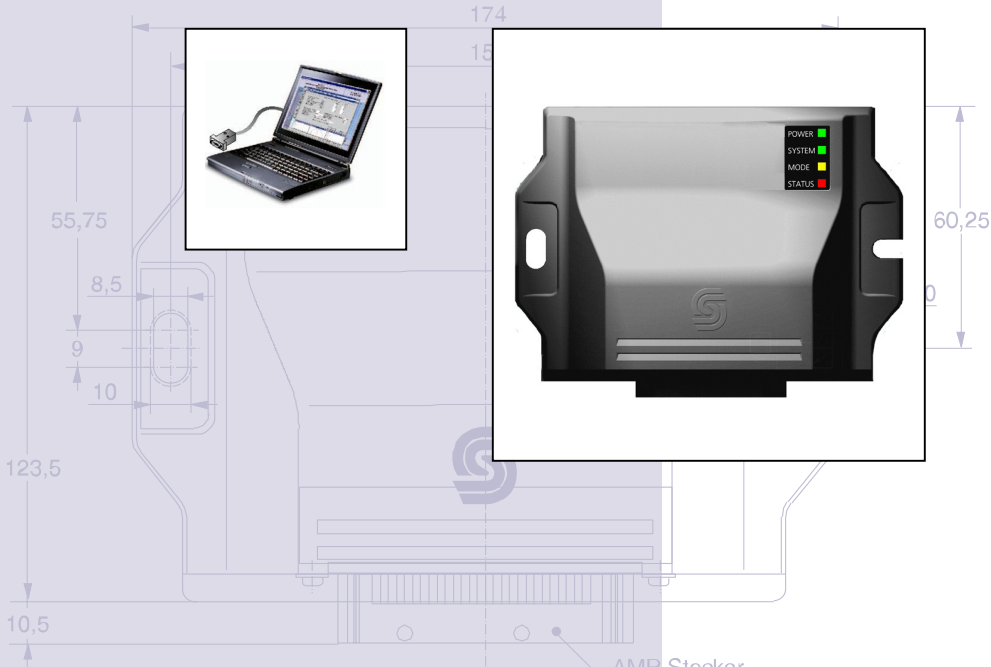
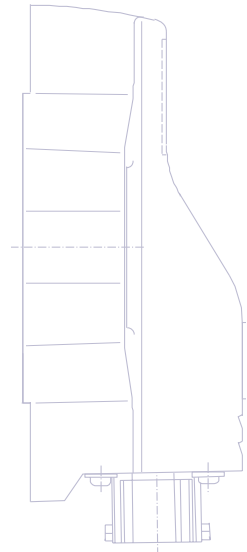
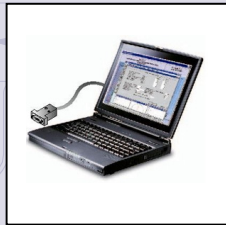
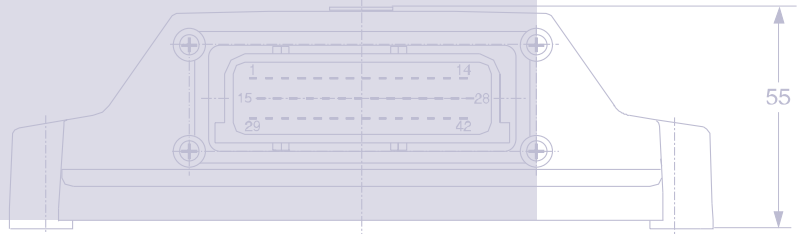




# WebGPI PDA Software for Palm Handhelds



AMP Stecker  
AMP Connector



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**Publication information**

January 2002 Rev 1.0    Software: WebGPI PDA Rev 1.0, Build 37  
April 2002 Rev 1.1    Software: WebGPI PDA Rev 1.0, Build 37  
May 2002 Rev 1.2    Software: WebGPI PDA Rev 1.0, Build 45  
May 2002 Rev 1.3    Software: WebGPI PDA Rev 1.0, V 1.13

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# Introduction

**Overview** This manual documents the WebGPI PDA™ application for Palm OS® handhelds.

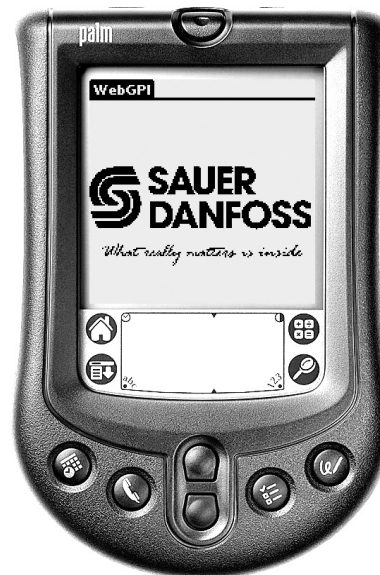
This chapter introduces the WebGPI PDA application.

---

*Note* See page 48 for WebGPI PDA application installation and registration instructions.

If you are updating your WebGPI PDA application, first uninstall any previous versions of the application that are on your PC.

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The WebGPI PDA Application Title Screen

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# About this Manual

This manual contains the following chapters:

- “Introduction” (this chapter)—Introduces the WebGPI PDA application.
- “Controls and Indicators” (page 10)—Describes the handheld controls and indicators that are commonly used in the WebGPI PDA application.

Read this chapter to familiarize yourself with the handheld controls and indicators used in the application. This information will be very useful if you are new to handhelds.

- “WebGPI PDA Application” (page 13)—Describes the screens, buttons, and icons used in the WebGPI PDA application.

Refer to this chapter for complete descriptions of screens, buttons, and icons.

- “Using the WebGPI PDA Application” (page 31)—Has step-by-step instructions for performing common WebGPI PDA application tasks.

Refer to this chapter for help in performing common WebGPI PDA tasks such as changing microcontroller tuning values and downloading applications to microcontrollers.

- “Installing and Removing the Application” (page 47)—Covers installing, registering, and removing the WebGPI PDA application on your handheld and PC.

# About the WebGPI PDA Application

The WebGPI PDA application installs in Palm OS handhelds. It turns a handheld into a powerful, low-cost tool for servicing Sauer-Danfoss microcontrollers.

With this application, you can use a handheld to:

- View and change microcontroller tuning values.
- Download applications to microcontrollers.
- Upload microcontroller tuning values to your PC.

Because the WebGPI PDA application has many of the features of the PC-based WebGPI™ application, you can use a handheld instead of a PC on many service jobs.

The following table compares features in the WebGPI PDA and WebGPI applications.

**WebGPI PDA and WebGPI Application Features**

FEATURE	WEBGPI PDA APPLICATION	WEBGPI APPLICATION
Installs in	Palm OS handheld*	PC
Operating system	Palm OS, 3.5 or later	Microsoft® Windows® 95 or later
View and change microcontroller tuning values	Yes	Yes
Download applications to a microcontroller	Yes	Yes
Download default tuning values to a microcontroller	Yes†	Yes
Create files containing tuning values	Yes‡	Yes
Debug capability	Yes	Yes
Data logging	No	Yes
Graphic display	No	Yes
On-line manual, on-screen help tips	No	Yes

\* Uses the Palm HotSync® operation to install the application and transfer data between the handheld and your PC.

† Tuning value files must be in hexadecimal (hex) format to download to a microcontroller. You need the WebGPI application to create files in this format.

‡ Creates files in extensible markup language (xml) format that you can transfer to your PC during a HotSync operation. Use these files to record values and for troubleshooting; you cannot download tuning values in this format to microcontrollers.

# WebGPI PDA Application Requirements

- PC Requirements**
- Microsoft Windows 95/98/ME/2000/Windows NT® (Service Pack 3 or higher) operating system
  - Palm™ Desktop software installed
  - CD-ROM drive
  - RS-232 or USB port

- Palm handheld requirements**
- Palm 3.5 or later OS
  - Cradle/cable for HotSync operation
  - 250 KB free memory for the WebGPI PDA application and program files (typical)

**Cabling requirements** A handheld running the WebGPI PDA application communicates with microcontrollers through its HotSync cradle/cable.

The type of microcontroller you are servicing determines the cable and adapters needed to make the connection between the HotSync cradle/cable and the microcontroller.

The table below lists the cables and adapters needed to communicate with Sauer-Danfoss microcontrollers. See page 35 for pictures of the cable connectors and adapters.

**WebGPI PDA Cables and Adapters**

<b>SAUER-DANFOSS MICROCONTROLLER</b>	<b>SAUER-DANFOSS CABLE</b>	<b>RADIO SHACK NULL MODEM</b>	<b>RADIO SHACK GENDER CHANGER</b>
MC200	PN 1090740	----	----
MC400	PN 1090740	----	----
S2X	PN KW02012*	Model 26-264	Model 26-231
MC300	PN KW02012*	Model 26-264	Model 26-231

# WebGPI PDA Application Files

The following describes the types of files needed when you use your handheld to service microcontrollers.

## File types

**Application file**—A hexadecimal (hex) format file that contains an application program and a set of default tuning values for a microcontroller.

You need this file on your handheld to install or update a microcontroller application.

**Parameter Set (“screen”) file**—An extensible markup language (xml) format file that contains the parameter sets specific to an application loaded in a microcontroller.

You need this file on your handheld to view and change tuning values in a microcontroller.

**Default tuning values file**—A (hex) format file that contains just tuning values specific to an application loaded in a microcontroller.

You need this file on your handheld to install a new set of default tuning values in a microcontroller.

**Kernel file**—A hexadecimal (hex) format file that contains the operating system used by a microcontroller processor.

You need this file on your handheld to install a new operating system in a microcontroller. Some microcontrollers need a boot file to install the kernel file.

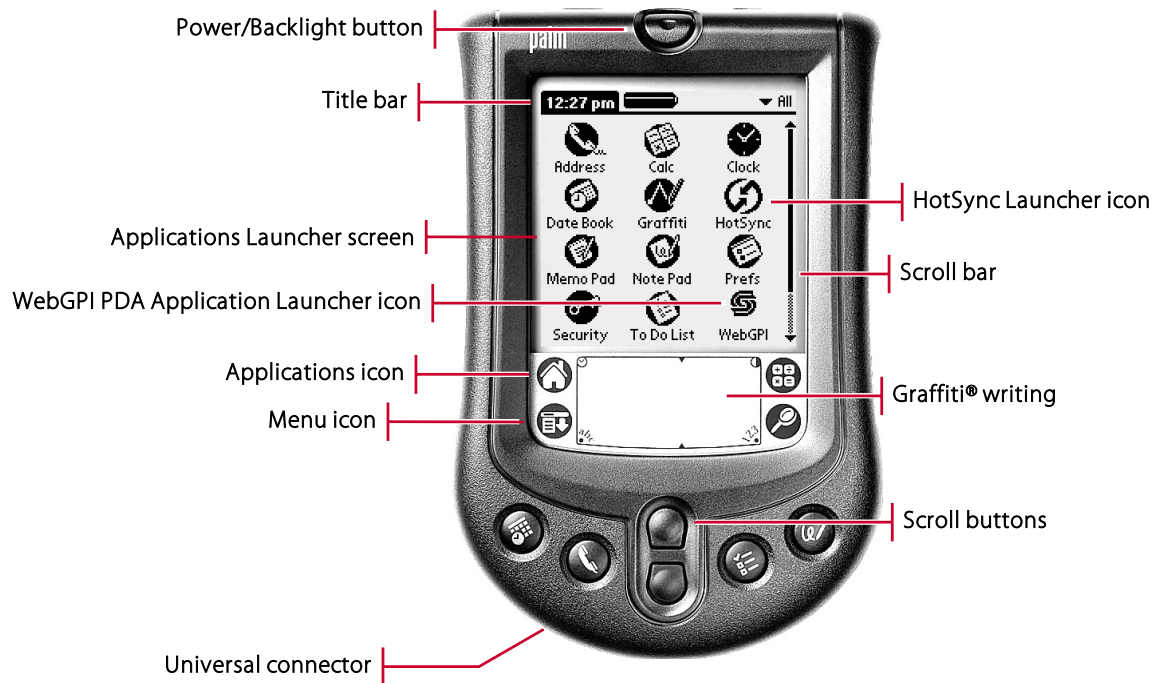
# Controls and Indicators

**Overview** This chapter briefly describes the controls and indicators on a handheld that you use when running the WebGPI PDA application.

For a complete description of all handheld controls and indicators, see the *Handbook* that came with your handheld.

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# Handheld Controls and Indicators



## Controls and Indicators Used in the WebGPI PDA Application

*Note* The appearance and location of controls and indicators on your handheld may be slightly different from those shown on this generic handheld.

### Handheld Controls and Indicators

ITEM	DESCRIPTION
<b>Power /Backlight button</b>	Turns handheld power on and off. Holding down this button backlights the screen.
<b>Title bar</b>	The <b>WebGPI</b> PDA menu displays here after you start the WebGPI PDA application.
<b>HotSync Launcher icon</b>	Tap to start a HotSync operation.
<b>Scroll bar</b>	Displays whenever there is additional off-screen material. Tap on this bar or use the Scroll buttons to view the off-screen material.
<b>Applications Launcher screen</b>	This screen displays all application launcher icons, including the <b>WebGPI</b> PDA Application Launcher icon.
<b>WebGPI PDA Application Launcher icon</b>	Tap to start the WebGPI PDA application.
<b>Applications icon</b>	Tap to display the Applications Launcher screen, which contains the <b>WebGPI</b> PDA Application Launcher icon. When in the WebGPI PDA application, use this icon to exit the application and return to the Applications Launcher screen.
<b>Graffiti writing area</b>	Use Graffiti writing here to enter numbers and letters. Tap in the lower corners of this area to display alphabetic and numeric keyboards.

## Handheld Controls and Indicators

ITEM	DESCRIPTION
Menu icon	Tap to display <b>WebGPI</b> PDA menu commands after you start the WebGPI PDA application.
Scroll buttons	Press to scroll off-screen material into the screen. Press to increase or decrease numerical parameter values that you have selected.
Universal connector	Connect the handheld to its HotSync cradle/cable here.

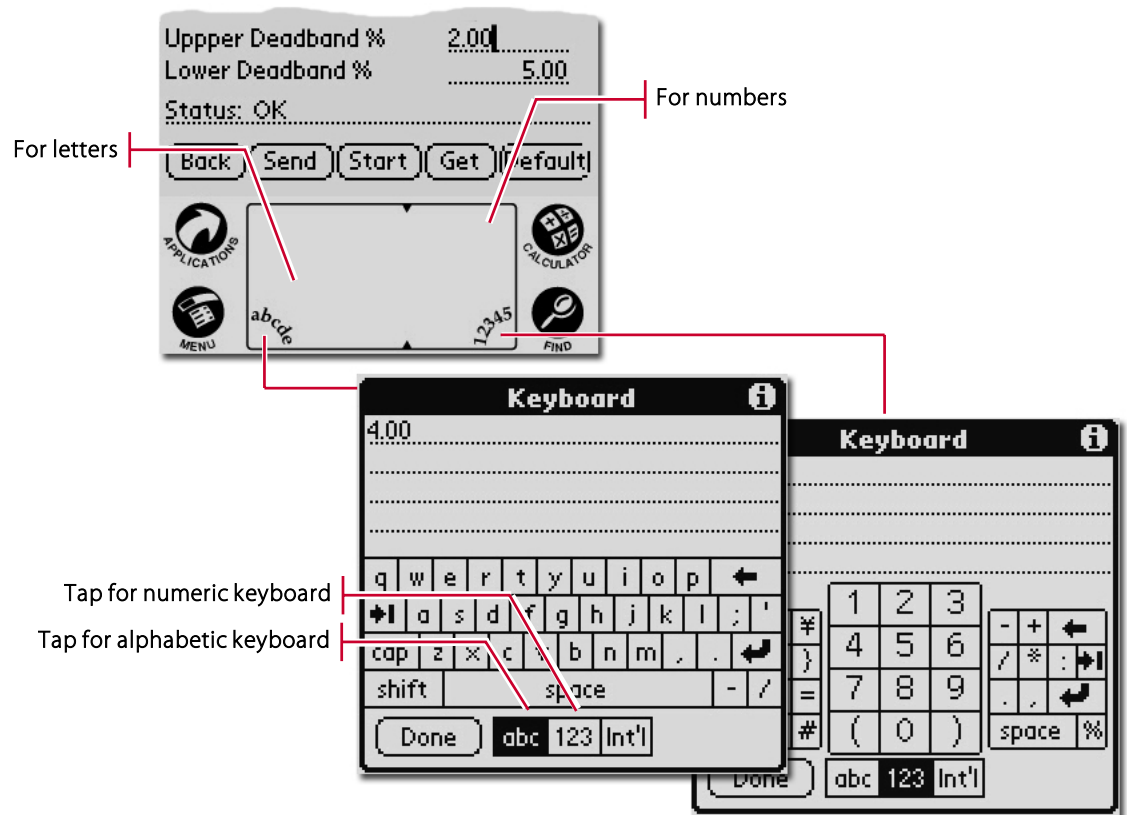
### Using the Graffiti writing area

In the Graffiti writing area:

- Use the left side to enter letters using Graffiti writing.
- Use the right side to enter numbers using Graffiti writing.
- Tap just below **abcde** to display an alphabetic keyboard.
- Tap just below **12345** to display a numeric keyboard.

Tap **abc** and **123** to switch between numeric and alphabetic keyboards.

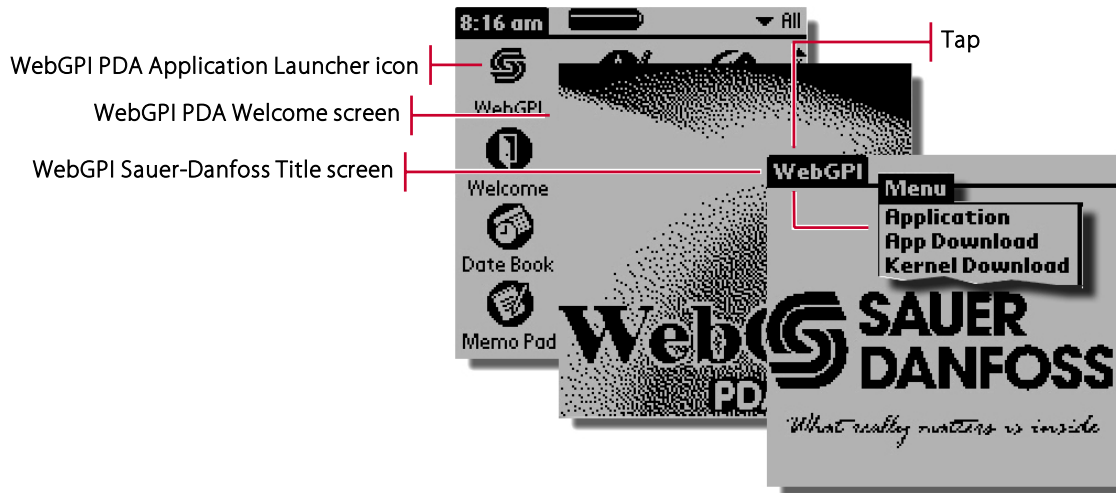
See the *Handbook* for your handheld for more about using the Graffiti writing area.



# WebGPI PDA Application

<b>Overview</b>	This chapter describes the screens, buttons, and icons used in the WebGPI PDA application.
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# WebGPI PDA Application Launcher Icon



**Purpose** Use this icon to launch the WebGPI PDA application.

After you launch the application, the WebGPI PDA Welcome screen briefly displays, followed by the **WebGPI Sauer-Danfoss** Title screen.

Tap on the **WebGPI** title bar to display the **WebGPI** PDA menu.

# WebGPI PDA Menu

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu



**Purpose** Use the menu commands to access WebGPI PDA application functions.

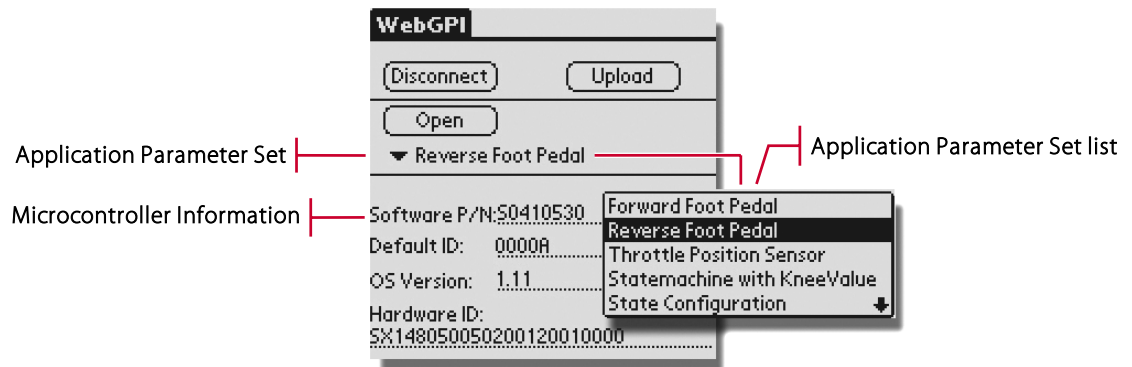
*Note* Tapping the Menu icon on the handheld (to the left of the Graffiti writing area) also displays the WebGPI PDA menu.

## WebGPI PDA Menu

ITEM	DESCRIPTION
<b>Application</b>	Starts a connection with an application loaded in a microcontroller.
<b>App Download</b>	Displays the Download Options Buttons that select application file download options.
<b>Kernel Download</b>	Displays the Kernel Options Buttons that select kernel file download options.
<b>Debug</b>	Enters a troubleshooting mode where you can you view microcontroller input values and directly set microcontroller output values. Not all microcontroller applications have a debug mode.
<b>Settings</b>	Displays the Settings screen, used to set baud and update rates.
<b>File Utility</b>	Displays the File Utility screen, used to both view and delete application files, kernel files, and boot files.
<b>About</b>	Displays the <b>About</b> dialog, which contains WebGPI PDA application version information.

# Application Parameters Access Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > Application command > **Connect** button



**Purpose** Use this screen to manage access to the parameter sets used in a microcontroller application.

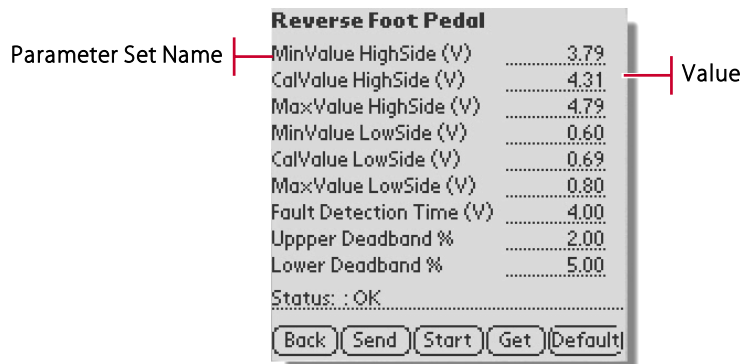
This screen displays when the **Connect** button successfully starts communication between a microcontroller and your handheld.

## Application Parameters Access Screen

ITEM	DESCRIPTION
<b>Disconnect</b>	Ends communication between the microcontroller and your handheld.
<b>Upload</b>	Displays the <b>Upload</b> dialog. Use this dialog to create a file containing tuning values from the current application that you can upload to your PC in a HotSync operation.
<b>Open</b>	Displays the Application Parameters screen, which displays the Application Parameter Set you have selected in the Application Parameter Set list.
<b>Application Parameter Set</b>	Identifies the parameter set you have selected to view.
<b>Application Parameter Set list</b>	Lists the Application Parameter Sets you can view.
<b>Microcontroller Information</b>	Displays microcontroller information.
<b>Software P/N</b>	Identifies the application part number.
<b>Default ID</b>	Identifies the default tuning values used by the application.
<b>OS Version</b>	Identifies the operating kernel version number.
<b>Hardware ID</b>	Identifies the microcontroller hardware.

# Application Parameters Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > Application command > **Connect** button > select a parameter set > **Open** button



**Purpose** Use this screen to view and change Application Parameter Set values.

*Note* The preceding figure shows a typical Application Parameter Set.

## Application Parameters Screen

ITEM	DESCRIPTION
<b>Parameter Set Name</b>	Identifies the Application Parameter Set.
<b>Value</b>	Shows the current value used by the microcontroller. Values that you can change snap to the left when selected. Values that you cannot change do not move. Use the Scroll buttons to increase or decrease whole numbers in values. Use the Graffiti writing area to enter new values. (See page 12 for a brief description of how to use the Graffiti writing area.)
<b>Status</b>	Indicates the status of the selected parameter set. Status messages depend on the type of parameter set selected.
<b>Back</b>	Returns to the Application Parameters Access screen.
<b>Send</b>	Applies the values displayed to the microcontroller. You may have to enter a password to change values. Application Parameter Sets that only monitor values do not display this button.
<b>Stop/Start</b>	Starts and stops the display of real-time data. Values entered in the Settings screen and communication speeds limit the update rate.
<b>Get</b>	Displays the values used by the microcontroller.
<b>Default</b>	Displays and applies the default values stored in the microcontroller memory. Application Parameter Sets that only monitor values do not display this button.

## Enter Password Dialog



Use this dialog when a password is required to change a parameter value.

- Passwords are case sensitive.
- Your password gives you access to all parameter sets at your checked **Level**.
- You may need to cycle microcontroller power to make your changes effective.
- Your password access remains effective until you cycle microcontroller power.
- If **Enter Password** reappears after you have entered your password:
  - You may have entered a wrong password.
  - Your **Level** is too low for the parameter value.

# Upload Dialog

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > Application command > **Connect** button > **Upload** button



**Purpose** Use this dialog to create an extensible markup language (xml) format file that contains tuning values from the current application.

The HotSync operation uploads this file to your PC.

## Upload Dialog

ITEM	DESCRIPTION
Upload Name	Names the upload file. Characters that replace the asterisks (**) are appended to the application file name to create the upload file name.

### Uploading tuning values

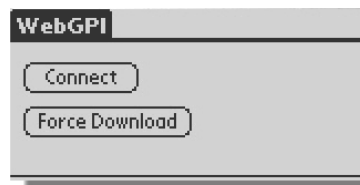
The HotSync operation uploads the file created here to your PC.

In your PC, the typical path to the uploaded file is:

**My Computer** > **Local Disk** (typically C) > **Palm** folder > your User Name folder > **WebGPI** folder > **Upload** folder.

# Application Download Option Buttons

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > App Download command



**Purpose** Use these buttons to select application file download options.

---

*Note* Select the **Download** option first. If you cannot open communication with the microcontroller, then select the **Force Download** option.

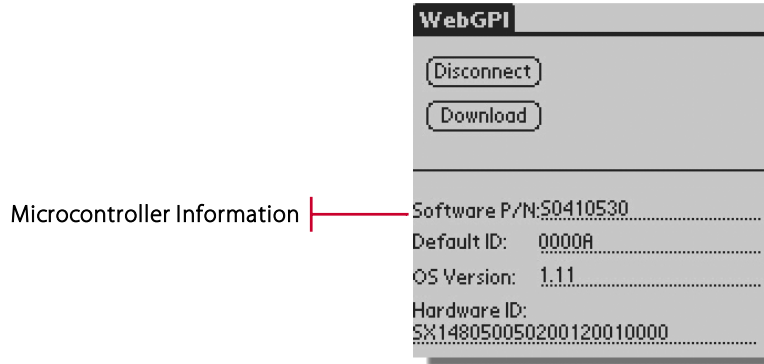
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## Application Download Option Buttons

ITEM	DESCRIPTION
<b>Connect</b>	Opens communication with your microcontroller to download application and default tuning value files. A successful connection displays the <b>Connect</b> screen.
<b>Force Download</b>	Forces communication with your microcontroller when processor problems return messages such as “Unable to Connect” and “Error while downloading.”

# Application Download Connect Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > App Download command > Connect button



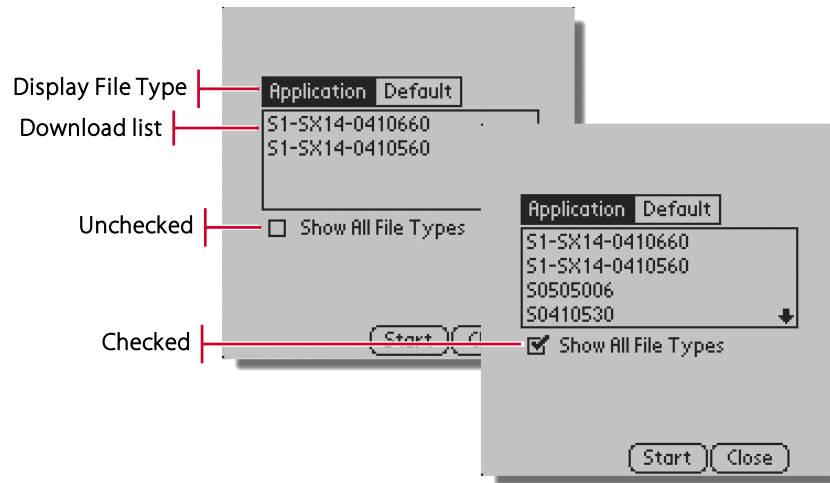
**Purpose** Use this screen to connect to the microcontroller prior to downloading an application or tuning value file..

## Application Download Connect Screen

ITEM	DESCRIPTION
<b>Disconnect</b>	Stops communication with the microcontroller and returns to the Application Download Option buttons.
<b>Download</b>	Displays the Application Download screen. Use this screen to select and download an application file or a default tuning values file.
<b>Microcontroller Information</b>	Displays information read from the microcontroller.
<b>Software P/N</b>	Identifies the application part number.
<b>Default ID</b>	Identifies the default tuning values used by the application.
<b>OS Version</b>	Identifies the operating kernel version number.
<b>Hardware ID</b>	Identifies the microcontroller hardware.

## Application Download Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > App Download command > **Connect** button > **Download** button



**Purpose** Use this screen to select and download an application file or a default tuning values file.

### Download Screen

ITEM	DESCRIPTION
<b>Display File Type</b>	Applies a filter that displays only application or default tuning values that conform to the Sauer-Danfoss (US) Company naming conventions. Check <b>Show All File Types</b> to disable this control and show all available files.
<b>Application</b>	Displays hexadecimal (hex) format application files that conform to Sauer-Danfoss (US) Company naming conventions.
<b>Default</b>	Displays hexadecimal (hex) format default tuning values files that conform to Sauer-Danfoss (US) Company naming conventions.
<b>Download List</b>	Lists downloadable files. Select the file you want to download.
<b>Show All File Types</b>	Displays all types of downloadable files.

# Kernel Download Option Buttons

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > **Kernel Download** command



**Purpose** Use these buttons to select kernel file download options.

---

*Note* Select the **Download** option first. If you cannot open communication with the microcontroller, then select the **Force Download** option.

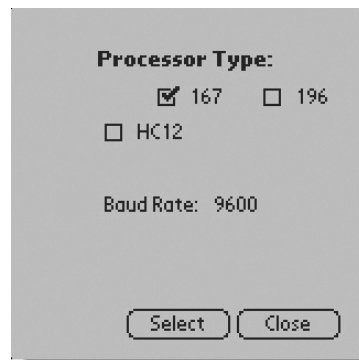
---

## Kernel Download Option Buttons

ITEM	DESCRIPTION
<b>Force Download</b>	Forces communication with your microcontroller when processor problems return messages such as “Unable to Connect” and “Error while downloading.”
<b>Connect</b>	Opens communication with your microcontroller to download kernel files. A successful connection displays the <b>Connect</b> screen.

# Force Kernel Download Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > **Kernel Download** command > **Force Download** button



**Purpose** Use this screen if you cannot download a kernel through the **Download** screen.

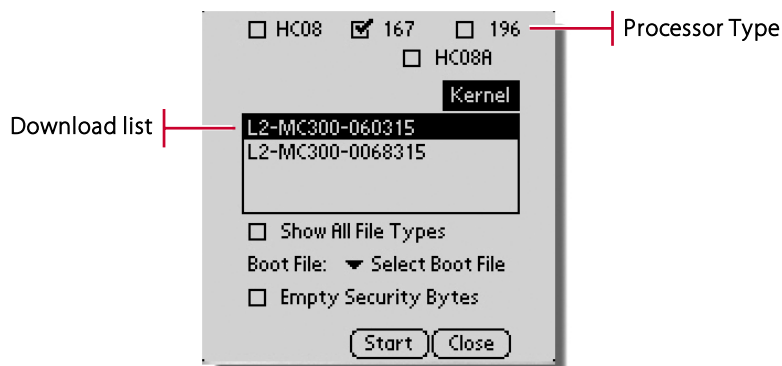
*Note* Motorola 68HC08 and 68HC08A processors do not have a force download option.

## Force Kernel Download Screen

ITEM	DESCRIPTION
<b>Processor Type</b>	<p><b>167</b>—Check when downloading to a microcontroller that uses an Infineon 167 processor.</p> <p><b>196</b>—Check when downloading to a microcontroller that uses an Intel 196 processor.</p> <p><b>HC12</b>—Check when downloading to a microcontroller that uses a Motorola 68HC12 processor.</p>
<b>Baud Rate</b>	Displays the baud rate of the selected processor.
<b>Select</b>	Starts the force download process and displays the Kernel Download screen.

# Kernel Download Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > **Kernel Download** command > **Download** button



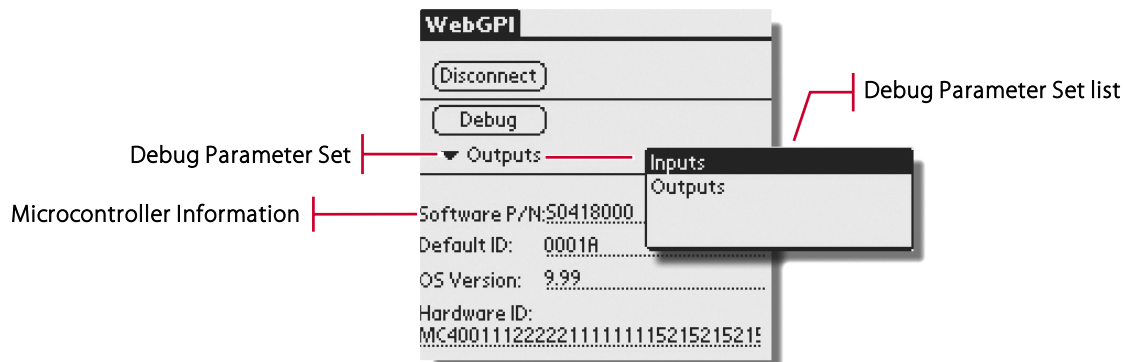
**Purpose** Use this screen to download kernel files.

## Kernel Download Screen

ITEM	DESCRIPTION
<b>Processor Type</b>	<p><b>HC08</b>—Check when downloading to a microcontroller that uses a Motorola 68HC08 processor.</p> <p><b>HC08A</b>—Check when downloading to a microcontroller that uses a Motorola 68HC08A processor.</p> <p>Checking <b>HC08</b> or <b>HC08A</b> displays <b>Boot File</b> and <b>Empty Security Bytes</b>.</p> <p><b>167</b>—Check when downloading to a microcontroller that uses an Infineon 167 processor.</p> <p><b>196</b>—Check when downloading to a microcontroller that uses an Intel 196 processor.</p> <p>Checking <b>167</b> or <b>196</b> displays <b>Boot File</b>.</p>
<b>Download list</b>	Select the kernel file you want to download.
<b>Show All File Types</b>	Displays all types of downloadable files
<b>Boot File</b>	<p>Selects a boot file, which may be required prior to downloading a kernel.</p> <p>Some processors require a boot file if the kernel fails to download, is missing, or is corrupted.</p>
<b>Empty Security Bytes</b>	Deletes the security bytes used when downloading a kernel to a microcontroller that uses a Motorola 68HC08 or 68HC08A processor.

# Debug Parameters Access Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > Debug command > Connect



Use this screen to manage access to Debug Parameter Sets. These sets allow you to view microcontroller input values and directly set output values to diagnose problems..

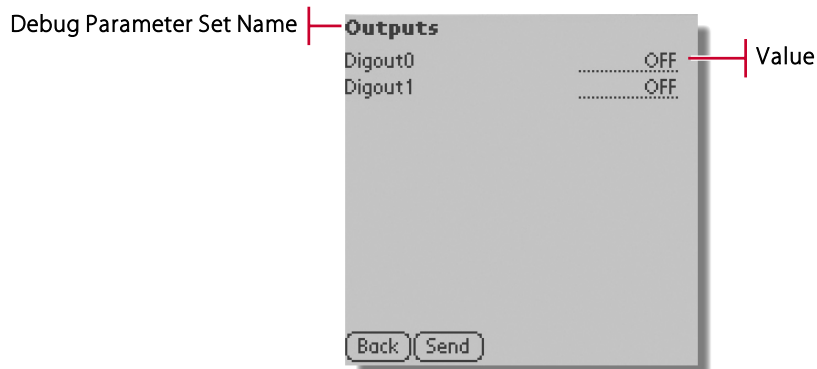
*Note* Not all applications have Debug Parameter Sets.

## Debug Parameters Access Screen

ITEM	DESCRIPTION
<b>Disconnect</b>	Ends communication with the microcontroller.
<b>Debug</b>	Displays the Debug Parameters screen, which displays the Debug Parameter Set you selected from the Debug Parameter Set list.
<b>Debug Parameter Set</b>	Identifies the Debug Parameter Set you have selected to view.
<b>Debug Parameter Set list</b>	Lists the Debug Parameter Sets you can view.
<b>Microcontroller Information</b>	Displays information read from the microcontroller.
<b>Software P/N</b>	Identifies the application part number.
<b>Default ID</b>	Identifies the default tuning values used by the application.
<b>OS Version</b>	Identifies the operating kernel version number.
<b>Hardware ID</b>	Identifies the microcontroller hardware.

# Debug Parameters Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > **Debug** command > **Connect** button > select Debug Parameter Set from Debug Parameter Set list > **Open** button



**Purpose** Use this screen in the Debug mode to monitor and change microcontroller values..

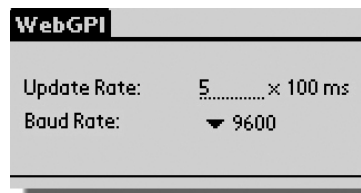
*Note* Debug values vary from application to application.

## Debug Parameters Screen

ITEM	DESCRIPTION
<b>Debug Parameter Set Name</b>	The name of the selected Debug Parameter Set.
<b>Value</b>	Shows the current value used by the microcontroller. Values that you can change snap to the left or show a toggle list when selected. Values that you cannot change do not move. Enter new values in the Graffiti writing area. (See page 12 for a brief description of how to use the Graffiti writing area.)
<b>Send</b>	Applies the values displayed to the microcontroller. A password may be required to change values.

# Settings Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > Settings command



**Purpose** Use this screen to set the update rate and baud rate between your handheld and the microcontroller.

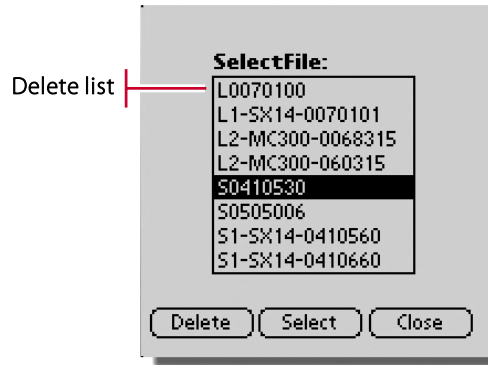
## Settings Screen

ITEM	DESCRIPTION
<b>Update Rate</b>	Sets the update rate for parameter values. <b>Range: 100–9000 ms</b> (1 = 100 ms)
<b>Baud Rate</b>	Automatically sets the baud rate between your handheld and the microcontroller. Lower this rate if you are having trouble communicating with your microcontroller.

- Baud rates**
- Microcontrollers that use Motorola 68HC08 and 68HC08A processors automatically connect at 9600 baud.
  - Microcontrollers that use either Infineon 167 or Intel 196 processors automatically connect at 19200 baud.

# File Utility Screen

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > File Utility command > View Files button



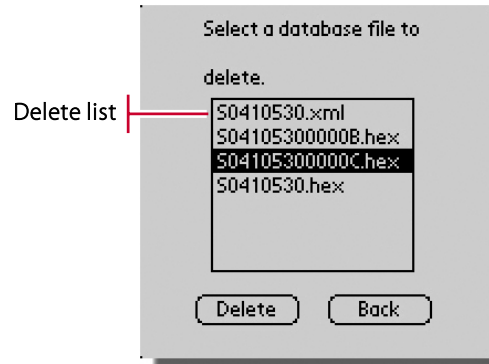
**Purpose** Use this screen to select an individual file or database to delete.

## File Utility Screen

ITEM	DESCRIPTION
Delete list	Selects a database or an individual file to delete.
Delete	Deletes the item selected in the Delete list.
Select	Displays the Delete Database Files screen, used to delete files within a selected database.

# Delete Database Files Screen

**Path** WebGPI PDA Application Launcher icon > **WebGPI PDA** menu > **Utility** command > **Delete** button > select database > **Select** button



**Purpose** Use this screen to delete files within a selected database..

## Delete Database Files Screen

ITEM	DESCRIPTION
Delete list	Selects files within the database to delete.
Delete	Deletes the selected file.

# About

**Path** WebGPI PDA Application Launcher icon > WebGPI PDA menu > **About** command



**Purpose** **About** identifies the WebGPI PDA version, build, and **User Key**.

---

*Note* See page 48 for information about registering your copy of the WebGPI PDA application.

---

# Using the WebGPI PDA Application

**Overview** This chapter has step-by-step instructions for performing common WebGPI PDA application tasks.

---

*Note* To be able to perform these tasks, you must first install Palm Desktop software on your PC and then install the WebGPI PDA application on your PC and handheld (see page 47).

---

- For a brief description of the handheld controls and indicators used when running the WebGPI PDA application, see page 10.
- For a complete description of the screens, buttons, and icons used in the WebGPI PDA application, see page 13.

**Contents**

- Transfer Files from a PC to a Handheld 33**
- Connect to a Microcontroller 35**
- Start the WebGPI PDA Application 36**
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- Download an Application 42**
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- Delete Files 46**

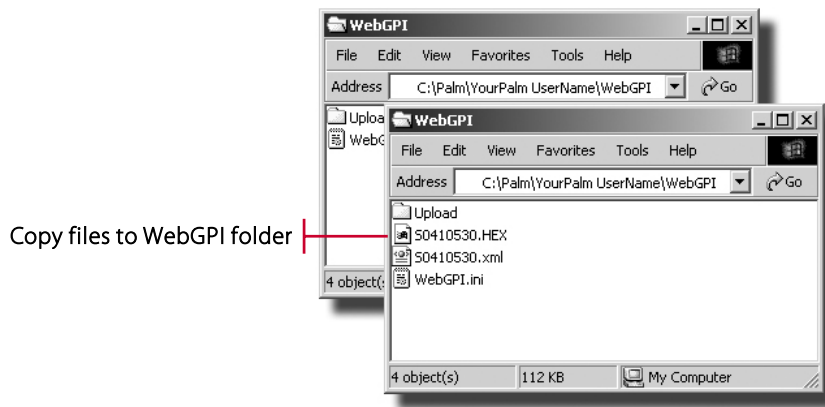
# Transfer Files from a PC to a Handheld

Use this procedure to transfer files from your PC to your handheld during a HotSync operation.

You can transfer:

- Application, kernel, boot, and default tuning value files in hexadecimal (hex) format.
- Application parameter set (“screen”) files in extensible markup language (xml) format.

1. Use the HotSync cradle/cable to connect your handheld to your computer.



2. On your PC, move or copy the files you want to transfer into the **WebGPI** folder.

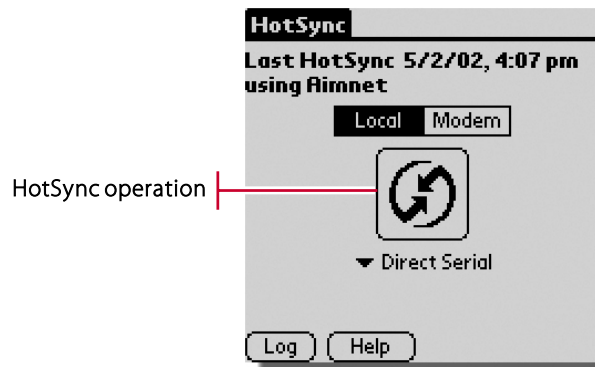
The typical path to this folder is:

**My Computer** > **Local Disk** (typically C:) > **Palm** folder > YourPalmUserName folder > **WebGPI** folder

---

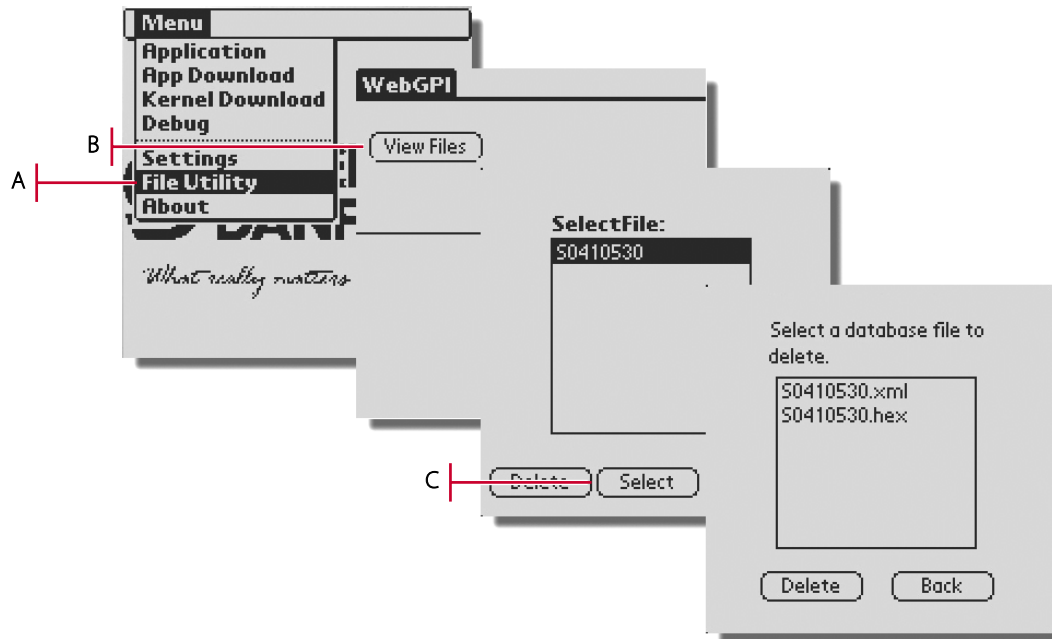
*Note* You can simplify copying files to the WebGPI folder by creating a shortcut to this folder and placing it on your PC desktop.

---



3. Perform a HotSync operation.

4. Start the WebGPI PDA application on your handheld.
  - A. Press the **Power/Backlight** button to apply power to the handheld.
  - B. Tap the **Applications** icon until the **WebGPI** Application Launcher icon displays in the Applications Launcher screen.
  - C. Tap the **WebGPI Application Launcher icon** to start the WebGPI PDA application.



5. Use the **File Utility** to see if the files successfully transferred.
  - A. In the **WebGPI** menu, select the **File Utility** command.
  - B. Tap **View Files** to view WebGPI PDA files.
  - C. As needed, tap **Select** to view the files within a selected database.

# Connect to a Microcontroller



## HotSync Cradle/Cable Connector

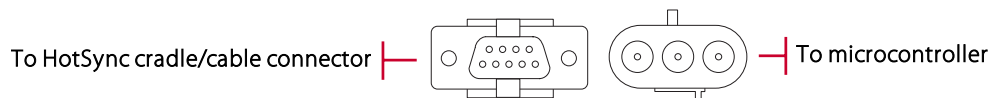
Your handheld communicates with a microcontroller through its HotSync cradle/cable. The type of microcontroller you are servicing determines the cable and adapters needed to connect the HotSync cradle/cable to the microcontroller.

The table below lists the cables and adapters needed for a handheld to communicate with a Sauer-Danfoss microcontroller.

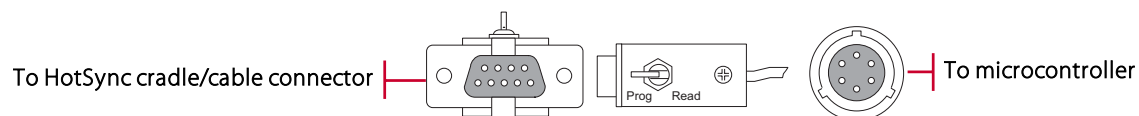
### WebGPI PDA Cables and Adapters

SAUER-DANFOSS MICROCONTROLLER	SAUER-DANFOSS CABLE	RADIO SHACK NULL MODEM	RADIO SHACK GENDER CHANGER
MC200	PN 1090740	----	----
MC400	PN 1090740	----	----
S2X	PN KW02012*	Model 26-264	Model 26-231
MC300	PN KW02012*	Model 26-264	Model 26-231

\* Leave the switch on this cable set at **Read** except when downloading an application.

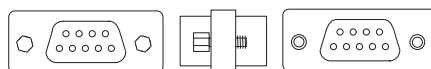


### Connectors on Sauer-Danfoss Cable PN 1090740



### Connectors on Sauer-Danfoss Cable PN KW02012

The above two figures show the connectors on the 109740 and KW02012 cables.



### Gender Changer—Radio Shack Model 26-231 (Use with KW02012)

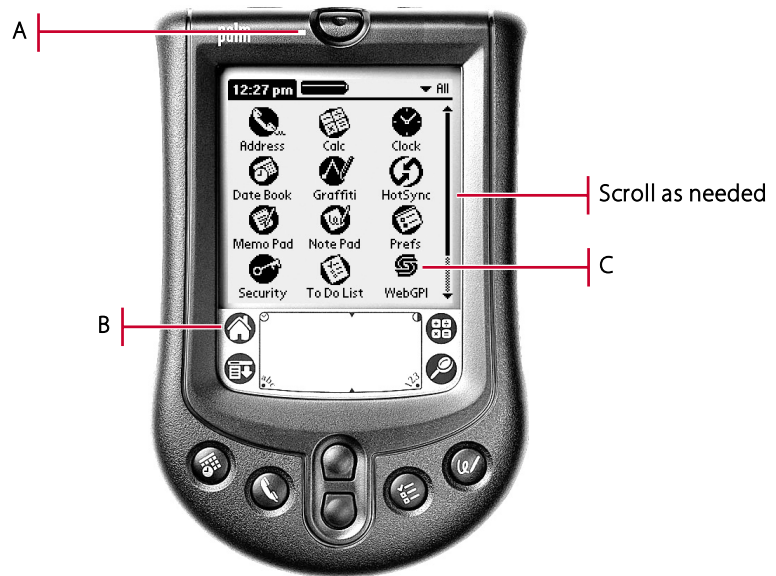


### Null Modem—Radio Shack Model 26-264 (Use with KW02012)

The above two figures show the adapters needed with the KW02012 cable.

# Start the WebGPI PDA Application

1. Connect the handheld to a Sauer-Danfoss microcontroller.



2. Start the handheld and launch the WebGPI PDA application.

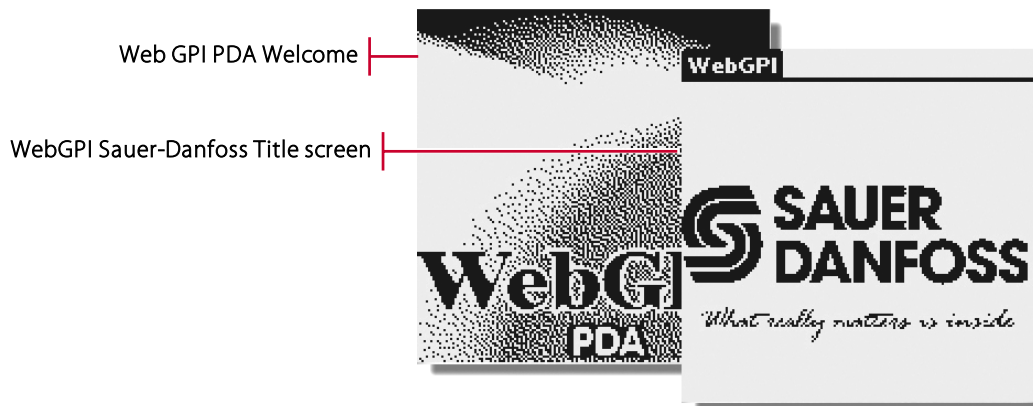
- A. Press the **Power/Backlight** button to apply power to the handheld.

As needed, hold the **Power** button down to backlight the screen.

- B. Tap the **Applications** icon until the **WebGPI** Application Launcher icon displays in the Applications Launcher screen.

You may have to use the Scroll bar or Scroll buttons to display the **WebGPI** Application Launcher icon.

- C. Tap the **WebGPI Application Launcher icon** to start the WebGPI PDA application.

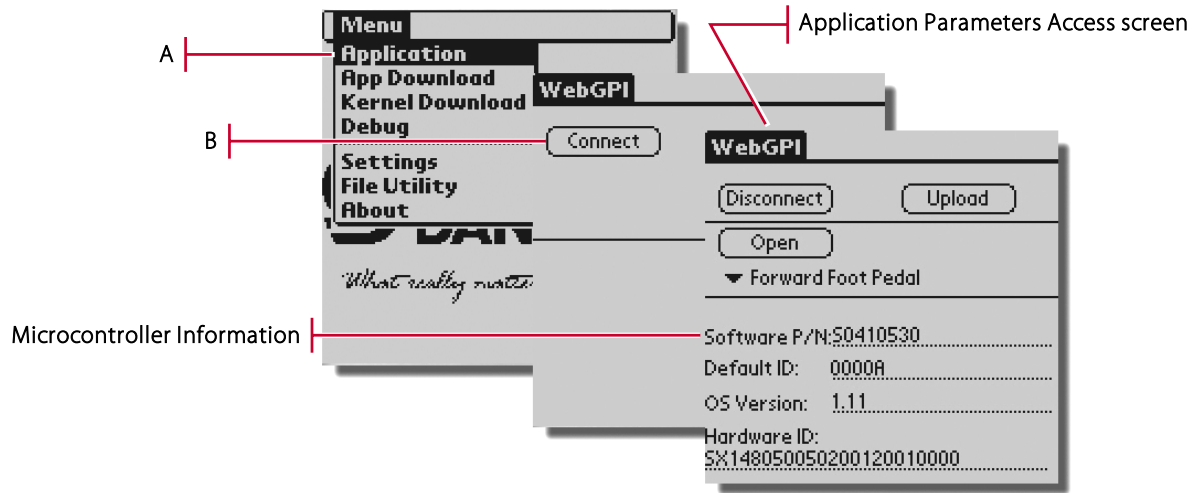


3. The **WebGPI PDA Welcome** screen briefly displays, followed by the **WebGPI Sauer-Danfoss** Title screen.

# View Parameter Values

To view parameter values, the handheld must have the extensible markup language (xml) format file containing the parameter sets (“screens”) for the application loaded in the microcontroller.

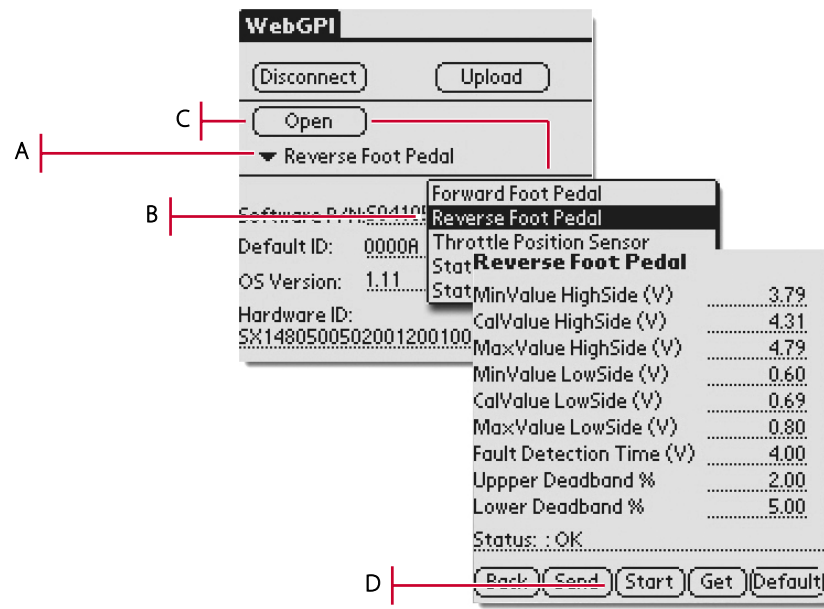
1. Transfer the xml format parameter set file from your PC to your handheld.
2. Connect your handheld to the microcontroller.
3. Start the WebGPI PDA application.



4. Display the Application Parameters Access screen.
  - A. Tap the **WebGPI** title bar to display **WebGPI PDA** menu and select the **Application** command.
  - B. Tap the **Connect** button.

When communication with the microcontroller starts, the Application Parameters Access screen displays microcontroller information.

A **No Screens** message displays if the xml format parameter set file is missing or does not match the application loaded in the microcontroller.



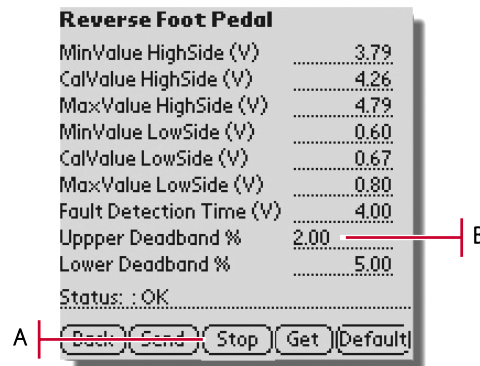
5. Select and display an Application Parameter Set.

- Tap on the Application Parameter Set.
- From the Application Parameter Set list that displays, select the Application Parameter Set you want to view.
- Tap **Open** to display the selected parameters in the Application Parameter screen.
- Tap **Start** to begin viewing parameter values.

# Change Parameter Values

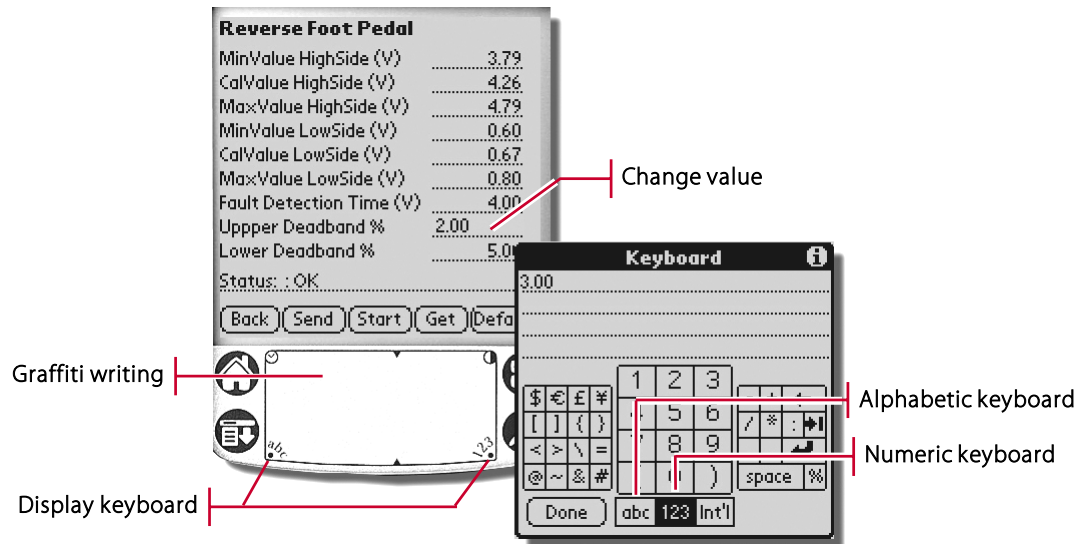
To change parameter values, the handheld must have the extensible markup language (xml) format file containing the parameter sets (“screens”) for the application loaded in the microcontroller.

1. Transfer the xml format parameter set file from your PC to your handheld.
2. Connect your handheld to the microcontroller.
3. Start the WebGPI PDA application.
4. View the Application Parameter Set whose values you want to change.



5. Select the value you want to change.
  - A. Tap **Stop** to stop updating the display of parameter set values.
  - B. Tap the value you want to change.

Values that can be changed snap to the left when selected. You cannot change values that do not move.



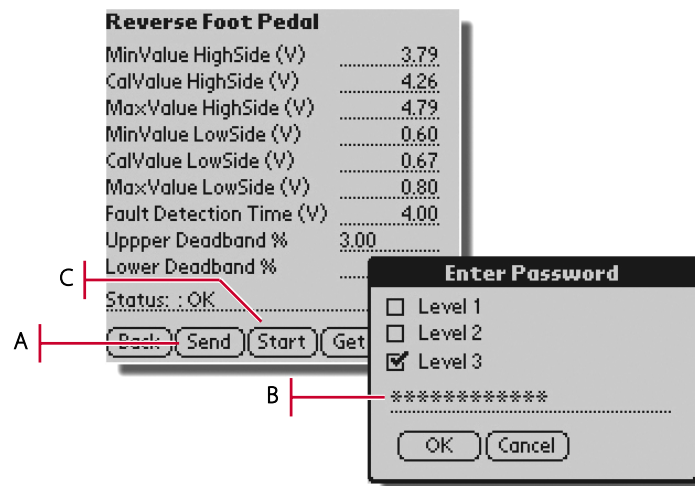
6. Change the value.

Use the Scroll buttons to increase or decrease the value by whole numbers.

In the Graffiti writing area:

- Use Graffiti writing to delete the current value and enter a new value.
- Tap just below **abc** or **123** to display the **Keyboard** and enter a new value.

7. Repeat the previous step as needed to change other values.



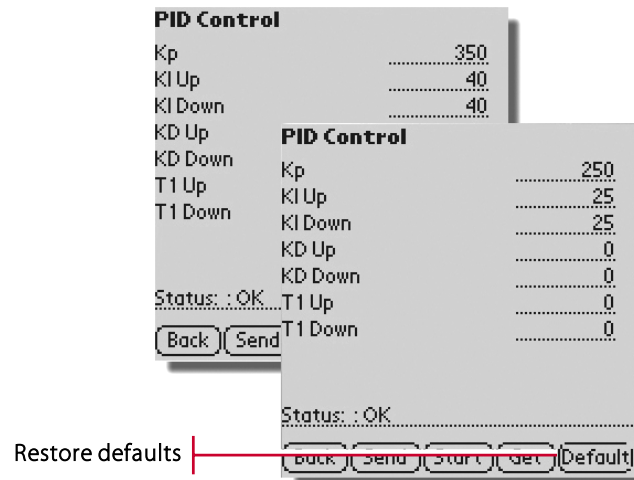
8. Send the new values to the microcontroller.

- A. Tap **Send** to download the new values to the microcontroller.
- B. As required, enter the password and set the **Level** needed to change the value.
- C. Tap **Start** to begin displaying the microcontroller values.

# Restore Default Parameter Values

This procedure assumes you have already connected with the microcontroller.

1. View the Application Parameter Set whose values you want to restore.



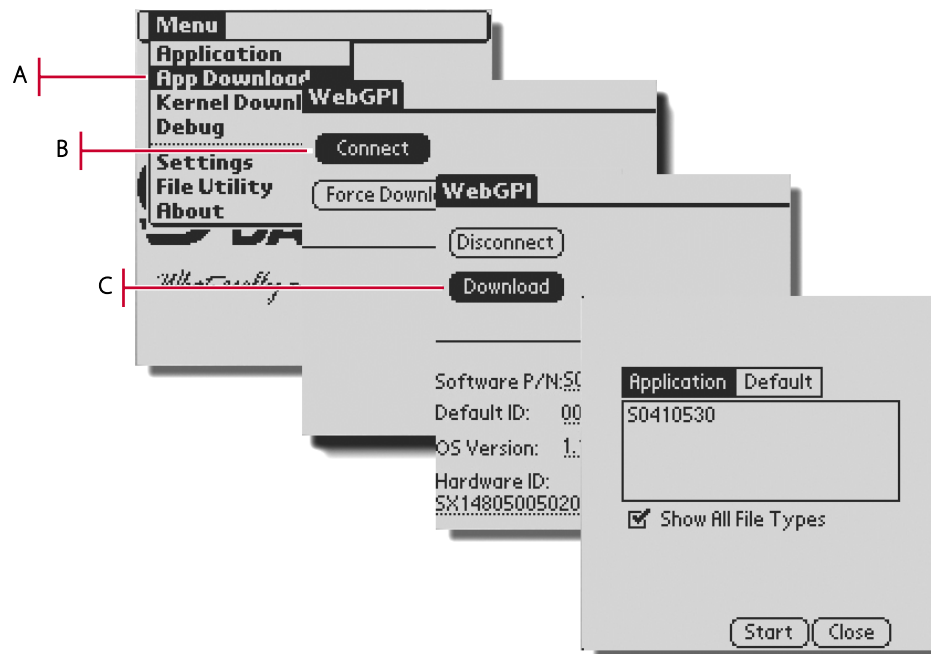
2. Tap **Default** to restore parameter default values.

# Download an Application

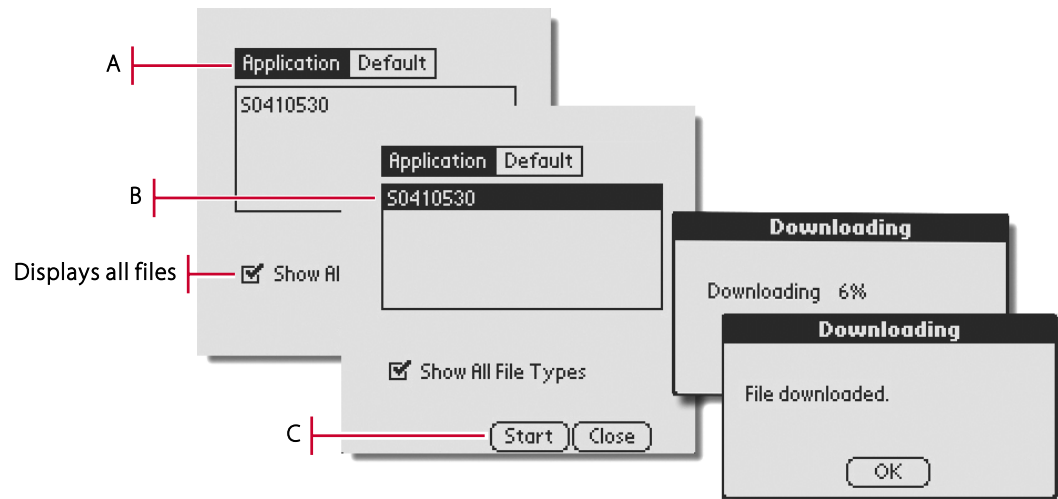
To download an application, the handheld must have the hexadecimal (hex) format file containing the application used by the microcontroller.

To view and change parameter values, the handheld must also have the extensible markup language (xml) format file containing the parameter sets (“screens”) for the application loaded in the microcontroller.

1. Transfer the hex format application and xml format parameter set files from your PC to your handheld.
2. Connect your handheld to the microcontroller.
3. Start the WebGPI PDA application.



4. Display the Download screen.
  - A. In the **WebGPI** menu, tap the **App Download** command.
  - B. In the Download Options buttons, tap **Connect** to display the Application Download Connect screen.
  - C. In the Application Download Connect screen, tap **Download** to display the Application Download screen.



5. Select and download an application file.
  - A. Select **Application** to display files whose names conform to Sauer-Danfoss (US) Company naming conventions.  
 Check **Show All File Types** to show files that do not conform to Sauer-Danfoss naming conventions.
  - B. Select the application file you want to download.
  - C. Tap **Start** to begin the download.

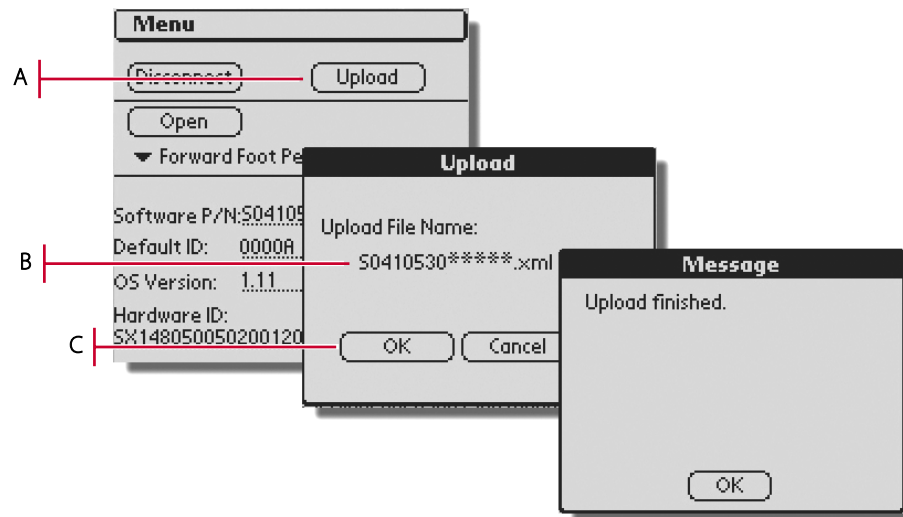
# Transfer Files from a Handheld to a PC

Use this procedure to transfer an extensible markup language (xml) format file containing microcontroller tuning values from your handheld to your PC.

Use these xml format files to record tuning values and for troubleshooting purposes.

The HotSync operation transfers this file to the Upload folder in your PC.

1. Connect your handheld to the microcontroller.
2. Start the WebGPI PDA application.
3. Display the Application Parameters Access screen.



4. Create an uploadable file that contains the tuning values now being used by the microcontroller.

- A. Tap **Upload** to display the **Upload** dialog.
- B. Name the upload file.

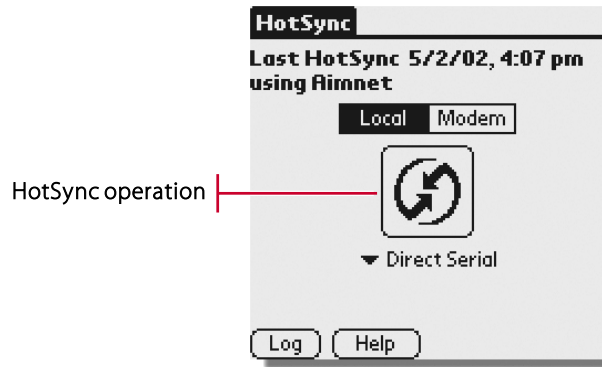
The five characters that replace the asterisks (\*\*) in the **Upload** are added to the **Software P/N** to name the upload file.

For example, if your **Software P/N** is **S0410530** and you enter **0000B** in **Upload**, the upload file name is **S04105300000B**.

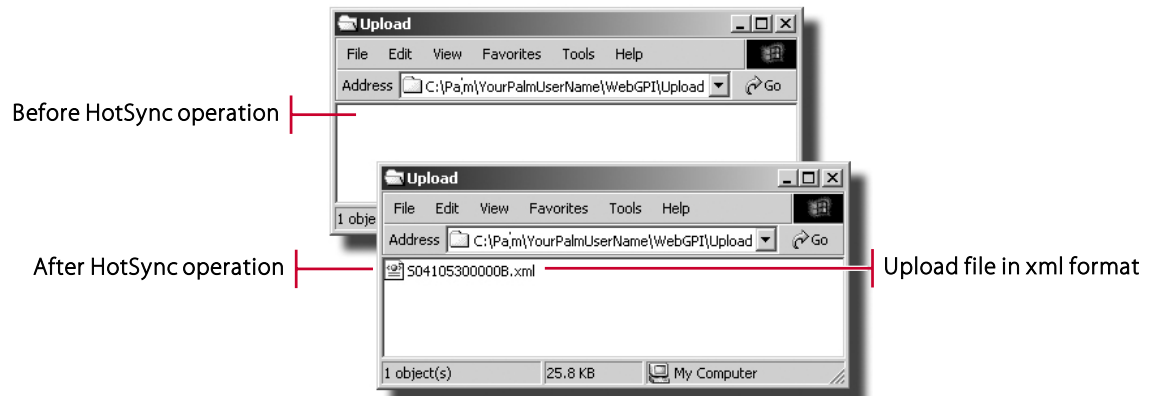
- C. Tap **OK** to start the upload.

The **Upload finished** message displays when the application creates the upload file.

5. Use the HotSync cradle/cable to connect your handheld to your computer.



6. Perform a HotSync operation.



7. In your PC, locate the uploaded file in the **Upload** folder.

The typical path to this folder is:

**My Computer** > **Local Disk** (typically C:) > **Palm** folder > YourPalmUserName folder > **WebGPI** folder > Upload folder

---

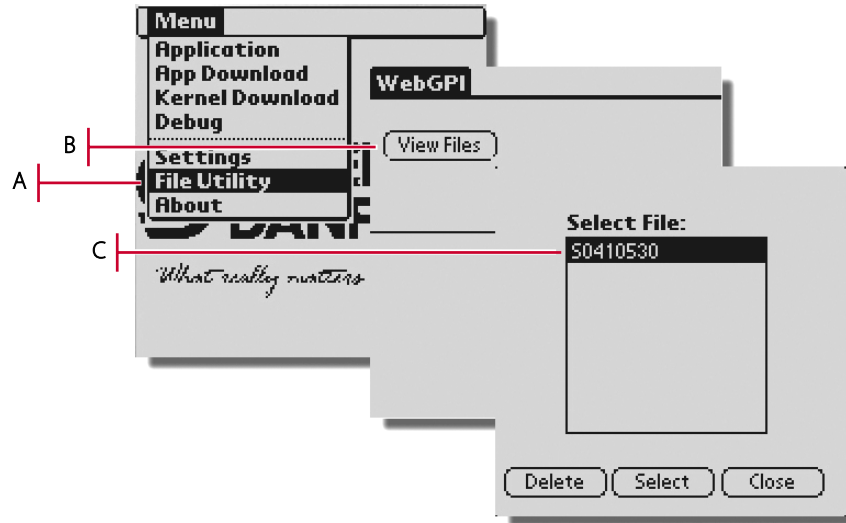
*Note* You can simplify finding the **Upload** folder by creating a shortcut to this folder and placing it on your desktop.

---

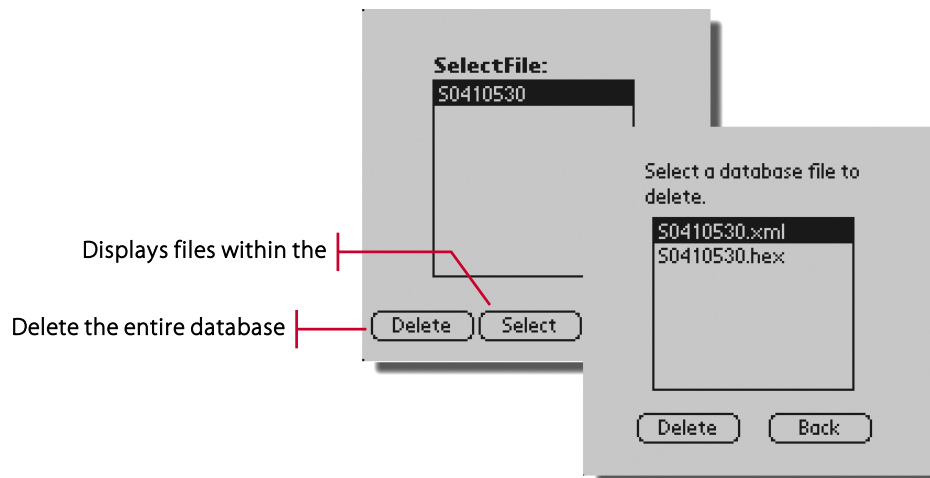
# Delete Files

1. Start the WebGPI PDA application.

You do not need to connect to a microcontroller to delete files.



2. Display the File Utility screen.
  - A. In the **WebGPI** menu, tap the **File Utility** command.
  - B. Tap the **View File** button.
  - C. Select a file.



3. Delete files.
  - Tap **Delete** to delete all the files in the database.
  - Tap **Select** to display files within the database. Then delete individual files within the database.

# Installing and Removing the Application

- Overview** This chapter covers installing and removing the WebGPI application on your PC and handheld.
- Contents** **Install and Register the WebGPI PDA Application 48**  
**Remove the WebGPI PDA Application 51**

# Install and Register the WebGPI PDA Application

- The WebGPI PDA application uses about 1.7 MB of disk space on your PC.
- The WebGPI PDA application with microcontroller application files typically requires about 250–350 KB of handheld memory.
- Without registering a **User Password**, the WebGPI PDA application will stop working 30 days after you install it on your handheld.

---

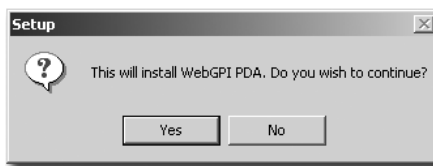
**Note** Install Palm Desktop software before installing the WebGPI PDA application.

---

1. If you are updating your WebGPI PDA application, uninstall any previous versions of the application that are on your PC (see page 51).



2. Insert the **WebGPI PDA** CD-ROM in the CD drive on your PC.

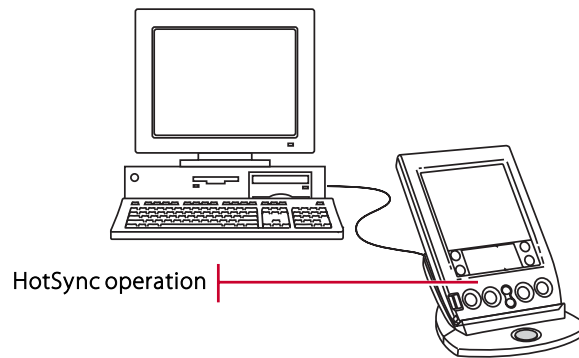


3. When the **Setup** dialog appears, answer **Yes**.

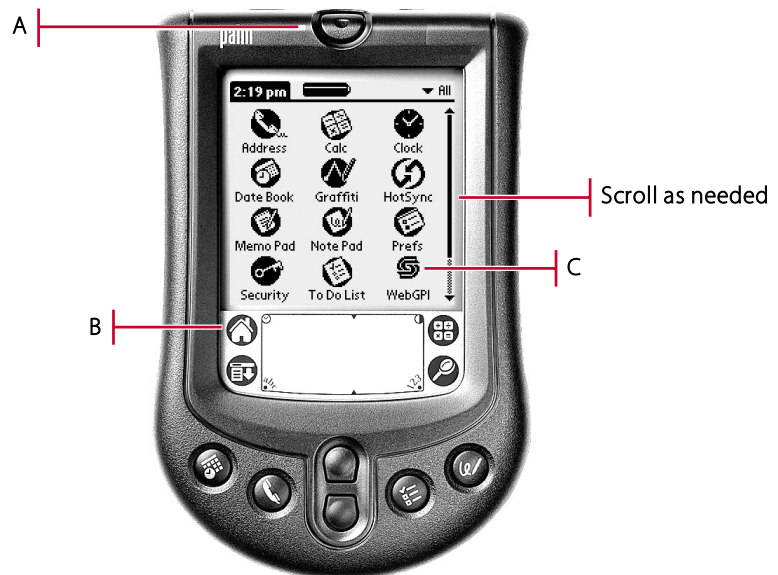
If the **Setup** dialog does not automatically appear, explore the **WebGPI PDA** CD-ROM and double-click the setup **WebGPI\_PDA.exe** file.

4. Follow the installation instructions that appear on your screen.

## Install on the handheld



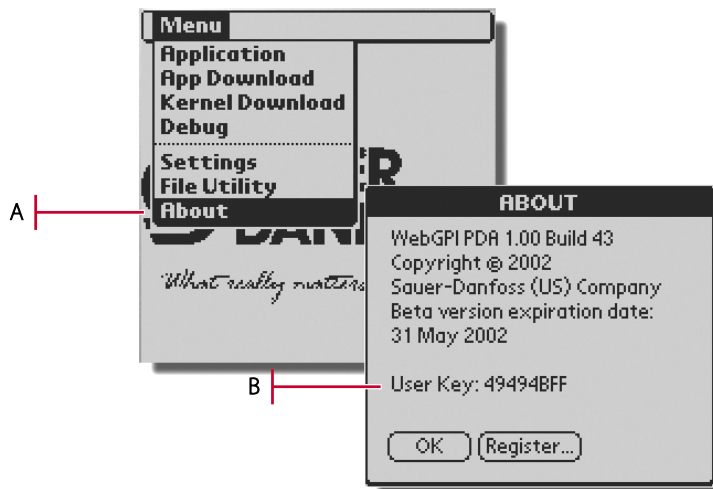
1. Perform a HotSync operation to install the WebGPI PDA application on your handheld.



2. Launch the WebGPI PDA application on your handheld.
  - A. Press the Power/Backlight button to start the handheld.
  - B. Tap the Applications Launcher icon and scroll as needed to display the **WebGPI** PDA Application Launcher icon.
  - C. Tap the **WebGPI** PDA Application Launcher icon to start the WebGPI PDA application.

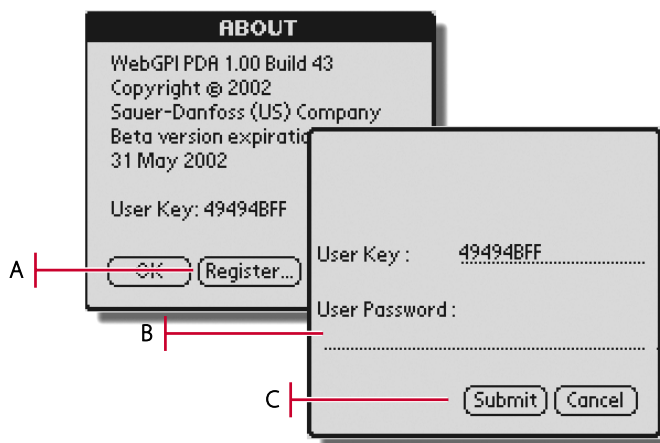
## Register

Each installation on a handheld generates a unique **User Key** that requires a unique **User Password** to register the WebGPI PDA application.



1. Locate your **User Key**.
  - A. Display the **About** alert.
  - B. In **About**, find your **User Key**.
2. Contact Sauer-Danfoss with your **User Key** and get a **User Password**.
  - Customer Service at 1.763.509.2084 (USA, Central Standard Time)
  - [www.sauer-danfoss.com/Products/products\\_electrohydraulics.html](http://www.sauer-danfoss.com/Products/products_electrohydraulics.html)

Sauer-Danfoss will give you a **User Password**.



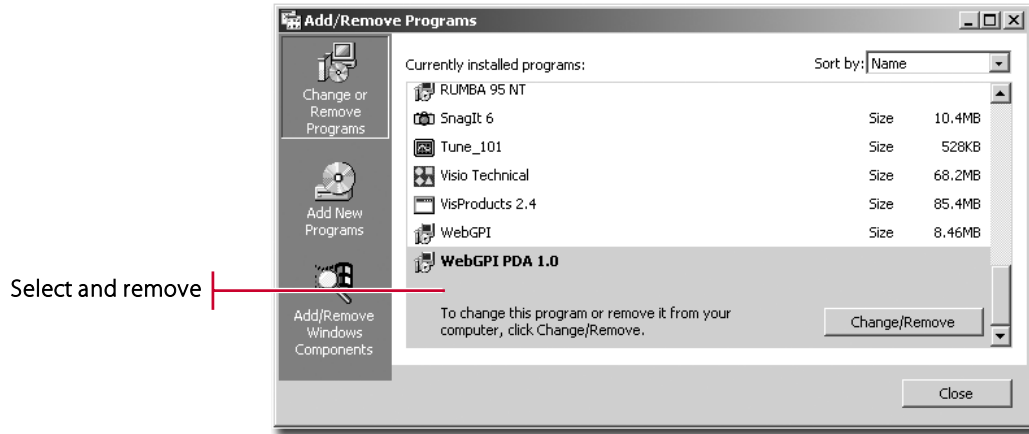
3. Register your **User Password** in your handheld
  - A. In **About**, tap **Register**.
  - B. Enter your **User Password** (See page 12 for information on using the Graffiti writing area).
  - C. Tap **Submit**.

# Remove the WebGPI PDA Application

## Remove from the PC

1. On your PC, display **Add/Remove Programs**.

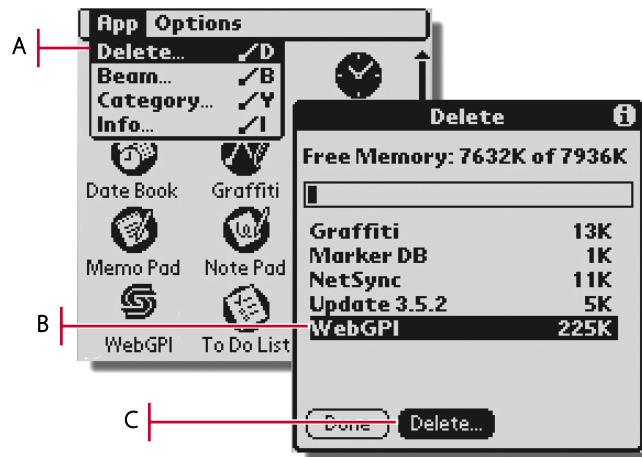
Start menu > **Settings** > **Control Panel** > **Add/Remove Programs**



2. Use **Add/Remove Programs** to remove the WebGPI PDA application.
  - A. Select the WebGPI PDA application.
  - B. Remove the WebGPI PDA application.

## Remove from the handheld

1. Turn your handheld on.



2. Delete the WebGPI PDA application.
  - A. In the **Applications Launcher** screen **App** menu, tap to select the **Delete** command.

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