## **Synchronizing data and files**

Windows CE Services 2.0 with ActiveSync enables you to synchronize data between Microsoft Outlook or Schedule+ on your desktop computer and the Pocket Outlook programs on your Velo 500. You can also synchronize the files in the My Documents\Synchronize Files folder on your Velo 500 with files in the My Documents (Windows 95) or Personal (Windows NT) folder on your desktop computer. Files and Outlook data can be synchronized automatically or manually.

If you choose to synchronize data automatically, ActiveSync will update all data whenever you connect your Velo 500 to your desktop computer. By synchronizing data automatically, you can be sure your appointments, tasks, and contacts are always readily accessible. If you choose to synchronize manually, you can do so at any time by clicking **Synchronize Now** on the **Tools** menu in the Mobile Devices window.



A synchronization conflict occurs when the same item has been modified both on the desktop computer and on the Velo 500. If you have conflicting items after synchronization, you will be prompted to resolve them in the **Resolve Conflict** dialog box. You can also set ActiveSync to resolve conflicts automatically the next time you synchronize.

---

**Note** You cannot synchronize data by dragging an Outlook or Schedule+ data file to your Velo 500.

---

### **Backing up and restoring your Velo 500 data**

You can use Windows CE Services to back up your Velo 500 data to a storage file on your desktop computer. If the information is ever lost or corrupted on your Velo 500, you can restore the data from the backup file.

You can back up your Velo 500 manually by updating the backup file when you've made important changes, or you can set Windows CE Services to automatically back up any changes each time you connect your Velo 500 to your desktop computer. For more information on backing up your Velo 500 and setting backup options, refer to Windows CE Services Help on your desktop computer.

The first time you back up your Velo 500, you are asked to specify a location for the backup file. Do not store the backup file in your desktop computer's temporary folder (by default, Windows\Temp). Backup will not operate correctly, and the integrity of your data will be compromised if you use your temporary directory.

When you restore your Velo 500 from the backup file, all information on your Velo 500 is erased and replaced by the information in the backup file. Any changes you've made since the last backup will be lost. After restoring data, you must disconnect and reset your Velo 500 using the Reset program (see "Resetting your Velo 500"). If you fail to reset, your Velo 500 will not function properly, and you will be unable to reconnect until the reset is completed.

## **Transferring and converting files**

You can transfer files between your desktop computer and your Velo 500 by dragging files to and from the Velo 500 icon in the Mobile Devices folder or by using **Cut**, **Copy**, and **Paste** on the **Edit** menu.

When you drag or copy and paste a file between your Velo 500 and your desktop computer, a version of the file exists in both locations. If you convert or transfer a file, make changes to the file, and then convert or transfer the file back to its original location, Windows CE Services assigns the file a new file name to preserve the integrity of your original file.

In addition to transferring files, you may need to convert certain file types, such as Microsoft Word or Microsoft Excel files, before you can use them on your Velo 500. Files originating on the Velo 500 that you want to transfer to or print from your desktop computer may also have to be converted. You can set Windows CE Services to convert selected file types automatically while they are transferred, using conversions you specify or the defaults provided for the most common types of files.

---

**Caution** When a file is transferred, it may be converted into a different file type, and some formatting may be changed or removed for efficiency. For more information about file conversions, see Windows CE Services Help on your desktop computer.

---

When creating files on the desktop computer, it is best to accept the default file name extension. If you change the extension so that it does not match the file type, file conversion may not work.

## **Printing files from your Velo 500**

Your Velo 500 provides several options for printing. You can connect your Velo 500 directly to a serial or parallel printer, use the infrared port to send files to an IrDA-compatible printer, or use Windows CE Services to print a file that resides on your Velo 500 from a desktop computer.

To connect directly to a serial printer, you will need an optional serial cable. For information about optional cables and other accessories, check the Philips Web site at <http://www.mobile.philips.com/>



### To print from your Velo 500

- 1 Line up the infrared port on your Velo 500 with the infrared port on the printer.
- 2 On your Velo 500, open the document you want to print, and tap **Print** on the **File** menu.
- 3 In the **Print** dialog box, select the port (infrared or serial) and other printing options.
- 4 Tap **OK**.

If you print through Windows CE Services, the file is converted and then printed using the print defaults established in the desktop computer application to which the file is converted. If the desktop application does not support printing, Windows CE Services will not be able to print the file.

### To print a file using Windows CE Services

- 1 Connect your Velo 500 to the desktop computer.
- 2 In My Computer on your desktop computer, double-click the Velo 500 icon in the Mobile Devices folder, and select the file you want to print.
- 3 On the **File** menu, click **Print**.

## Connecting to a remote computer

The Velo 500 includes a built-in modem for connecting to a telephone line and an infrared port for connecting to other IrDA-compatible devices. You can use the modem to explore the Internet, send and receive e-mail, send and receive faxes, and connect to other services. Use the infrared port to share files with another H/PC or to send files to an infrared-equipped printer or PC.

This section provides an overview of the steps involved in connecting to remote computers in these ways. For detailed procedures, refer to "Getting Connected" in Windows CE Services Help on your desktop computer and the Communications help topic on your Velo 500.

## Modem connection

You can use the built-in modem or a PC Card modem to connect your Velo 500 to a remote computer over the Internet or by dial-up connection to a remote access service (RAS) server. In each case, you must first use the Remote Networking program on your Velo 500 to configure a connection for the host computer. For detailed instructions on configuring a connection, refer to “Getting Connected” in Windows CE Services Help on your desktop computer and the Communications help topic on your Velo 500.

---

**Note** To use the built-in modem on your Velo 500, you must select Internal modem on COM 4 when creating a new dial-up connection. For more information, refer to the Communications help topic on your Velo 500.

---

---

**Warning** Do not connect your Velo 500 to a digital telephone line. The internal modem is designed for use only with analog telephone lines; connecting to a digital telephone line may damage the device. Before connecting, verify that the line is analog or check with the professional who maintains your telephone lines.

---

### To connect to a telephone line

- ▶ Open the RJ-11 jack, and plug in a standard telephone line.

The RJ-11 jack is on the lid of the Velo 500 (see Figure 2).

---

**Note** The built-in modem is designed for use only in the U.S.

---

## Transferring files between H/PCs by infrared

If you need to give someone your meeting notes or turn in an expense report, you can send these files from your Velo 500 to another H/PC using the built-in infrared ports. You can send one file at a time, which will be placed on the receiving H/PC. You can also send contact cards from Pocket Outlook.





---

**Note** If your desktop computer is equipped with an IrDA-compatible infrared device, you can also use infrared to transfer files to and from your desktop computer. To do so, you must install infrared device drivers for Microsoft Windows. For more information, refer to the documentation that came with your infrared device.

---

### **To send or receive a file using infrared**

- 1 In Windows CE Explorer on your Velo 500, select the file you want to send, and then tap **Send** on the **File** menu.
- 2 Line up the infrared ports on the H/PCs.  
Make sure that the receiving H/PC is turned on and is within a few feet of the sending H/PC.
- 3 In Windows CE Explorer on the receiving H/PC, tap **Receive** on the **File** menu.

### **To send or receive a contact card by infrared**

- 1 In Contacts, select the contact card you want to send, and then tap **Send** on the **File** menu.  
You can send more than one contact card at a time by selecting multiple cards in the contact list before you tap **Send**.
- 2 Line up the infrared ports on the H/PCs.  
Make sure that the receiving H/PC is turned on and is within a few feet of the sending H/PC.
- 3 On the receiving H/PC, open Contacts, and then tap **Receive** on the **File** menu.

### **Tips for infrared communication**

If you have trouble sending or receiving files by infrared, try the following tips to improve communication:

- Position each H/PC so that the infrared ports line up with one another. Make sure the infrared ports are within three feet (one meter) of each other.
- Make sure neither infrared port is blocked. The infrared port may be blocked if you swing the display fully open.
- Some types of fluorescent lamps may interfere with infrared communication. To minimize interference, try turning off some lights or moving to a location with different lighting.

## Resetting your Velo 500

Occasionally, you will need to reset your Velo 500, for example, after you restore data from your desktop computer or when the operating system stops responding to your commands or stylus taps. There are several methods for resetting, depending on the severity of the problem. In most cases, you can reset your Velo 500 without losing any data; however, to ensure the safety of your information, you should regularly back up your data to your desktop computer.

The Reset program (Reset.exe) is the most reliable method for resetting your Velo 500 while preserving your data. The Reset program is already installed in the Velo Applications folder on your Velo 500.

### To reset your Velo 500 using the Reset program

- 1 On the **Start** menu, tap **Programs**, tap **Velo Applications**, and then tap **Reset**.
- 2 In the **Reset Velo 500** dialog box, tap **Yes**.

Only when the Reset program fails to correct a problem should you press the Reset button with the stylus. Pressing the Reset button once should retain the data stored on your Velo 500.

---

**Caution** Pressing the reset button multiple times will cause your Velo 500 to do a full restart. This will erase all information not stored in ROM.

---

In the most severe cases, such as when your Velo 500 doesn't respond to the Reset button or if you forget your password, you may need to perform a "full restart" by removing all power, including the main and backup batteries, from your Velo 500. Resetting in this way will erase all files and programs you have saved on your Velo 500.

---

**Caution** Performing a full restart by removing and reinstalling all batteries erases all files, programs, and appointments you have entered. You can restore this data from the backup file on your desktop computer; however, the information will be only as current as the most recent backup.

---



## Expanding your Velo 500

Your Velo 500 comes with many built-in features, and you can expand it to add even more capabilities. The Velo 500 includes two slots for industry-standard Miniature Cards that can hold additional memory and software. One slot can hold DRAM Miniature Cards for memory expansion. The other slot can hold either flash memory Miniature Cards for memory expansion or ROM Miniature Cards for operating system upgrades (see Figure 3). With the optional Type II PC Card V-Module, you can add cellular modems, pagers, and other devices on PC Cards (also called PCMCIA cards). Check the Velo 500 Web site (<http://www.mobile.philips.com/>) for announcements of other types of V-Modules that add more functionality to your Velo 500.



**Figure 6: Type II PC Card V-Module**

### DRAM Miniature Cards

You can add memory by installing a DRAM Miniature Card in the RAM slot on the bottom of your Velo 500. Memory contained on a DRAM Miniature Card can be used as either storage or program memory, and is included in the system memory shown on the Memory tab of the System control panel.

---

**Warning** Only Philips Miniature Cards are guaranteed to work properly with the Velo 500.

---

## To install a DRAM Miniature Card

- 1 Back up your Velo 500 using Windows CE Services on your desktop computer. (For instructions on backing up your Velo 500, see Windows CE Help on your desktop computer.)
- 2 Turn off your Velo 500.

---

**Caution** If you remove all main and backup batteries and disconnect external power, you will lose all information you have entered. You can restore this data from the backup file on your desktop computer; however, the information will be only as current as the most recent backup. Make sure you back up your Velo 500 immediately before removing all batteries.

---

- 3 Remove all batteries (including the backup battery).
- 4 Remove the screw from the DRAM Miniature Card slot, and remove the door to the slot and the dummy card.

---

**Note** Save the dummy card so you can reinsert it if you remove the DRAM Miniature Card.

---

- 5 Insert the connector side of the DRAM Miniature Card into the connector slot on the Velo 500, and push down on the DRAM Miniature Card until it snaps into position.
- 6 Replace the door.
- 7 Replace the screw, and install the batteries.
- 8 Turn on your Velo 500.
- 9 Restore the data to your Velo 500 using Windows CE Services 2.0 on your desktop computer.
- 10 If your Velo 500 does not reset automatically when you turn it on, run the reset program to ensure proper synchronization. (On the **Start** menu, point to **Programs**, point to **Velo Applications**, and tap **Reset**.)



## To remove a DRAM Miniature Card

---

**Caution** Make sure your data will fit into your Velo 500 after removing the DRAM Miniature Card.

---

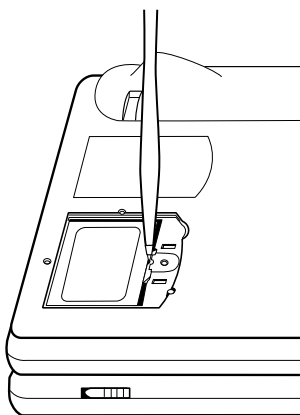
- 1 Back up your Velo 500 using Windows CE Services on your desktop computer. (For instructions on backing up your Velo 500, see Windows CE Help on your desktop computer.)
- 2 Quit all programs, and turn off your Velo 500.

---

**Caution** If you remove all main and backup batteries and disconnect external power, you will lose all information you have entered. You can restore this data from the backup file on your desktop computer; however, the information will be only as current as the most recent backup. Make sure you back up your Velo 500 immediately before removing all batteries.

---

- 3 Remove all batteries (including the backup battery).
- 4 Remove the screw from the DRAM Miniature Card slot, and remove the door to the slot.
- 5 Push the tip of the stylus between the DRAM Miniature Card and the white latch (See Figure 7). The DRAM Miniature Card will pop up.



**Figure 7: Removing the DRAM Miniature Card with the stylus**

- 6 Remove the DRAM Miniature Card.
- 7 Replace the dummy card and the cover.
- 8 Replace the screw, and install all batteries.
- 9 Turn on your Velo 500.
- 10 Restore the data to your Velo 500 using Windows CE Services 2.0 on your desktop computer.

---

**Caution** Any data stored on your DRAM Miniature Card will be lost.

---

## Flash memory Miniature Cards

You can add storage memory by installing a flash memory Miniature Card in the Flash/ROM slot on the bottom of your Velo 500. Storage memory on a flash memory Miniature Card will not be included on the Memory tab of the System control panel. You will not lose the information that is stored on the card when you remove the flash memory Miniature Card.

---

**Note** You cannot add a flash memory Miniature Card if you already installed an operating system upgrade ROM Miniature Card in the Flash/ROM slot.

---



---

**Caution** After you install or remove a flash memory Miniature Card, your Velo 500 will reset automatically. Any unsaved information will be lost.

---

### To install a flash memory Miniature Card

- 1 Connect your Velo 500 to your desktop computer.
- 2 Insert the Flash Memory Miniature Card disk into a disk drive on your desktop computer.
- 3 On the **Start** menu, click **Run**, and then type *a:setup* and press ENTER, where *a:* is the letter of the drive containing the Flash Memory Miniature Card disk.
- 4 Follow the instructions on your screen.

---

**Note** Check the Philips Web site (<http://www.mobile.philips.com/>) for the latest version of the Flash Memory Miniature Card software.

---

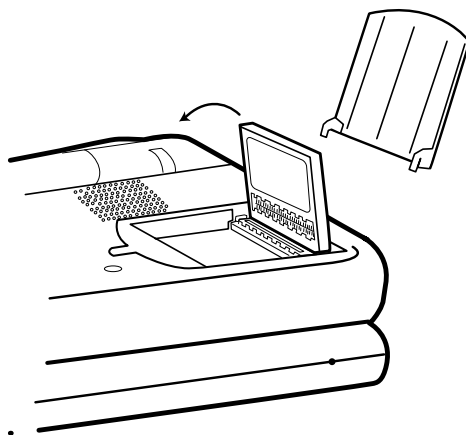
- 5 Quit all programs, and turn off your Velo 500.
- 6 Slide back the switch to open the door to the Flash/ROM slot, and remove the door and the dummy card.

---

**Note** Save the dummy card so you can reinsert it if you remove the flash memory Miniature Card.

---

- 7 Insert the flash memory Miniature Card and replace the door.
- 8 Turn on your Velo 500.



**Figure 8: Inserting a flash memory Miniature Card**

You can open files and folders in the PC Card folder as you would in any other folder on your Velo 500.

#### **To remove a flash memory Miniature Card**

- 1 Quit all programs and turn off your Velo 500.
- 2 Slide back the switch to open the door to the Flash/ROM slot, and remove the door.
- 3 Remove the flash memory Miniature Card.
- 4 Replace the dummy card and the door.
- 5 Turn on your Velo 500.

### To remove the flash memory Miniature Card software

- 1 Remove the flash memory Miniature Card (see previous section).
- 2 On the **Start** menu, point to **Settings**, and tap **Control Panel**.
- 3 Double-tap the **Remove Programs** icon.
- 4 Select **MCFlash** from the list, and tap **Remove**.
- 5 In the **Remove Program** dialog box, tap **Yes**.
- 6 After **MCFlash** is removed from the list, tap **OK**.

---

**Note** You cannot remove the flash memory Miniature Card software while the flash memory Miniature Card is in your Velo 500.

---

## Using PC Card accessories

By using the optional Type II PC Card V-Module, you can add cellular modems, pagers, and other PC Card-based accessories to your Velo 500.

---

**Warning** Not following the instructions for installing and removing the V-Module can seriously damage your Velo 500.

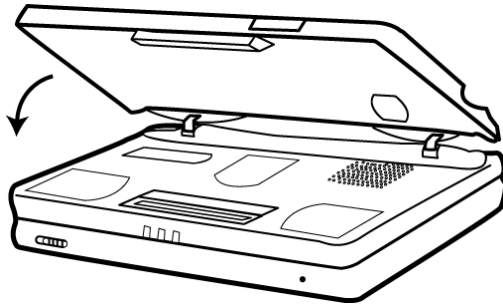
---

### To attach the V-Module

- 1 Be sure the V-Module latch on the bottom of the V-Module is in the unlock position.
- 2 Be sure your Velo 500 is turned off.
- 3 Open the connector door on the bottom of your Velo 500. (See Figure 3.)
- 4 Snap the V-Module to the bottom of the Velo 500, aligning the connector (see Figure 9).
- 5 Slide the V-Module latch into the lock position.

Once the V-Module is attached, you can insert or remove PC Cards without turning off the Velo 500.





**Figure 9: Snapping the Type II PC Card V-Module to the Velo 500**

---

**Warning** Attach and detach the V-Module only when necessary. Frequently attaching and detaching (multiple times per day) the V-Module can ultimately damage your Velo 500.

---

#### **To remove the V-Module**

- 1 Be sure your Velo 500 is turned off.
- 2 Slide the latch on the bottom of the V-Module into the unlock position.
- 3 Push back the V-Module release button, and remove the V-Module.
- 4 Close the connector door on your Velo 500.

#### **To install a PC Card in the V-Module**

- ▶ Slide the PC Card into the V-Module's card slot until it locks in place.

You can use Type I or Type II PC Cards with the V-Module. For a list of supported cards, see the Philips Velo 500 Web site at <http://www.mobile.philips.com/>

#### **To remove a PC Card from the V-Module**

- 1 Push the PC Card release button located next to the PC Card slot.
- 2 Remove the PC Card from the V-Module card slot.

## Physical specifications

### Physical description of the Velo 500

Dimensions	171 mm (6.75") by 95 mm (3.75") by 32 mm (1.25")
Weight	370 g (13 oz.) without batteries

### Power

Main battery	Requires 1 NiMH rechargeable battery pack
Backup battery	Requires CR2032 lithium coin cell
DC jack	12V @ 500mA




### Processor and basic input/output

Keyboard	61-key QWERTY layout Quick Start keys to start applications
Display	Backlit, nonglare, touch screen display, grayscale LCD (640 x 240 pixels, .23mm dot pitch) with controllable contrast and on-demand backlighting
CPU	3.3V 32-bit MIPS-based PR31700 RISC processor @ 75 MHz
Memory	16 MB EDO DRAM, 16 MB Fast Page Mode ROM

### Other input/output

Serial port	RS-232 serial port Supports data transfer rate up to 230 kbps.
Infrared transceiver	Meets IrDA standard (Level 1) Data transfer rate up to 115 kbps.



Indicator lights	Green recharging indicator light  indicates charging of the rechargeable batteries
	Red serial connection indicator light  indicates communication over the Serial connector
	Yellow alarm indicator light  indicates alarms or messages
Audio in	Omnidirectional microphone used in conjunction with Voice Memo application
	Records up to 16 minutes per MB using TrueSpeech™ 8.5 sound compression
Audio out	Speaker on the bottom can play standard .wav files with sample rates: 8 kHz 8 or 16 bit mono 11 kHz 8 or 16 bit mono 11.025 kHz 8 or 16 bit mono 22 kHz 8 or 16 bit mono 22.050 kHz 8 or 16 bit mono
Modem	28.8-kbps data 9600-bps fax send/receive

## Expansion

Velo Dock	Provides connection to desktop computer and external power supply. Begins synchronization if software is running on desktop computer. Recharges batteries with Philips rechargeable battery pack installed.
Miniature Card slots	Two industry-standard expansion slots for DRAM, Flash memory, or ROM upgrades
Type II PC Card V-Module (optional)	Contains one PC Card slot (Type II PCMCIA), power specification: Vcc= 5V @ 325mA, Vpp= 5V

## Regulatory information

### Declaration of conformity

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

<b>Responsible Party Name</b>	Philips Mobile Computing Group
<b>Telephone</b>	1-888-275-8356
<b>Product/Model</b>	Velo 500

### FCC warning statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it can cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Determine if the equipment does cause interference to radio or television reception by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:

- 1 Where it can be done safely, reorient or relocate the receiving antenna.
- 2 Increase the separation between the equipment and receiver.
- 3 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4 Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment. Shielded interface cables must be used when operating this device or the user's authority to operate this equipment could be voided.



## Telephone Consumer Protection Act of 1991

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone facsimile machine unless such message clearly contains, in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. To program this information into your facsimile, complete the steps described in “To set up a fax service” in Inbox Help on your Velo 500.

### FCC Part 68 requirements

- ▶ This equipment complies with Part 68 of the FCC rules. On the back of the computer is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.
- ▶ The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.
- ▶ If trouble is experienced with this equipment, please contact Philips Mobile Computing Group at 1-888-275-8356 for repair and (or) warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved.
- ▶ This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.
- ▶ This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is FCC Part 68 compliant.

## Canadian IC CS-03 requirements

**Notice:** The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s).

The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

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**Caution** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

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### **Ringer equivalence**

The Ringer Equivalence Number (REN) of this device is 0.6B.

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**Notice:** The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5. The equipment uses a CA 11A jack.

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