

# ***Symbol Application Guide***

*for Symbol Devices*



# **Symbol Application Guide**

*For Symbol Devices*

72E-68901-01

Revision A

April 2005

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# Revision History

Changes to the original manual are listed below:

<b>Change</b>	<b>Date</b>	<b>Description</b>
-01 Rev A	April 2005	Initial Release



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## Introduction

This guide provides information about the Symbol provided sample and utility applications.



Screens and windows pictured in this guide are samples and may differ from actual screens.

This guide provides navigation procedures and instructions for touch screen devices. For devices that do not have a touch screen refer to the device *User Guide* for navigation instructions.

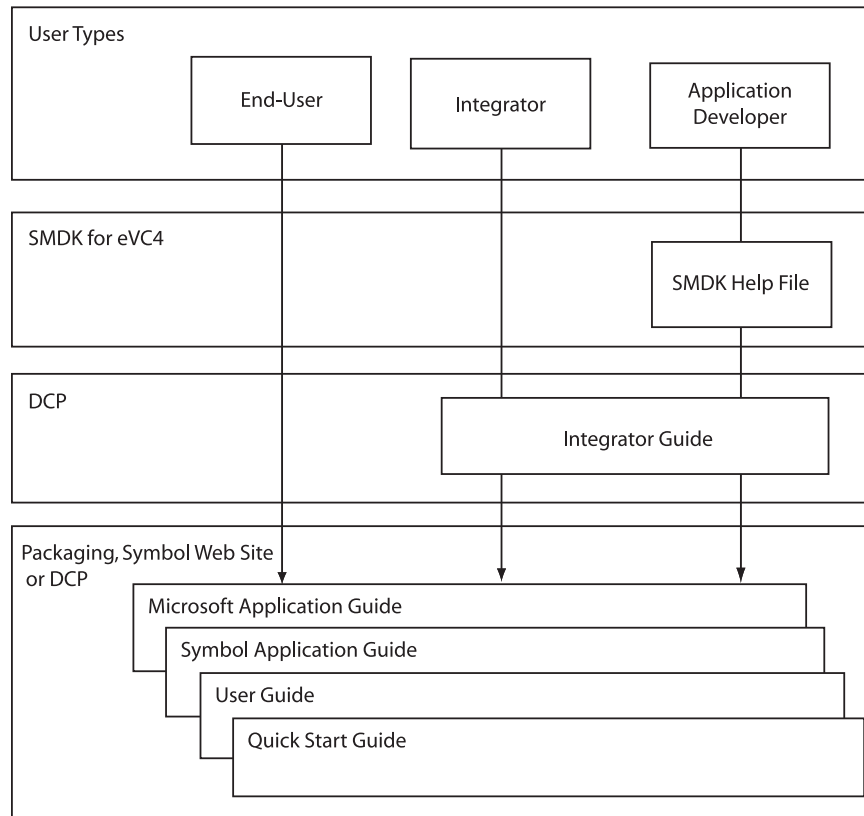
Not all features described in this guide pertain to all devices. Refer to the device *User Guide* for supported features.

## Documentation Set

The documentation set for Symbol devices is divided into guides that provide information for specific user needs.

- **Microsoft Applications User Guide for Symbol Devices** - describes how to use Microsoft developed applications.
- **Symbol Application Guide for Symbol Devices** - describes how to use Symbol developed sample and utility applications.
- **Quick Start Guide (QSG)** - provides an overview of how to use a particular Symbol device.
- **User Guide** - describes how to use a particular Symbol device.
- **Integrator Guide** - describes how to set up a Symbol device and the device accessories.
- **SMDK Help File** - provides API information for writing applications.

For the latest document versions, go to: <http://www.symbol.com/manuals>.



## Chapter Descriptions

Topics covered in this guide are as follows:

- *Chapter 1, Introduction* provides an introduction to the two Symbol application types: sample applications and utility applications.
- *Chapter 2, Sample Applications* provides information about the Symbol sample applications. These applications are provided to give the application developers an overview of how the application works and to assist the application developer with application development. The source code is available in the *SMDK for eVC4*.
- *Chapter 3, Utilities* provides instructions on using the Symbol utilities and the device settings accessed from the *CtlPanel.exe* utility.

## Notational Conventions

The following conventions are used in this document:

- The term “device” refers to a Symbol device.
- *Italics* are used to highlight the following:
  - Chapters and sections in this and related documents
  - Dialog box, window and screen names
  - Drop-down list and list box names
  - Check box and radio button names
  - Icons on a screen.
- **Bold** text is used to highlight the following:
  - Key names on a keypad
  - Button names on a screen.
- Bullets (●) indicate:
  - Action items
  - Lists of alternatives
  - Lists of required steps that are not necessarily sequential.
- Sequential lists (e.g., those that describe step-by-step procedures) appear as numbered lists.

# 1

## ***Introduction***

### **Chapter Contents**

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## Introduction

There are two Symbol application types: sample applications and utilities (see [Table 2-1 on page 2-4](#) and [Table 3-1 on page 3-3](#)). Application developers can use the sample applications for an overview of how the application works and to assist in application development. The source code is available for the sample applications in the *SMDK for eVC4*. Use the utilities to change and/or set the device parameters and for test applications. The source code is not provided for utility applications.



Screens and windows pictured in this guide are for illustration purposes and may differ from actual screens.

This guide provides navigation procedures and instructions for touch screen devices. For devices that do not have a touch screen refer to the device *User Guide* for navigation instructions.

The applications described in this guide are not available on (or applicable to) all devices.

For Windows CE based devices use a double-tap on the OTL window application icon.

For Windows Mobile 2003 based devices use a single tap on the OTL window application icon.

Refer to the device *User Guide* for procedures on accessing applications.

## OTL Window



Application locations provided in this guide are not device specific. Refer to the device *User Guide* for specific application locations.

For Windows CE based devices the OTL window is often the default window when the device is turned on. If the OTL window is not the default window when the device is turned on, launch OTL to access the OTL application. Refer to the device *User Guide* to locate the OTL program file.

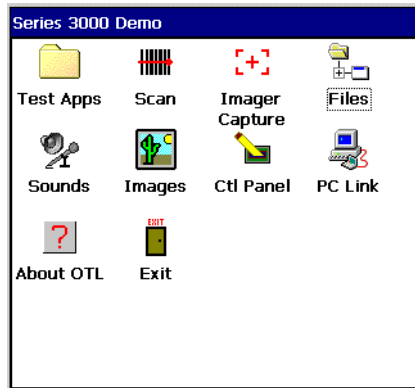
For Windows Mobile 2003 based devices tap *Start* and then tap the OTL program item on the menu.

Or if the OTL application is not listed in the *Start* menu, use the file browser to locate the OTL application. Refer to the device *User Guide* to locate the OTL program file.

The keypad arrows (if available) perform the same function as the screen displayed arrow buttons.

Procedures provided in this guide are not device specific and are intended to provide the application developers with an overview of how the application works.

The *OTL* program launcher sample application (file name is *OTL.exe*) uses registry settings to create an OTL window that display icons for the applications and utilities provided on the device. The *OTL* program launcher sample application is provided as an application development example. The source code is available for the *OTL* program launcher sample application in the *SMDK for eVC4*. For more information on the OTL application see [OTL on page 2-24](#).



**Figure 1-1. OTL Sample Application Window**

## ***Sample Applications***

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## Introduction

The sample applications (see [Table 2-1 on page 2-4](#)) are designed to provide sample code to assist in application development. The source code is available in the *SMDK for eVC4*. These applications were not intended for use in a production environment.



Screens and windows pictured in this guide are for illustration purposes and may differ from actual screens.

This guide provides navigation procedures and instructions for touch screen devices. For devices that do not have a touch screen refer to the device *User Guide* for navigation instructions.

The applications described in this guide are not available on (or applicable to) all devices.

For Windows CE based devices use a double-tap to launch an application.

For Windows Mobile 2003 based devices use a single tap to launch the application.

Refer to the device *User Guide* for procedures on accessing applications.

Procedures provided in this guide are not device specific and are intended to provide the application developers with an overview of how the application works.

## Common Menus

The *File* and the *Help* menus are common to many of the sample applications. Use these menus to exit the application, view the *About* window and perform program specific functions.

### File Menu






Use the *File* menu to exit the application. Tap *File - Exit*. To exit the application.

### Help Menu

Use the *Help* menu to display the *About* window.

1. Tap *Help - About*. The application *About* window appears.
2. From the *About* window, tap **OK** to close the *About* window and return to the application.

**Table 2-1. Sample Applications**

Icon*	File Name	Description
 About OTL	<i>About.exe</i>	Use the <i>About</i> sample application window to display the About OTL window software version information (see <a href="#">About on page 2-5</a> ).
 Sounds	<i>AudioSamp.exe</i>	Use the <i>AudioSamp</i> application to play, record and save .wav audio files (see <a href="#">AudioSamp on page 2-6</a> ).
 Printing	<i>BasicPrint.exe</i>	Use the <i>BasicPrint</i> application to demonstrate the device print capability (see <a href="#">BasicPrint on page 2-9</a> ).
 Display	<i>DisplayTest.exe</i>	Use the <i>Display</i> window to test the device display functions by cycling through the 16 system colors (see <a href="#">DisplayTest on page 2-10</a> ). Black and white screens display 16 shades of grey.
 Imager Capture	<i>ImagerSample.exe</i>	Use the <i>ImagerSample</i> sample application (in devices with an integrated imager or color camera) to capture, display and save image files (see <a href="#">ImagerSample on page 2-11</a> ).
 Images	<i>ImageViewer.exe</i>	Use the <i>ImageViewer</i> application to open, display, pan, scale and save image files (see <a href="#">ImageViewer on page 2-13</a> ).
 Files	<i>InkWiz.exe</i>	Use the <i>InkWiz</i> file browser sample application to open, rename, delete, send, browse, cut, copy, paste files and to execute programs (see <a href="#">InkWiz on page 2-15</a> ).
 Keyboard	<i>KeyCheck.exe</i>	Use the <i>KeyCheck</i> sample application to test the device keypad functions. The application receives windows keyboard messages and displays them on the screen (see <a href="#">KeyCheck on page 2-18</a> ).
 Memory	<i>MemTest.exe</i>	Use the <i>MemTest</i> application to display and adjust the device memory allocation (see <a href="#">MemTest on page 2-19</a> ).
 MSR	<i>MsrSamp2.exe</i>	Use the <i>MsrSamp2</i> application to display information from a Magnetic Stripe Card (MSR). The application is designed to work with a MSR Card Reader (see <a href="#">MsrSamp2 on page 2-20</a> ).
 Notify	<i>Notify.exe</i>	Use the <i>Notify</i> sample application to demonstrate the notification capabilities (such as LEDs, beepers and vibrators). The <i>Notify</i> application displays the <i>Notify Example</i> window. The window contains a listing of the notification objects supported by the device (see <a href="#">Notify on page 2-21</a> ).
 Otl	<i>OTL.exe</i>	Use the <i>OTL</i> sample application window to launch applications (see <a href="#">OTL on page 2-24</a> ).
 Scan	<i>ScanSamp2.exe</i>	Use the <i>ScanSamp2</i> sample application to enable the scanner, display scanned data and to modify the scan parameters (see <a href="#">ScanSamp2 on page 2-25</a> ).
 ScanWedge	<i>ScanWedge.exe</i>	Use the <i>ScanWedge</i> sample application to enable non-scanning aware applications to receive data from scanned bar codes (see <a href="#">ScanWedge on page 2-29</a> ).

\* The icons and the icon names are samples and may differ from product to product.

## About

Use the *About* sample application window to display the *About OTL* window. This window contains the software version information.

To view the *About OTL* window:

1. From the OTL window, launch *About OTL*. The *About OTL* window appears.










**Figure 2-1. About OTL Window**

2. Tap **OK** to return to the OTL window.

## AudioSamp

Use the *AudioSamp* application to play, record and save .wav audio files. The *AudioSamp* application can only be used on devices that have the optional audio enabled hardware. [Table 2-2](#) provides the *AudioSamp* button function descriptions.

**Table 2-2. AudioSamp Application Button Descriptions**

Button	Description
	Tap the folder button to find an audio file.
	Tap the play button to play an audio file.
	Tap the record button to record an audio file.
	Tap the stop button to stop either the play or record functions.
	Tap the floppy disk button to save a file
	Tap the question mark button to view the <i>About</i> window.
	Tap the <b>Exit</b> button to exit.



The *AudioSamp* application displays an error message when used with a device that does not have the audio enabling hardware. The audio enabling hardware is not available on all devices.

To use the *AudioSamp* application and play a sound file:

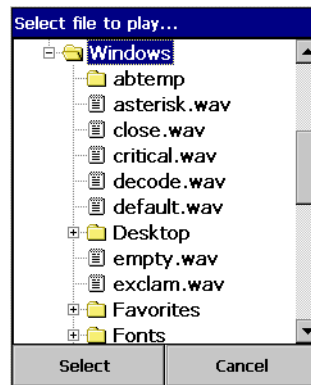
1. From the OTL window, launch *Sounds*. The *AudioSamp Example* window appears.



**Figure 2-2. AudioSamp Example Window**

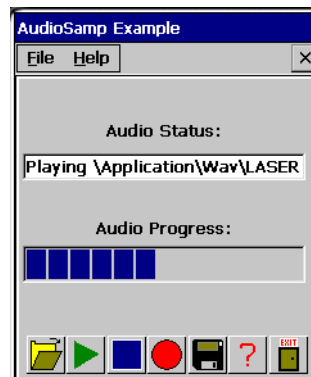


2. Tap the file folder button to access the sounds files. The *Select File to Play* window appears. The *Select File to Play* window shows the available .wav files. For devices that do not have the optional .wav file capability and support audio aliasing, select .wav files from the *\Platform\WavAlias\* directory.



**Figure 2-3. Select File to Play Window**

3. Select the .wav file. The *AudioSamp Example* play window appears.



**Figure 2-4. AudioSamp Example, Play Window**

4. Tap the green triangle (play) button to play the file.

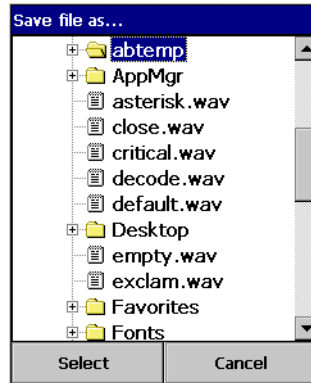
To record and save a sound file:

1. To record a file, tap the blue square (record) button. The *AudioSamp Example, Record* window appears.



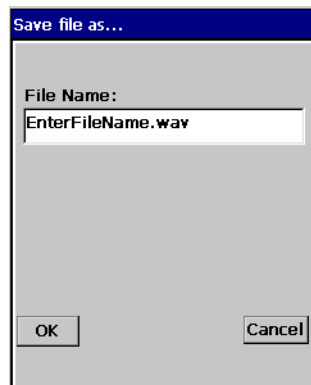
**Figure 2-5. AudioSamp Example, Record Window**

2. Speak into the microphone.
3. When the recording is complete, tap the red circle (stop) button to stop the recording.
4. Tap the floppy disk (save) button to save the recording. The *Save file as...* directory window appears.



**Figure 2-6. Save File As, Directory Window**

5. Tap a folder to highlight and tap **Select** to set that folder as the destination. The *Save file as*, file name window appears.



**Figure 2-7. Save File As, File Name Window**

6. Enter the file name in the *File Name:* text box.
7. Tap **OK** to save the file or tap **Cancel** to exit without saving.
8. Tap **Exit** to exit the application.

## **Menus**

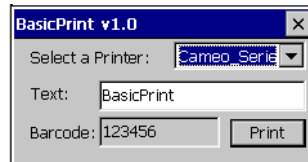
Use the *AudioSamp* sample application to access the [Common Menus on page 2-3](#).

## BasicPrint

Use the *BasicPrint* application to demonstrate the device print capability. The application source code also shows how an application should handle printer outputs.

To use the *BasicPrint* application:

1. From the *Test Applications* window, launch *Printing*. The *BasicPrint* window appears.



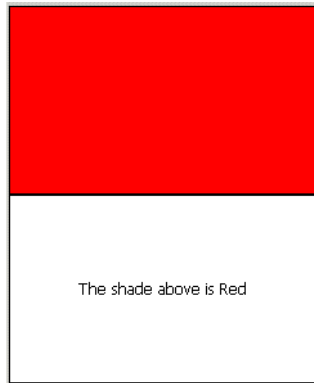
**Figure 2-8. BasicPrint Window**

2. Tap the *Select a Printer* drop-down arrow to select a printer.
3. In the *Text:* text box, enter text to print.
4. Tap **Print**. The printer prints the contents of the *Text:* text box and *Barcode:* text box.
5. Tap **X** to exit.

## DisplayTest

Use the *DisplayTest* window to test the device display functions by cycling through the 16 system colors. Monochrome screens display 16 shades of grey.

To perform a display test, launch *Display* (from the *Test Applications* window). The *Display Test* window appears and the display test application automatically runs through all of the display test windows. When the test is complete, the application exits automatically.



**Figure 2-9. Display Test Window**

## ImagerSample

Use the *ImagerSample* sample application (in devices with an integrated imager or color camera) to capture, display and save image files. The *ImagerSample* sample application supports two modes of operation:

- *Capture mode* The imager is enabled and the real-time video image displays. This is a viewfinder mode of operation, used for aiming and framing the picture. Press the scan button to capture the image and toggle to the Display mode.
- *Display mode* The captured image displays as a still image. In this mode the image can be saved as a .bmp file. Press the scan button to toggle back to the real-time video image and the Capture mode.

To use the *ImagerSample* application, from the OTL window, launch *ImagerSample*. The *ImagerSample* window appears.



**Figure 2-10. ImagerSample Window**

## Menus

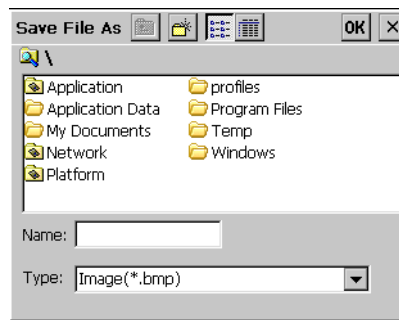
In addition to the [Common Menus on page 2-3](#), the *Imager* sample application has a *File* menu that allows additional options and an *Options* menu that allows scan parameters to be set.

### File Menu

Use the *File* menu to save, capture and view an image, or exit the application.

To save an acquired image:

1. Tap *File - Save As*. The *Save File As* window appears.



**Figure 2-11. Save File As Window**

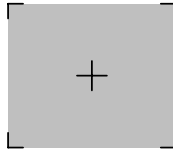
2. Select a folder to select that folder as the destination.
3. Enter the name of the image in the *Name* text box. The only available file format selection in the *Type* box is *Image(\*.bmp)*.
4. Tap **OK** to save the image.

- Tap *File - Capture* to capture a real-time video image.
- Tap *File - Viewer* to switch from a recently captured image to displaying a real-time video image.
- Tap *File - Exit* to exit.

### Options Menu

Use the *Options* menu to set the *Aim*, *Lamp* and *Focus Near* selections. The *Aim*, *Lamp* and *Focus Near* options are not supported (disabled or grayed out) on devices with a color camera.

- Tap *Options - Aim* (laser aim) to enable or disable an aiming targeting pattern.










**Figure 2-12. Aiming Pattern**

- Tap *Options - Lamp* to enable or disable the illumination lamp on during the image acquisition (exposure phase).
- Tap *Options - Focus Near* to enable or disable a close focal (focus) length, for close up image capture.

## ImageViewer

Use the *ImageViewer* application to open, display, pan, scale and save image files. [Table 2-3](#) provides the *ImageViewer* button function descriptions.

**Table 2-3. ImageViewer Button Function Descriptions**

Button	Description
	Tap an arrow and drag stylus on image to accomplish the following: <ul style="list-style-type: none"> <li>• Up arrow expands image from bottom to top or pans up (based upon re-scale or pan mode).</li> <li>• Down arrow expands image from top to bottom or pans down (based upon re-scale or pan mode).</li> <li>• Left arrow shrinks image from right to left or pans left (based upon re-scale or pan mode).</li> <li>• Right arrow expands image from left to right or pans right (based upon re-scale or pan mode).</li> </ul>
	Tap an icon and use stylus to crop the image as follows: <ol style="list-style-type: none"> <li>1. Fits image to screen (maintain original aspect ratio).</li> <li>2. Locates image to home position (upper left).</li> <li>3. Re-scales mode enable.</li> </ol>
	Tap to open an image file.
	Tap and drag stylus on image as follows: <ol style="list-style-type: none"> <li>1. Fine panning mode enable.</li> <li>2. Coarse panning mode enable.</li> </ol>
	Tap to save an image.
	Tap to open <i>About ImageViewer</i> window.
	Tap to exit the ImageViewer.

## File Management

The *Open* and *Save* functions utilize the *InkWiz* sample application to select files (see [InkWiz on page 2-15](#)). If *InkWiz* is not loaded onto the device an error occurs when these functions are invoked.

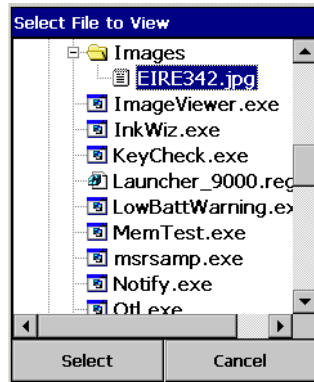
To open the *Images* application and display an image:

1. From the OTL window, launch *Images*. The *ImageViewer Example* window appears.



**Figure 2-13. ImageViewer Example Window**

- Select the folder icon to display the contents of the images folder. The *Select File to View* window appears.



**Figure 2-14. Select File to View Window**

- Select the image name to display it. The *Image* window appears and displays the selected image file.



**Figure 2-15. Image Window**

To manipulate and save the image:

- Use the positioning, sizing and save icons to manipulate and save the image, see [Table 2-3](#).
- Tap **Exit** to exit.

## Menus

Use the *ImageView* sample application to access the [Common Menus on page 2-3](#).



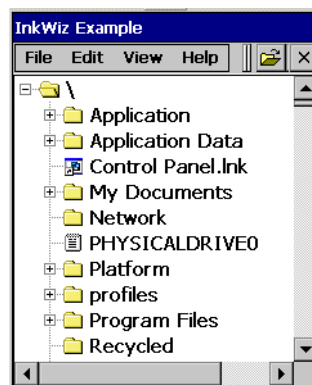
## InkWiz

Use the *InkWiz* file browser sample application to open, rename, delete, send, browse, cut, copy, paste files and to execute programs. *InkWiz* may also provide file transfer capability via the serial port, the IrDA port and Winsock (depending on product capabilities).

The *Treeview* display (default display), shows the structure and contents of the file systems. The root is represented by the back slash “\” character. *Treeview* has two node types, parent nodes and child nodes. Parent nodes represent file systems or folders and are depicted by a folder icon. Child nodes represent files and are depicted by a file icon.

Parent nodes that contain embedded nodes use a plus “+” symbol to indicate that node is not expanded or a minus “-” symbol to indicate that the node is expanded. Tap the plus “+” to expansion the node and display the contents. Tap the minus “-” to collapse the node and hide the contents.

To use the *InkWiz* application, from the OTL window, launch *Files*. The *InkWiz Example* window appears.



**Figure 2-16. InkWiz Example Window**

## Menus

In addition to the [Common Menus on page 2-3](#), the *InkWiz Example* application menus allow additional options.

- The *File* menu is used for moving and maintaining files.
- The *Edit* menu is used to manage the host, and the connection information.
- The *View* menu is used to manage the host information, and the connection information.
- The *Help* menu is used to display the *WhoAmI* window.

### File Menu

Use the *File* menu to open, rename, send, receive, view file properties or delete files, or to exit the application.

- Highlight a file and tap *File - Open* to open the file.
- Highlight a file and tap *File - Rename* to enter the new file name.
- Highlight a file and tap *File - Properties* to display the file properties.
- Highlight a file and tap *File - Del* to delete the file.
- Highlight a file and tap *File - Send to* to select the transport method for an outgoing file. A drop-down menu appears to select the transport methods.
  - Tap *IR*. A menu appears to select the transport method (not supported on all devices).
  - Tap *Serial*. A menu appears to select the serial port.
  - Tap *Cradle*. To transport through the default cradle port.
  - Tap *WinSock*. A menu appears to select the transport method (not supported on all devices).
- Highlight a file and tap *Receive from* to select the transport method for an incoming file. A drop-down menu appears to select the transport method.
  - Tap *IR*. A menu appears to select the transport method (not supported on all devices).
  - Tap *Serial*. A menu appears to select the serial port.
  - Tap *Cradle*. To transport through the default cradle port.
  - Tap *WinSock*. A menu appears to select the transport method (not supported on all devices).
- Tap *File - Exit* to exit.

### Edit Menu

Use the *Edit* menu to cut, copy, paste, set baud rates, or to exit the application. The *Edit* menu is also used to manage the host information, and the connection information.

- Highlight a file and tap *Cut* to move the file to memory.
- Highlight a file and tap *Copy* to copy the file to memory.
- Highlight destination location and tap *Paste* to copy a file from memory to the highlighted location.
- Tap *Baud* to select a baud rate. A menu appears to select the *9600*, *19200*, *38400*, *57600*, or *115200* baud rate.
- Tap *Hosts* to view and manage the connected host information.
  - Tap **OK** to exit. Changes made to the list take effect immediately.
  - Tap the down arrow to scroll down.
  - Tap the up arrow to scroll up.
  - Tap **Edit** to edit the information for the selected (highlighted) host in the list.
  - Tap **New** to enter a new host.
  - Tap **Del** to delete the selected (highlighted) host from the list.

- Tap **Cancel** to exit. All entered changes are abandoned.
- Tap the *Connections* selection to view and manage the connection information.
  - Tap **OK** to exit. Changes made to the list take effect immediately. There is no way to abandon changes once they are made.
  - Tap **Edit** to edit the information for the selected (highlighted) connection in the list. Modifying a connection removes the old connection and adds the new connection.
  - Tap **New** to enter a new connection. When a new connection is added, an attempt is made to establish access to the specified network file share immediately. If the attempt succeeds, then the connection is added to both the registry and the list. If the attempt fails, then the connection is not added to the registry or the list.
  - Tap **Del** to disconnect the selected (highlighted) connection and remove it from the registry and the list.

### View Menu

Use the *View* menu to hide and to display the directory tree information.

- Tap *Hide* to hide the directory *Treeview*.
- Tap *Tree* to select a directory *Treeview*. A menu appears to select the directory tree view *Expand*, *Collapse*, *Default*, *Minimum*, or *Refresh*.

### Help Menu

Use the *Help* menu to display the *About* and *WhoAml* windows.

- Tap *Help - WhoAml*, the *InkWiz Example, WhoAml* window appears and displays the network name and IP address assigned to the device.



**Figure 2-17. InkWiz Example, WhoAml Window**

## KeyCheck

Use the *KeyCheck* sample application to test the device keypad functions. The application receives keyboard messages and displays them on the screen. This application demonstrates how the keyboard messages are processed. The application can also be used to help diagnose keypad problems.

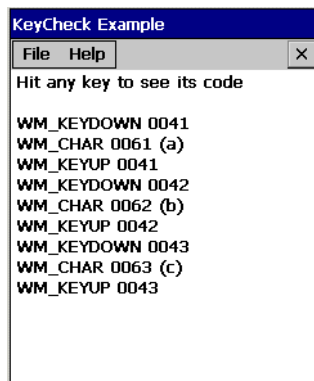
To use the *KeyCheck* application:

1. From the *Test Applications* window, launch *Keyboard*. The *KeyCheck Example* window appears.



**Figure 2-18. KeyCheck Example Window**

2. Press the *a* key, press the *b* key and press the *c* key. The corresponding values display on the *KeyCheck Example* window.



**Figure 2-19. KeyCheck Example Window**

## Menus

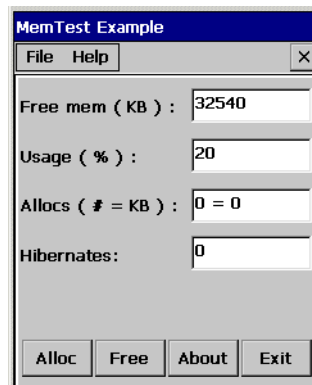
Use the *KeyCheck* sample application to access the [Common Menus on page 2-3](#).

## MemTest

Use the *MemTest* application to display and adjust memory allocations. The application source code also demonstrates how an application should handle memory messages.

To use the *MemTest* application:

1. From the *Test Applications* window launch *Memory*. The *MemTest Example* window appears. The memory test automatically tests the device memory and displays the results.



**Figure 2-20. Memory Test Window**

**Table 2-4. Button Functions**

Button	Function
<b>Alloc</b>	Increase the amount of allocated memory and decreases the amount of free memory.
<b>Free</b>	Increases the amount of free memory and decreases the amount of allocated memory.
<b>About</b>	Displays the application <i>About</i> window.
<b>Exit</b>	Exits the application.

2. Tap **Alloc**. The amount of allocated memory increases (each time **Alloc** is selected) and correspondingly the amount of free memory is reduced.
3. Tap **Free**. The amount of free memory increases (each time **Free** is selected) and correspondingly the amount of allocated memory is reduced.
4. Tap **About** to display the *About* Window.
5. Tap **Exit** to exit.

## Menus

Use the *MemTest* sample application to access the [Common Menus on page 2-3](#).

## MsrSamp2

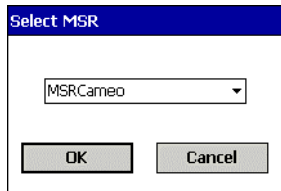
Use the *MsrSamp2* application to display information from a Magnetic Stripe Card (MSR). The application is designed to work with a MSR Card Reader. The sample application source code illustrates how the application code should handle MSR inputs.



The MSR must be attached to the device before the sample application is executed.

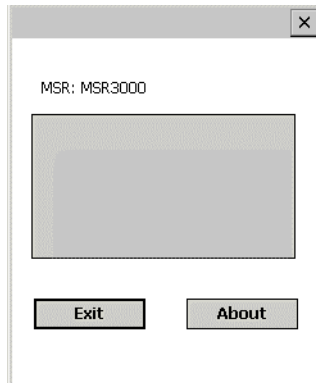
To use the *MsrSamp2* application:

1. From the *Test Applications* window, launch *MSR*. The *Select MSR* window appears.



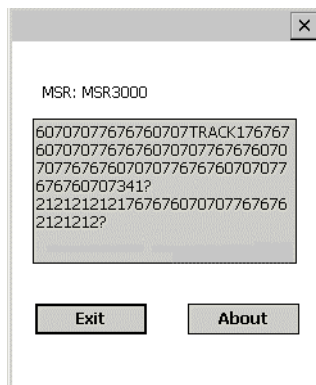
**Figure 2-21. Select MSR Window**

2. Tap the drop-down arrow and select the applicable MSR version from the list. The *MSR* window appears.



**Figure 2-22. MSR Window**

3. Swipe a magnetic stripe card. The card data displays in the MSR data window.



**Figure 2-23. MSR Data Window**

4. Tap **About** to display the *MSR About* window.
5. Tap **Exit** to exit the application.

## Notify

Use the *Notify* sample application to demonstrate the device notification capabilities. The *Notify* application displays the *Notify Example* window. The window contains a listing of the notification items supported by the current device. Function buttons may also display (depending on the device).

There are three classes of notification items supported: LED, Beeper, and Vibrator. A device can have multiple notification items for each class, but normally there would not be more than one beeper or vibrator notification item. The notification items are assigned names, which identify both the class and the function of the notification item.

**Table 2-5. Notification Classes**

Object Name	Class	Description
Green Decode LED	LED	Used to indicate a successful scan.
FUNC LED	LED	Used to indicate the function state of the keypad.
SHIFT LED	LED	Used to indicate the shift state of the keypad.
CNTL LED	LED	Used to indicate the control state of the keypad.
COMM LED	LED	Used to indicate communications connectivity/activity.
Amber LED	LED	General purpose amber color indicator.
Yellow LED	LED	General purpose yellow color indicator.
Beeper	Beeper	Audio device used to indicate significant events.
Vibrator	Vibrator	Mechanical device used to indicate significant events.



The *Object Name* list is unique to each device.

To use the *Notify* application:

1. From the *Test Applications* window, launch *Notify*. The *Notify Example* window appears.

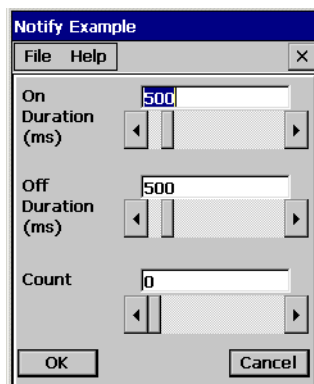


**Figure 2-24. Notify Example Window**

**Table 2-6. Button Functions**

Button Functions	Description
<b>Off</b>	Turns off the selected (highlighted) notification object.
<b>On</b>	Turns on the selected (highlighted) notification object.
<b>Cycle</b>	Sets the selected (highlighted) object to cycling between on and off states according to the cycle options currently in effect for the object.
<b>Edit</b>	Displays and allows modification of the cycle options for the selected (highlighted) notification object.
<b>State</b>	Displays the current state of the selected (highlighted) notification object.
<b>About</b>	Displays the <i>About</i> window.
<b>Exit</b>	Closes the <i>Notify Example</i> window and exits the application.

2. Tap an *Object Name* to select the item.
  - Tap **Off** to turn off the selected item.
  - Tap **On** to turn on the selected item.
  - Tap **Cycle** to cycle the selected item on and off.
  - Tap **State** to display the selected on or off state.
3. Tap **About** to view the *Notify About* window.
4. Tap **Exit** to exit.
5. Tap an *Object Name* to select the item.
6. Tap **Edit**, the *Notify Example Edit Window* appears.
7. Drag a slide bar to adjust the value. The cycle options can be set for a notification object. The supported cycle options for each of the notification objects are provided in [Table 2-7 on page 2-23](#).
8. Repeat the edit procedure (if required) for remaining items.



**Figure 2-25. Notify Example Edit Window**



**Table 2-7. Notify Cycle Edits**

Setting	Description
LED	
A notification cycle for LEDs involves alternating a specified number of times between the on and off states and spending the specified time durations in each of the states.	
On Duration	The duration of time (in milliseconds) that the LED is on.
Off Duration	The duration of time (in milliseconds) that the LED is off.
Count	The number of times that the LED alternates between on and off.
Beeper	
A notification cycle for a beeper involves turning the beeper on at a specified frequency and volume, leaving it on for a specified duration, and then turning it off.	
Frequency	The frequency to be used when the beeper is on.
Volume	The volume to be used when the beeper is on.
Duration	The duration the beeper remains on.
Class Vibrator	
A notification cycle for a vibrator involves turning the vibrator on, leaving it on for a specified duration, and then turning it off.	
Duration	The duration the vibrator remains on.

9. Tap **OK** to save edits and return to the *Notify* window.
10. Tap **Cancel** to exit without saving edits.

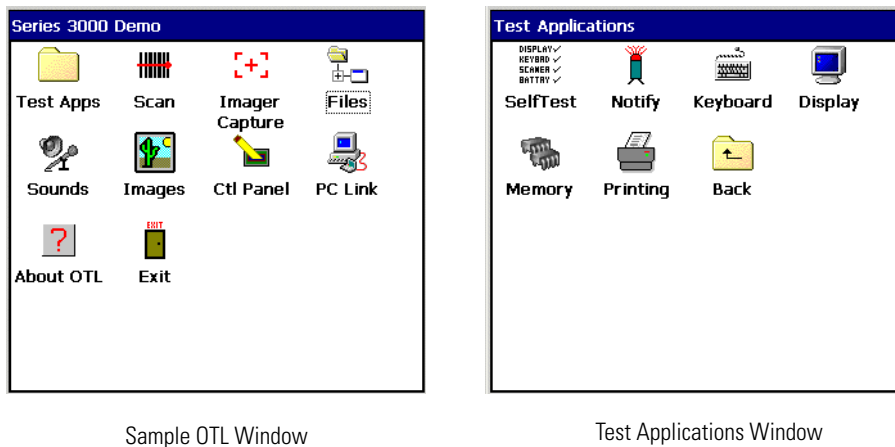
## **Menus**

Use the *Notify* sample application to access the [Common Menus on page 2-3](#).

## OTL

The *OTL* program launcher sample application uses registry settings to create an OTL window (and the nested *Test Applications* window) that display icons for the applications and utilities provided on the device.

1. If the OTL window is not the default window, launch OTL to access the OTL sample application. Refer to the device *User Guide* to launch the OTL window.
2. Select an icon to run the application.
3. From the OTL window, select the *Test Apps* icon to open the test applications window.
4. Select the *Back* icon to return to the OTL window.



**Figure 2-26. OTL Sample Application Windows**

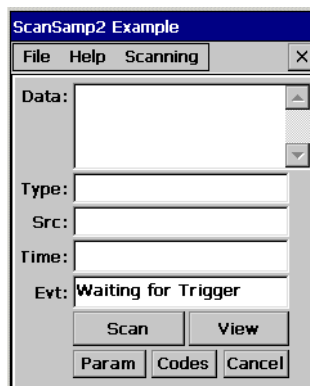
5. Select the *Exit* icon to exit the OTL application.

## ScanSamp2

Use the *ScanSamp2* sample application to enable the scanner, display scanned data and to modify the scan parameters.

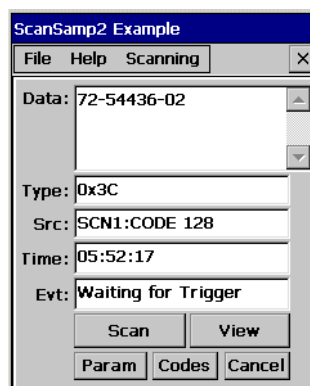
To use the *ScanSamp2* application:

1. From the OTL window, launch *Scan*. The *ScanSamp2 Example* window appears.



**Figure 2-27. ScanSamp2 Example Window**

2. Aim the device at a bar code and press a scan button (or select **Scan**). After a bar code is successfully scanned, the following information displays on the *ScanSamp2 Example* window:
  - *Data* Displays the data encoded in the scanned bar code.
  - *Type* Indicates the hex type (label type) scanned.
  - *Src* Indicates the scanner used and the bar code type scanned (e.g., Code 128).
  - *Time* Displays the time the bar code was scanned.
  - *Evt* Indicates that the device is ready to perform another scan.



**Figure 2-28. ScanSamp2 Example Window (with populated data)**

3. Tap **View**. The *View Window* appears and displays the bar code content (see [View Window on page 2-26](#)).
4. Tap **Param**. The *Parameters* window appears and displays the scan parameters (see [Parameters Window on page 2-27](#)).
5. Tap **Codes**. The *Codes* window appears and displays the scan parameters (see [Codes Window on page 2-28](#)).
6. Tap **Cancel** to exit.

## **View Window**

The *ScanSamp2 Example*, *View* window displays the data for the last scanned bar code. It also displays any bar code auxiliary information (if it exists).

Tap **OK** to exit the *View* window and return to the *ScanSamp2 Example* window.



**Figure 2-29. ScanSamp2 Example, View Window**

## Parameters Window

Use the *Parameters* windows to set the scan parameters options. Table 2-8 lists the parameter settings and describes the values.

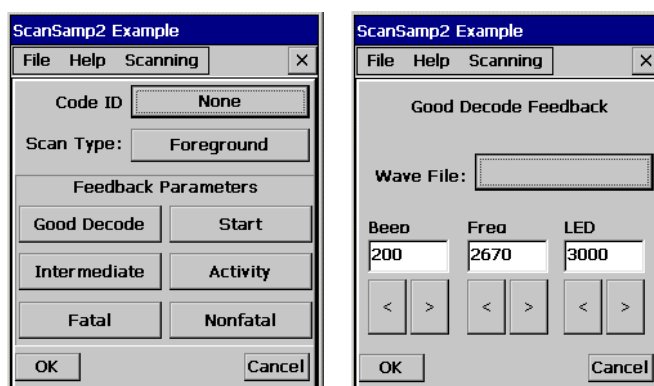


Figure 2-30. Parameters Window

Table 2-8. Parameters Window Settings

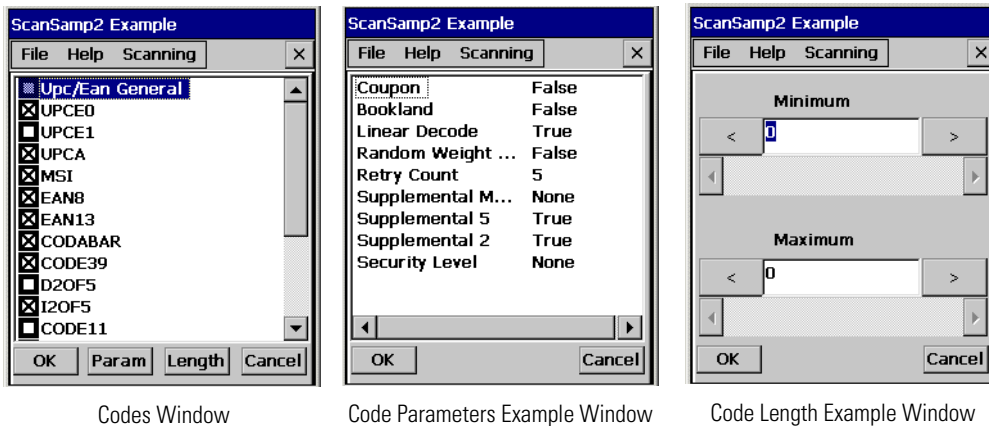
Parameter	Value
<i>Code ID</i>	
<b>None</b>	Default setting. No prefix.
<b>Symbol</b>	A Symbol defined single character prefix.
<b>AIM</b>	A standards based three character prefix.
<i>Scan Type</i>	
<b>Background</b>	The scan takes place in the background, but only if no foreground reads are pending.
<b>Foreground</b>	The scan takes place in the foreground, as the primary user activity. Foreground reads combine only with other foreground reads and preempt background reads.
<b>Monitor</b>	No scanning is requested, but if scanning is initiated by another application, a monitor read receives a copy (if the code type is appropriate).
<i>Feedback Parameters</i>	
<b>Good Decode</b>	<i>WAV File</i> - The name of the WAV file used to create the decode beep.
<b>Intermediate</b>	Note: A WAV file can only be used on audio enabled devices.
<b>Fatal</b>	<i>Beep</i> - The length of time the decode beep remains on upon decode.
<b>Start</b>	<i>Freq</i> - Defines the beeper frequency (tone).
<b>Activity</b>	<i>LED</i> - The length of time LED remains on upon decode.
<b>Nonfatal</b>	

1. Tap *Code ID* to select the code ID value (**None**, **Symbol** or **AIM**).
2. Tap *Scan Type* to select the scan type (**Background**, **Foreground** or **Monitor**).
3. Select a *Feedback Parameters* button to select the feedback parameters category (**Good Decode**, **Intermediate**, **Fatal**, **Start**, **Activity** or **Nonfatal**). A *Parameters Input Window* appears. All of the feedback parameter categories use a *Parameters Input Window* with the same basic format.
4. To change the beep wave file enter a new path and name into the *Wave File* box. Use the left and right arrow buttons to set the values for the *Beep*, *Freq* and *LED*. Note, devices that do not have the optional .wav file capability can not use the new .wav file setting.
5. Tap **Cancel** to return to the *ScanSamp2 Example* window.

## Codes Window

Use the *Codes* window to enable or disable code types and set the scan parameters for each code type.

1. Select the check box next to a code type to enable the code type or deselect the check box to disable the code type.



**Figure 2-31. ScanSamp2 Example**

2. To set parameters for a code type, tap the code type to highlight it and then tap **Param** to display the *Code Parameters Example Window*. Different code types have parameter settings specific to that code type, so the windows are different.
3. To set length for a code type, tap the code type to highlight it and then tap **Length** to display the *Code Length Example Window*. Lengths are specified as a minimum length and a maximum length. Different code types have length settings specific to that code type.
4. Tap **Cancel** to exit.

## Menus

In addition to the [Common Menus on page 2-3](#), the *ScanSamp2* application has a *Scanning* menu that allows additional scanning parameters to be set.

### Scanning Menu

Use the *Scanning* menu to set the scan parameters.

- Tap *Scanning - Enable*. Enables scanning when a scan button is pressed. Scanning is enabled by default when the application starts.
- Tap *Scanning - Disable*. Prevents scanning even when a scan button is pressed.
- Tap *Scanning - Abandon*. Used in a macro multi-bar code sequence to exit the scanning sequence without scanning all of the required bar codes.
- Tap *Scanning - Simulate*. Simulates the scanning of a bar code. Simulation mode can be used to run the application on a device without a scanner (such as the Windows Mobile 2003 emulator).

Tap **Cancel** to return to the *ScanSamp2 Example* window.

## ScanWedge

Use the *ScanWedge* sample application to enable non-scanning aware applications to receive data from scanned bar codes.

In normal use, *ScanWedge* has no user interface, all scanned bar codes are sent to the current foreground application. However, a *ScanWedge* user interface is available. The *ScanWedge* user interface can also be used as a test window by displaying bar codes locally rather than sending them as keyboard messages. The *ScanWedge* application is typically located in the */Application* directory.

To run the *ScanWedge* application:

1. Select *Start - Programs - Windows Explorer* and open the *Application* folder.
2. Launch *ScanWedge*. The *ScanWedge* icon appears on the task bar.

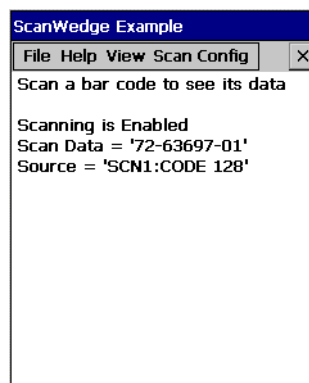
To launch the *ScanWedge* user interface:

1. Select the *ScanWedge* icon on the task bar, the *ScanWedge Launch Menu* appears. The available menu functions are device dependent.



**Figure 2-32. ScanWedge Launch Menu**

2. From the *ScanWedge Launch Menu*, tap *Launch* to start the user interface. The *ScanWedge User Interface* window appears.



**Figure 2-33. ScanWedge User Interface Window**

3. Press the scan button and scan a bar code to enter the scan data into the *ScanWedge* user interface.

## Menus

In addition to the [Common Menus on page 2-3](#), the *ScanWedge* application has a *Scan* menu that allows scanning parameters to be set to enabled, disabled or to simulate and a *Config* menu that allows the scan configuration parameters to be set.

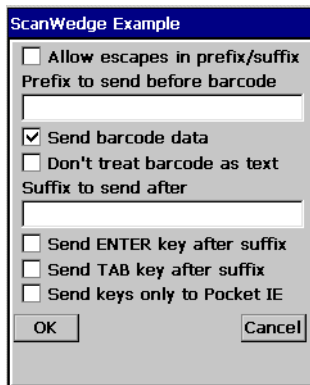
*View* menu: Tap *Hide* to hide the user interface.

*Scan* menu:

- *Enable* Allows scanning when the device scan button is activated. Scanning is allowed by default when the application starts.
- *Disable* Disables scanning.
- *Simulate* Used when the application is built in *simulation* mode to simulate the scanning of a bar code. Simulation mode can be used to run the application on a device without a scanner (such as the Pocket PC emulator).

*Config* menu:

- *Setup* Use the *ScanWedge Example, Setup* window to set the *ScanWedge* options. See [Table 2-9](#) for setup parameter descriptions.



**Figure 2-34. ScanWedge Example, Setup Window**

**Table 2-9. Setup Parameters**

Parameter	Default Setting	Description
<i>Allow escapes in prefix/suffix</i>	Disabled	Enable this option to allow escape sequences to be embedded in prefix and suffix strings. Escape sequences allow non-textual data to be transmitted as part of the prefix or suffix string. All escape sequences begin with the back slash "\" character. The supported escape sequences are: \b Backspace \f Form feed \n New line (line feed) \r Carriage return \t Tab \xHH ASCII character represented in Hexadecimal notation (e.g \x3F) Note: Consult a standard ASCII chart for suitable values. \wHH Virtual key code represented in Hexadecimal notation (e.g \x3F) Note: Consult the Microsoft Windows header file WinUser.h for suitable values.
<i>Send barcode data</i>	Enabled	Disable this option to prevent the barcode data from being transmitted. The prefix and suffix strings (if present) are still transmitted.



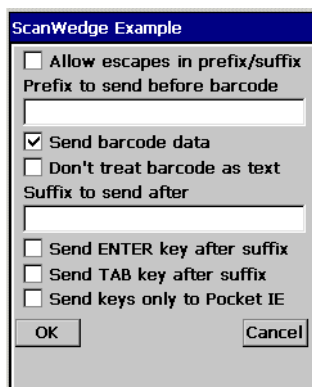
**Table 2-9. Setup Parameters (Continued)**

Parameter	Default Setting	Description
<i>Don't treat barcode as text</i>	Disabled	Enable this option to have the barcodes read as binary data and transmitted in hexadecimal notation with two hexadecimal digits per binary byte of data.
<i>Send ENTER key after suffix</i>	Disabled	Enable this option to have an ENTER key (VK_RETURN virtual key code) transmitted following all other data (prefix, barcode, and suffix).
<i>Send TAB key after suffix</i>	Disabled	Enable this option to have a TAB key (VK_TAB virtual key code) transmitted following all other data (prefix, barcode, and suffix).
<i>Send keys only to Pocket IE</i>	Disabled	Enable this option to turn on AutoPIE mode (see <a href="#">AutoPIE Mode on page 2-32</a> ).

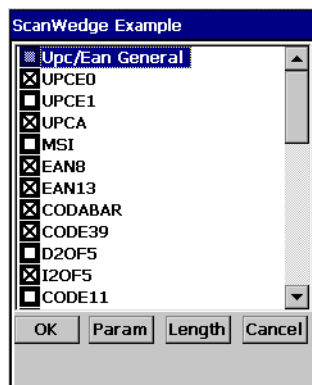


The setup parameters are saved in the registry and persist across a device warm boot. If the setup parameters need to persist across a cold boot, then capture the registry and place it into a .reg file.

- *Scan Params* Use the *ScanWedge Example, Scan Parameters* window to change scan parameter options. See [Parameters Window on page 2-27](#) for a description of the scan parameters.

**Figure 2-35. ScanWedge Example, Scan Parameters Window**

- *Codes* Use the *ScanWedge Example, Codes* window to enable or disable code types and set options for each code type. See [Codes Window on page 2-28](#) for a description of the code type settings.

**Figure 2-36. ScanWedge Example, Codes Window**

## **AutoPIE Mode**

*ScanWedge* supports an AutoPIE mode that is designed to integrate with Microsoft PIE (Pocket Internet Explorer) on Pocket PC 2002 or Pocket PC 2003 devices only.

When AutoPIE mode is enabled, *ScanWedge* confirms that PIE is running and that there is an empty data entry field on the currently displayed web page. If PIE is not running or there is no empty data entry field on the currently displayed web page, then scanning is not enabled. When there is nowhere for the data to go, the scanner does not come on, even when the scan button is pressed. While scanning is not enabled, *ScanWedge* periodically re-checks to see if the conditions necessary to enable scanning have changed.

If *ScanWedge* finds that PIE is running and that there is at least one empty data entry field on the currently displayed web page then *ScanWedge* makes PIE the foreground window, sets the input to the first empty data entry field, and enables scanning. While scanning is enabled, *ScanWedge* periodically re-checks to make sure that the conditions necessary to enable scanning remain present. If the condition cease to be met, scanning is disabled. When a bar code is scanned, *ScanWedge* re-checks to make sure that PIE is running and that there is at least one empty data entry field on the currently displayed web page. Then *ScanWedge* makes PIE the foreground window, sets the input to the first empty data entry field, and then sends the data (prefix, barcode, and suffix) as keyboard messages. *ScanWedge* then repeats the check to determine if scanning should be enabled again.

To select AutoPIE mode, either select the *Send Keys only to Pocket IE* check box (see [Figure 2-34 on page 2-30](#)) or add an appropriate registry setting.

# 3

## Utilities

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## Introduction

This chapter provides instructions on using the device settings accessed from the *CtlPanel.exe* utility and for using the *SelfTest.exe* utility.



The list of available control panel options may differ depending on the device configuration.

For Windows CE based devices use a double-tap to launch the OTL window application icon.

For Windows Mobile 2003 based devices use a single tap to launch the OTL window application icon.

Refer to the device *User Guide* for procedures on accessing applications.

This guide provides navigation procedures and instructions for touch screen devices. For devices that do not have a touch screen refer to the device *User Guide* for navigation instructions.

Screens, icons and windows pictured in this guide are samples and may differ from the actual screens.

The keypad arrows (if available) perform the same function as the screen displayed arrow buttons.

## Control Panel



Use the *CtlPanel* utility window to view and change mobile device settings. *CtlPanel* makes most changes using API calls, although some changes must be made by modifying the registry settings. Changes made using API calls typically take effect immediately. To ensure that such changes remain in effect across a warm boot of the device, the default value of the setting is stored in the registry (when the setting supports it). Changes made using the registry are used only when no API call exists and may not take effect until the next time the relevant subsystem is reinitialized (a warm boot).

*CtlPanel* can be placed into *Persist* mode by setting the *Persist* option to *Yes*. In *Persist* mode, all changes to the registry are made permanent by saving the changes in .reg files. This ensures that the changes remain in effect across a device cold boot.

## Self Test

Use *SelfTest* to test the device functions. [Table 3-10](#) lists the tests and the test descriptions. *SelfTest.exe* is a utility, not a sample application, so the source code is not provided.

**Table 3-1. Utilities**

Icon*	File Name	Description
 Ctl Panel	<i>CtlPanel.exe</i>	Use the <i>CtlPanel</i> utility to view and change mobile device settings such as: Scanner Parameters, Display Settings, Audio Settings, Printer Settings, Date and Time Settings, Touch Screen Settings, ... etc. (see <a href="#">Control Panel on page 3-3</a> ).
 SelfTest	<i>SelfTest.exe</i>	Use <i>SelfTest</i> utility to test the device functions (see <a href="#">SelfTest on page 3-33</a> ).
* The icons and the icon names are samples and may differ from product to product.		

## CtlPanel

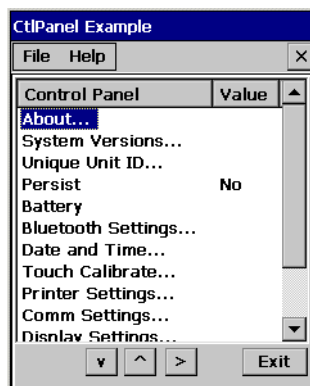
Use the *CtlPanel* utility window to view and change mobile device settings such as: *Scanner Parameters*, *Display Settings*, *Audio Settings*, *Printer Settings*, *Date and Time Settings*, *Touch Screen Settings*, ... etc. See [Device Settings on page 3-5](#) for a detailed description of the device settings.

### CtlPanel Example Window

The *CtlPanel Example* window appears when the *CtlPanel* utility is activated. The left column displays an informational item name, or the name of a subsidiary page of settings. The right column displays the current value for the left column entry. A blank entry in the right column (*Value*) indicates that the left column (*Control Panel*) contains the name of a subsidiary settings page.

To use the *CtlPanel Example* application:

1. From the OTL window, launch *CtlPanel*. The *CtlPanel Example* window appears.



**Figure 3-1. CtlPanel Example Window**

2. Navigate the *Control Panel Example* window using the up and down arrows or by dragging the slide bar.
3. To set the *Persist* value, tap *Persist* to highlight, and tap the right arrow to toggle the value between *Yes* and *No* (see [Persist on page 3-9](#) for detailed procedures). *Persist* is the only item that has a value that can be set from the *Control Panel Example* window. All the other items have subsidiary page(s) that either display information or contain settings.
4. To open a subsidiary page select the value in the *Control Panel* column. Display only subsidiary pages display useful information but have no settings. Settings pages use the same navigation procedures as the *Control Panel Example* window.
5. To change a setting on a subsidiary page, highlight the item and tap the right arrow button. The selections may require opening additional subsidiary page(s) and/or menu selections.
6. Tap **Exit** to return to the OTL window.

## Menus

Use the *CtlPanel* utility to access the [Common Menus on page 2-3](#).

## Device Settings

Use the *CtlPanel* to change the device settings. From the OTL Window, launch the *CtlPanel* utility to display the *CtlPanel Example* window (see [Figure 3-1 on page 3-4](#)). [Table 3-2](#) lists the settings and provides a link to the setting detailed description.

**Table 3-2. CtlPanel Menu**

Menu Item	Description
<i>About</i>	Displays the <i>CtlPanel</i> software information (see <a href="#">About CtlPanel on page 3-6</a> ).
<i>System Versions</i>	Displays the system software information (see <a href="#">System Version on page 3-7</a> ).
<i>Unique Unit ID</i>	Displays the UUID software information (see <a href="#">Unique Unit ID on page 3-8</a> ).
<i>Persist</i>	Set the persist setting, Yes or No (see <a href="#">Persist on page 3-9</a> ).
<i>Battery</i>	Displays the battery status information (see <a href="#">Battery on page 3-10</a> ).
<i>Power Settings</i>	Set the power settings (see <a href="#">Power Settings on page 3-11</a> ).
<i>Bluetooth Settings</i>	Set the Bluetooth settings (see <a href="#">Bluetooth Settings on page 3-14</a> ).
<i>Date and Time</i>	Set the date and time settings (see <a href="#">Date and Time on page 3-15</a> ).
<i>Touch Calibrate</i>	Calibrate the touch panel (see <a href="#">Touch Calibrate on page 3-16</a> ).
<i>Printer Settings</i>	Set the printer settings (see <a href="#">Printer Settings on page 3-17</a> ).
<i>Comm Settings</i>	Set the communication settings (see <a href="#">Comm Settings on page 3-19</a> ).
<i>Display Settings</i>	Set the display settings (see <a href="#">Display Settings on page 3-20</a> ).
<i>Audio Settings</i>	Set the sound settings (see <a href="#">Audio Settings on page 3-21</a> ).
<i>Scanner Settings</i>	Set scan parameters (see <a href="#">Scanner Settings on page 3-22</a> ).
<i>Symbol Security</i>	Displays the Symbol security parameters (see <a href="#">Symbol Security on page 3-32</a> ).

## Menus

Use the *CtlPanel* utility to access the [Common Menus on page 2-3](#).

## **About CtIPanel**

Use the *About CtIPanel Example* window to view the *CtIPanel* software version information.

1. From the *CtIPanel Example* window, launch *About*. The *About* window appears.



**Figure 3-2. CtIPanel Example, About Window**

2. Tap **OK** to return to the *CtIPanel Example* window.



## System Version

Use the *System Version* window to view the system software versions.

1. From the *CtlPanel Example* window, launch *System Versions*. The *System Versions* window appears.



**Figure 3-3. System Version Window**

2. Tap **OK** to return to the *CtlPanel Example* window.

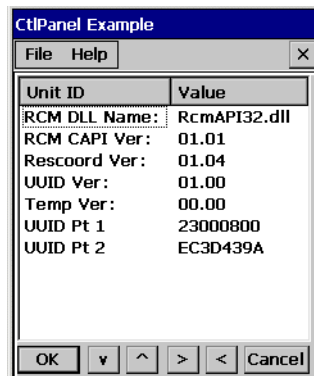


*Version data shown is example data only.*

## Unique Unit ID

Use the *Unique Unit ID* (UUID) window to view the device ID information. The UUID provides a way of uniquely identifying each device. Some software packages require a UUID.

1. From the *CtlPanel Example* window, launch *Unique Unit ID*. The *Unique Unit ID* window appears.



**Figure 3-4. Unique Unit ID Window**

2. Tap **OK** to return to the *CtlPanel Example* window.

## **Persist**

Use the *Persist* parameter in the *CtlPanel Example* window to save the new parameter setting(s) in a .reg file in the */Applications* directory. Enable *Persist* prior to changing the settings to save the settings over a cold boot. *Persist* is the only item that can be set directly from the *Control Panel Example* window.

1. From the *CtlPanel Example* window, tap *Persist*.
2. Use the right arrow button to toggle the value to between *Yes* or *No*.

The created registry files can be found in the root directory of the Application folder. The file names produced are the same as the registry key paths. For example, changing the *Beeper Volume* under *CtlPanel, Audio Settings* to a value of 3 produces a file named *Software.Symbol.Audio.BeeperVolume.reg*.

## Battery

Use the *Battery* status window to view the battery status.

1. From the *CtlPanel Example* window, launch *Battery*. The *Battery* status window appears.



**Figure 3-5. Battery Status Window**



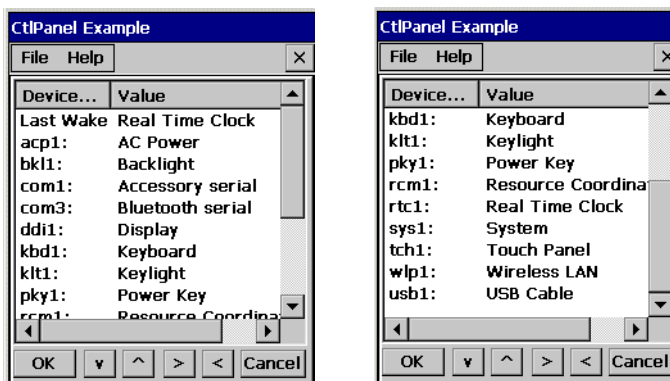
*Do not use the Backup voltage value.*

2. Tap **OK** to return to the *CtlPanel Example* window.

## Power Settings

Use the *Power Settings* window to view and set the power parameters.

From the *CtlPanel Example* window, launch *Power Settings*. The *Power Settings* window appears.



**Figure 3-6. Power Settings Window**

The device list as well as the parameter settings are dependent on the device setup and configuration. The parameter types are:

- WakeUp control (Power key, Timeout, and API call)
- Timeout control (Battery and AC power)
- State control (D0, D1, D2, D3, D4)
- Activity control (Trigger, Touch, Keyboard, User).

Use the power settings to set the individual power parameters. See [Table 3-3 on page 3-12](#) for parameter settings. Tap the up and down arrow buttons to scroll up or down on the menu selections and tap the left or right arrow buttons to select a menu item, or to toggle a selection value. Tap **OK** to save any new selections and return to the previous window or tap **Cancel** to return to the previous window without saving any new entries.



*Use the power settings with caution. Some of the settings allow the user to turn off the display, or to disable the keypad/touch screen. If the device is disabled with the power settings, see the User Guide for instructions on performing a cold boot to restore the factory settings.*

**Table 3-3. Power Setting Parameters**

<b>Parameter</b>	<b>Value</b>	<b>Settings</b>	
<i>Last Wake</i>	Real Time Clock	Displays the event that initiated the last wake up.	
<i>acp1:</i>	AC Power	Power Key Wake Timeout Wake API Call Wake	Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No
<i>bkl1:</i>	Backlight	Battery Timeout AC Power Timeout D0 D3 D4 Activities: Trigger Touch Keyboard User	60 (time value in ms) 0 (time value in ms) When selected feature is on When selected feature is on standby When selected feature is off  Tap Yes to set Activities to function on Battery Power and/or on AC Power. Tap No to set activities not to function on Battery Power and/or on AC Power.
<i>com1:</i>	Accessory serial	Power Key Wake Timeout Wake API Call Wake D0 D3 D4	Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No When selected feature is on When selected feature is on standby When selected feature is off
<i>com3:</i>	Bluetooth serial	Power Key Wake Timeout Wake API Call Wake D0 D3 D4	Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No When selected feature is on When selected feature is on standby When selected feature is off
<i>ddi1:</i>	Display	D0 D4	When selected the Display is turned on When selected the Display is turned off
<i>kbd1:</i>	Keyboard	Power Key Wake Timeout Wake API Call Wake D0 D3 D4	Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No When selected feature is on When selected feature is on standby When selected feature is off

**Table 3-3. Power Setting Parameters (Continued)**

<b>Parameter</b>	<b>Value</b>	<b>Settings</b>	
<i>klt1:</i>	Keylight	Battery Timeout AC Power Timeout D0 D3 D4 Activities: Trigger Touch Keyboard User	60 (time value in ms) 0 (time value in ms) When selected feature is on When selected feature is on standby When selected feature is off  Tap Yes to set Activities to function on Battery Power and/or on AC Power. Tap No to set activities not to function on Battery Power and/or on AC Power.
<i>pky1:</i>	Power Key	Display only	
<i>rcm1:</i>	Resource Coordinator	Power Key Wake Timeout Wake API Call Wake	Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No
<i>rtc1:</i>	Real Time Clock	Display only	
<i>sys1:</i>	System	Battery Timeout AC Power Timeout	180 (time value in ms) 0 (time value in ms)
<i>tch1:</i>	Touch Panel	Power Key Wake Timeout Wake API Call Wake D0 D3 D4	Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No When selected the Touch Panel is turned on When selected feature is on standby When selected the Touch Panel is turned off
<i>wlp1:</i>	Wireless LAN	Power Key Wake Timeout Wake API Call Wake D0 D3 D4	Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No When selected feature is on When selected feature is on standby When selected feature is off
<i>usb1:</i>	USB Cable	Power Key Wake Timeout Wake API Call Wake	Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No Set the Wake on=Yes, off=No

## Bluetooth Settings

Use the *Bluetooth Settings* window to view the Bluetooth parameters.



Devices that do not have Bluetooth capability display *UNKNOWN* values.

1. From the *CtlPanel Example* window, launch *Bluetooth Settings*. The *Bluetooth Settings* window displays.



**Figure 3-7. Bluetooth Settings Window**

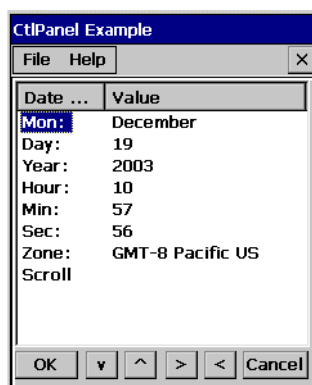
2. Tap **OK** to return to the *CtlPanel Example* window.



## Date and Time

Use the *Date and Time* window to set the date, time, and time zone information.

1. From the *CtlPanel Example* window, launch *Date and Time*. The *Date and Time* window appears.



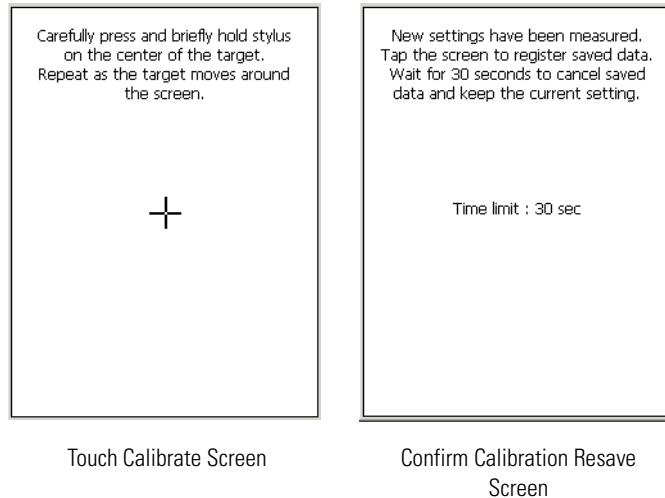
**Figure 3-8. Date and Time Window**

2. To set the *Value* for any item in the *Date and Time* column, use the up and/or down arrows to select the item.
3. Use the left and right arrow buttons to select the value.
4. Tap **OK** to accept the new values and return to the *CtlPanel Example* window or tap **Cancel** to discard the new values and return to the *CtlPanel Example* window.

## **Touch Calibrate**

Use the *Touch Calibration* screen to align the touch screen.

1. From the *CtlPanel Example* window, launch *Touch Calibrate*. The *Touch Calibrate* screen appears.
2. Remove the stylus from the stylus holder.
3. Carefully press and briefly hold the tip of stylus on the center of the *Touch Calibrate* screen target. Repeat the procedure as the target moves and stops at different locations on the screen. This enters the new calibration settings.



**Figure 3-9. Touch Calibrate Screen**

4. When completed, the *Confirm Calibration Resave* screen appears. Tap the screen within 30 seconds to save the new calibration settings or allow the 30 second timer to expire and the new calibration settings are discarded.

## Printer Settings

Use the *Printer Settings* window to select the printer settings.



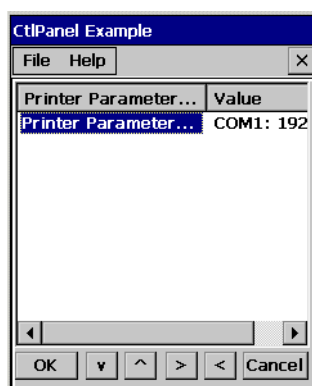
The list of available printers and option selections may differ depending on the device.

1. From the *CtlPanel Example* window, launch *Printer Settings*. The *Printer Settings* window appears.



**Figure 3-10. Printer Settings Window**

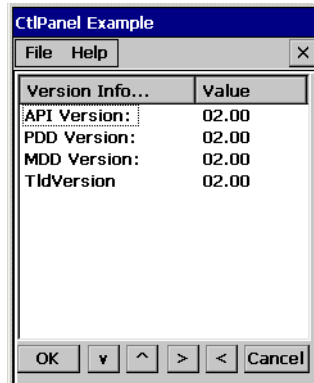
2. To select a printer, launch the *Selected Printer* item in the *Printer Settings* column.
3. Use the left and right arrows to scroll through the printer listings, to select the printer.
4. Launch *Printer Parameters* to enter the *Printer Parameters* window.



**Figure 3-11. Printer Parameters Window**

5. Tap the *Printer Parameter* item in the *Printer Parameter* column.
6. Use the left and right arrows to select the communication type and baud rate.

7. To view the printer driver *Version Information* window launch the *Version Info* item in the *Printer Settings* column. version information includes:
- API Version
  - PDD Version
  - MDD Version
  - TldVersion.



**Figure 3-12. Version Information Window**

8. Tap **OK** to accept the new values and return to the *CtIPanel Example* window or tap **Cancel** to discard the new values and return to the *CtIPanel Example* window.



*The SMDK provides developer support for programming printer applications. See the Integrator Guide for the SMDK installation.*

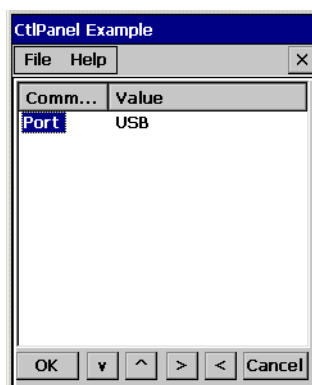
## Comm Settings

Use the *Comm Settings* window to set the communications settings.



To enable ActiveSync communication, the device *Comm Setting* must match the ActiveSync communications setting.

1. From the *CtlPanel Example* window, launch *Comm Settings*. The *Comm Settings* window appears.



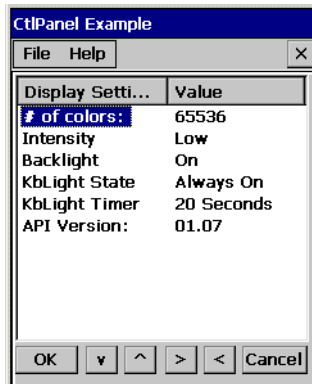
**Figure 3-13. Comm Settings Window**

2. With *Port* highlighted, use the left and right arrow buttons to select the appropriate communication setting.
3. Tap **OK** to accept the new values and return to the *CtlPanel Example* window or tap **Cancel** to discard the new values and return to the *CtlPanel Example* window.

## Display Settings

Use the *Display Settings* window to set the display parameters.

1. From the *CtiPanel Example* window, launch *Display Settings*. The *Display Settings* window appears.



**Figure 3-14. Display Settings Window**

2. To set the *Value* for any item in the *Display Settings* column, use the up and down arrows to select the item.
3. Use the left and right arrow buttons to select a value.

**Table 3-4. Display Settings**

Display Setting	Values
# of colors	65536
Contrast	0 to 15 (only on monochromatic devices)
Intensity	Low, Medium, High, Super
Backlight	On, Off
KbLight State	Always off, Always on, Timeout
KbLight Timer	5 Sec, 10 Sec, 20 Sec, 30 Sec, 1 Min, 5 Min
API Version	01.07 (display only, not selectable)

4. Tap **OK** to accept the new values and return to the *CtiPanel Example* window or tap **Cancel** to discard the new values and return to the *CtiPanel Example* window.



To optimize display performance, do not leave the display turned on to a fixed image for an extended period of time. Use the device Display Settings to automatically turn off the display, or use a screen saver when the device is not in use.

## Audio Settings

Use the *Audio Settings* window to set the audio parameters.

1. From the *CtlPanel Example* window, launch *Audio Settings*. The *Audio Settings* window appears.



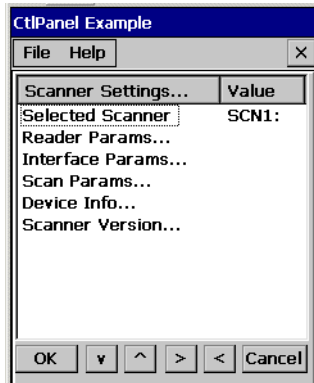
**Figure 3-15. Audio Settings Window**

2. Tap *Beeper Volume* in the *Audio Settings* column.
3. Use the left and right arrow buttons to set the volume value to 0, 1, 2, or 3. *API Version* and *Notify API Version* are display values only.
4. Tap **OK** to accept the new values and return to the *CtlPanel Example* window or tap **Cancel** to discard the new values and return to the *CtlPanel Example* window.

## Scanner Settings

Use the *Scanner Settings* window to set the scanner information.

1. From the *CtlPanel Example* window, launch *Scanner Settings*. The *Scanner Settings* window appears.



**Figure 3-16. Scan Settings Window**

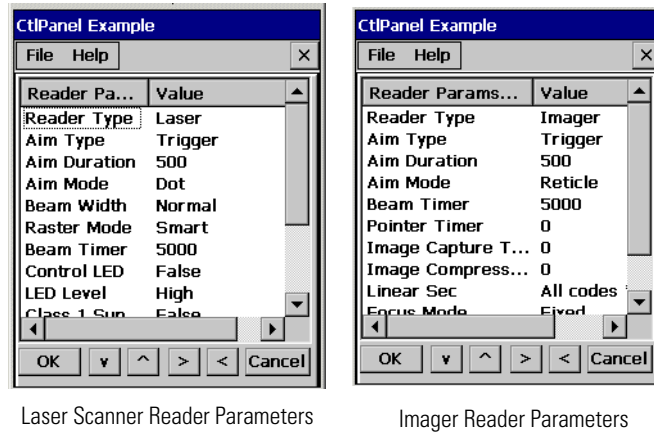
2. To change any item in the *Scanner Settings* column, use the up and down arrows to select the item.
3. Launch the item to open a new window.
  - *Reader Parameters*, see [Reader Parameters on page 3-23](#).
  - *Interface Parameters*, see [Interface Parameters on page 3-26](#).
  - *Scan Parameters*, see [Scan Parameters on page 3-27](#).
  - *Device Information*, see [Device Information on page 3-30](#).
  - *Scanner Version*, see [Scanner Version on page 3-31](#).
4. Tap **OK** to return to the *CtlPanel Example* window.



## Reader Parameters

Use the *Reader Parameters* window to set the scanning read parameters. The settings differ for laser scanners or imagers. See [Table 3-5 on page 3-24](#) for laser scanner settings and see [Table 3-6 on page 3-25](#) for imager settings.

1. From the *CtlPanel Example* window, launch *Scanner Settings - Reader Parameters*. The *Reader Parameters* window appears.
2. Use the up and down arrows or tap an item to select.



**Figure 3-17. Reader Parameters Window**

3. Use the left and right arrow buttons to increment the value.
4. Tap **OK** to accept the new values and return to the *CtlPanel Example* window or tap **Cancel** to discard the new values and return to the *CtlPanel Example* window.

**Table 3-5. Laser Scanner Reader Parameters**

<b>Reader Parameters</b>	<b>Laser Values</b>	<b>Description</b>
<i>Reader Type</i>	Laser	Laser type scan engine is used.
<i>Aim Type</i>	<i>Trigger mode:</i> <i>Trigger hold mode:</i> <i>Timed release mode:</i>	On/off controlled by the trigger. Trigger can be released but it remains active for the specified period of time. Activation stops after a specified period of time, even if the trigger is held.
<i>Aim Duration</i>	0 - 60,000 ms	Sets the amount of time (0 - 60,000 ms in increments of 100 ms).
<i>Aim Mode</i>	Dot, Slab, Reticle, None	To disable <i>Aim Mode</i> set to <i>None</i> (no aiming) or to enable <i>Aim Mode</i> set to <i>Slab</i> (slab aiming). No other settings selections are available.
<i>Beam Width</i>	Normal, Narrow	Sets the scan beam width to normal or narrow.
<i>Raster Mode</i>	<i>Smart</i>  <i>Cyclone</i> <i>None</i> <i>Always Open</i>	Creates a single scan line which opens vertically for PDF417 symbols using the Smart Raster feature. This feature autodetects the type of bar code presented and adjusts its pattern accordingly. This provides optimal performance on 1D, PDF417, and EAN/UCC. A scan pattern which decodes 1D symbologies in any orientation. Raster mode disabled. Opens the laser to a full sized raster pattern. Decodes 1D and PDF417. <i>Note: Raster Mode</i> is not supported on all devices.
<i>Beam Timer</i>	0 - 60,000 ms	Sets the maximum amount of time that the laser remains on (0 - 60,000 ms in increments of 100 ms). A value of 0 sets the laser to stay on.
<i>Control LED</i>	False	Not supported, do not modify default setting.
<i>LED Level</i>	High	Not supported, do not modify default setting.
<i>Class 1 Sup</i>	False	Not supported, do not modify default setting.
<i>Redundancy</i>	None, Bidirectional	Sets the read direction for the bar code redundancy. Bidirectional reads in both directions.
<i>Linear Sec</i>	All codes *2 All codes *3 Long*2, Short*3 Short, Redun Short, Codabar	Sets the number of times a bar code is re-read to confirm an accurate decode. <i>All codes *2</i> : Two times read redundancy for all bar codes. <i>All codes *3</i> : Three times read redundancy for all bar codes. <i>Long *2 Short *3</i> : Two times read redundancy for long bar codes, three times for short bar codes. <i>Short, Redun</i> : Two times read redundancy based on redundancy flags and code length. <i>Short, Codabar</i> : Two times read redundancy if short bar code or CODABAR).
<i>Pointer Timer</i>	0 - 60,000 ms	Sets the maximum amount of time that the pointer remains on (0 - 60,000 ms in increments of 100 ms). A value of 0 sets the pointer to stay on.
<i>Raster Height</i>	0-100 in.	<i>Sets the Raster Height</i> from 0 to 100 inches in increments of 5 in. <i>Raster Height</i> is not supported on all devices.

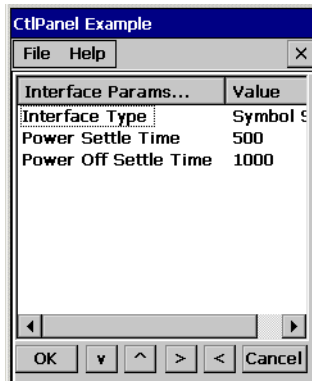
**Table 3-6. Imager Reader Parameters**

<b>Reader Parameters</b>	<b>Imager Values</b>	<b>Description</b>
<i>Reader Type</i>	Imager	Imager type engine is used.
<i>Aim Type</i>	<i>Trigger mode:</i> <i>Trigger hold mode:</i> <i>Timed release mode:</i>	On/off controlled by the trigger. Trigger can be released but it remains active for the specified period of time. Activation stops after a specified period of time, even if the trigger is held.
<i>Aim Duration</i>	0 - 60,000 ms	Sets the amount of time (0 - 60,000 ms in increments of 100 ms).
<i>Aim Mode</i>	Dot, Slab, Reticle, None	To disable <i>Aim Mode</i> set to <i>None</i> (no aiming) or to enable <i>Aim Mode</i> set to <i>Slab</i> (slab aiming). No other settings selections are available.
<i>Beam Timer</i>	0 - 60,000 ms	Sets the maximum amount of time that the laser remains on (0 - 60,000 ms in increments of 100 ms). A value of 0 sets the laser to stay on.
<i>Pointer Timer</i>	0 - 60,000 ms	Sets the maximum amount of time that the <i>Pointer Timer</i> remains on (0 - 60,000 ms in increments of 100 ms). A value of 0 sets the <i>Pointer Timer</i> to stay on. This parameter is not supported on all devices.
<i>Image Capture Timeout</i>	0 - 60,000 ms	Sets the maximum amount of time for the <i>Image Capture Timeout</i> (0 - 60,000 ms in increments of 100 ms). A value of 0 sets the <i>Image Capture Timeout</i> to stay on. This parameter is not supported on all devices.
<i>Image Compress Timeout</i>	0 - 60,000 ms	Sets the maximum amount of time for the <i>Image Compress Timeout</i> (0 - 60,000 ms in increments of 100 ms). <i>Image Compress Timeout</i> is not supported on all devices.
<i>Linear Sec</i>	All codes *2: All Codes *3: Long*2, Short*3:  Short, Redun  Short, Codabar	Sets the number of times a bar code is read to confirm an accurate decode. <i>All codes *2</i> : Two times read redundancy for all bar codes. <i>All codes *3</i> : Three times read redundancy for all bar codes. <i>Long *2 Short *3</i> : Two times read redundancy for long bar codes, three times for short bar codes. <i>Short, Redun</i> : Two times read redundancy based on redundancy flags and code length. <i>Short, Codabar</i> : Two times read redundancy if short bar code or CODABAR).
<i>Focus Mode</i>	Fixed, Auto, Smart	<i>Fixed</i> mode is the only focus mode supported.
<i>Focus Position</i>	Far, Near	Specifies the <i>Fixed</i> setting, focus position for <i>Far</i> is 9 inches and focus position for <i>Near</i> is 5 inches.

## Interface Parameters

Use the *Interface Parameters* window to set the scanning interface parameters.

1. From the *CtlPanel Example* window, launch *Scanner Settings - Interface Parameters*. The *Interface Parameters* window appears



**Figure 3-18. Interface Parameters Window**

2. To change any item in the *Interface Parameters* column, use the up and down arrows to select the item.
3. Use the left and right arrow buttons to increment the value. [Table 3-7](#) list the Reader Parameter value options.

**Table 3-7. Interface Parameters**

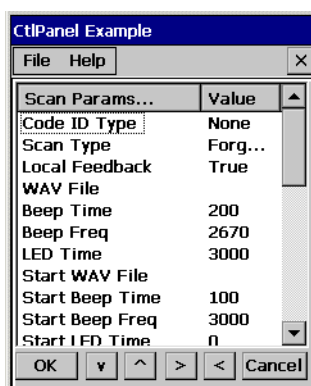
Interface Parameter	Values
Interface Type	Symbol SSI
Power Settle Time	0-1000 ms in increments of 50 ms
Power Off Settle Time	0-1000 ms in increments of 50 ms

4. Tap **OK** to accept the new values and return to the *CtlPanel Example* window or tap **Cancel** to discard the new values and return to the *CtlPanel Example* window.

## Scan Parameters

Use the *Scan Parameters* window to set the scan parameters.

1. From the *CtlPanel Example* window, launch *Scanner Settings - Scan Params*. The *Scan Parameters* window appears.



**Figure 3-19. Scan Parameters Window**

2. To change any item in the *Scan Parameters* column, use the up and down arrows to select the item.
3. Use the left and right arrow buttons to increment the value. [Table 3-8](#) list the Scan Parameter value options.

**Table 3-8. Scan Parameters**

Scan Parameters	Values	Values
<i>Code ID Type</i>	<i>None</i> <i>Symbol</i> <i>AIM</i>	Default setting. No prefix. A Symbol defined single character prefix. A standards based three character prefix.
<i>Scan Type</i>	<i>Foreground</i> <i>Bkgrnd</i> <i>Monitor</i>	The scan takes place in the foreground, as the primary user activity. Foreground reads combine only with other foreground reads and preempt background reads. The scan takes place in the background, but only if no foreground reads are pending. No scanning is requested, but if scanning is initiated by another application, a monitor read receives a copy (if the code type is appropriate).
<i>Local Feedback</i>	<i>True, False</i>	<i>Sets the Local Feedback value to True or False</i>
<i>WAV File</i>	<b>Decrement</b> <b>Increment</b> <b>OK</b>	Tap <b>Decrement</b> to move back on the WAV file listing. Tap <b>Increment</b> to move forward on the WAV file listing. Tap <b>OK</b> to select the WAV file. See <a href="#">Figure 3-20 on page 3-29</a> .
<i>Beep Time</i>	0-5000 ms	<i>Sets the Beep Time value in increments of 100 ms.</i>
<i>Beep Freq</i>	2500-3500 Hz	<i>Sets the Beep Freq value in increments of 10 ms.</i>
<i>LED Time</i>	0-5000 ms	<i>Sets the LED Time value in increments of 500 ms.</i>
<i>Start WAV File</i>	<b>Decrement</b> <b>Increment</b> <b>OK</b>	Tap <b>Decrement</b> to move back on the WAV file listing. Tap <b>Increment</b> to move forward on the WAV file listing. Tap <b>OK</b> to select the WAV file. See <a href="#">Figure 3-20 on page 3-29</a> .
<i>Start Beep Time</i>	0-5000 ms	<i>Sets the Start Beep Time value in increments of 100 ms.</i>

**Table 3-8. Scan Parameters (Continued)**

Scan Parameters	Values	Values
<i>Start Beep Freq</i>	2500-3500 Hz	<i>Sets the Start Beep Freq value in increments of 10 Hz.</i>
<i>Start LED Time</i>	0-5000 ms	<i>Sets the Start LED time value in increments of 500 ms.</i>
<i>Interim WAV File</i>	<b>Decrement</b> <b>Increment</b> <b>OK</b>	Tap <b>Decrement</b> to move back on the WAV file listing. Tap <b>Increment</b> to move forward on the WAV file listing. Tap <b>OK</b> to select the WAV file. See <a href="#">Figure 3-20 on page 3-29</a> .
<i>Interim Beep Time</i>	0-5000 ms	<i>Sets the Interim Beep Time value in increments of 100 ms.</i>
<i>Interim Beep Freq</i>	2500-3500 Hz	<i>Sets the Interim Beep Freq value in increments of 10 Hz.</i>
<i>Interim LED Time</i>	0-5000 ms	<i>Sets the Interim LED time value in increments of 500 ms.</i>
<i>Fatal WAV File</i>	<b>Decrement</b> <b>Increment</b> <b>OK</b>	Tap <b>Decrement</b> to move back on the WAV file listing. Tap <b>Increment</b> to move forward on the WAV file listing. Tap <b>OK</b> to select the WAV file. See <a href="#">Figure 3-20 on page 3-29</a> .
<i>Fatal Beep Time</i>	0-5000 ms	<i>Sets the Fatal Beep Time value in increments of 100 ms.</i>
<i>Fatal Beep Freq</i>	2500-3500 Hz	<i>Sets the Fatal Beep Frequency value in increments of 10 Hz.</i>
<i>Fatal LED Time</i>	0-5000 ms	<i>Sets the Fatal LED Time value in increments of 500 ms.</i>
<i>Nonfatal WAV File</i>	<b>Decrement</b> <b>Increment</b> <b>OK</b>	Tap <b>Decrement</b> to move back on the WAV file listing. Tap <b>Increment</b> to move forward on the WAV file listing. Tap <b>OK</b> to select the WAV file. See <a href="#">Figure 3-20 on page 3-29</a> .
<i>Nonfatal Beep Time</i>	0-5000 ms	<i>Sets the Nonfatal Beep Time value in increments of 100 ms.</i>
<i>Nonfatal Beep Freq</i>	2500-3500 Hz	<i>Sets the Nonfatal Beep Frequency value in increments of 10 Hz.</i>
<i>Nonfatal LED Time</i>	0-5000 ms	<i>Sets the Nonfatal LED Time value in increments of 500 ms.</i>
<i>Activity WAV File</i>	<b>Decrement</b> <b>Increment</b> <b>OK</b>	Tap <b>Decrement</b> to move back on the WAV file listing. Tap <b>Increment</b> to move forward on the WAV file listing. Tap <b>OK</b> to select the WAV file. See <a href="#">Figure 3-20 on page 3-29</a> .
<i>Activity Beep Time</i>	0-5000 ms	<i>Sets the Activity Beep Time value in increments of 100 ms.</i>
<i>Activity Beep Freq</i>	2500-3500 Hz	<i>Sets the Activity Beep Frequency value in increments of 10 Hz.</i>
<i>Activity LED Time</i>	0-5000 ms	<i>Sets the Activity LED Time value in increments of 500 ms.</i>

4. Tap **OK** to accept the new values and return to the *CtlPanel Example* window or tap **Cancel** to discard the new values and return to the *CtlPanel Example* window.

## WAV File

Use the *WAV File* window to select a .wav file. Use the **Increment** and **Decrement** buttons to scroll through the wav file listing.



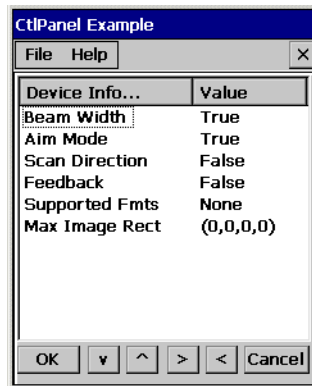
**Figure 3-20. Scan WAV File Window**

Tap **OK** to accept the new values and return to the *CtlPanel Example* window or tap **Cancel** to discard the new values and return to the *CtlPanel Example* window.

## Device Information

Use the *Device Information* window to view the device information.

1. From the *CtlPanel Example* window, launch *Scanner Settings - Device Information*. The *Device Information* window appears.



**Figure 3-21. Device Information Window**

**Table 3-9. Device Information**

Device Info Parameter	Values	Description
<i>Beam Width</i>	<i>True</i> or <i>False</i>	The value is <i>True</i> if the device supports <i>Beam Width</i> selection.
<i>Aim Mode</i>	<i>True</i> or <i>False</i>	The value is <i>True</i> if the device supports <i>Aim Mode</i> selection.
<i>Scan Direction</i>	<i>True</i> or <i>False</i>	The value is <i>True</i> if the device supports bi-directional reporting.
<i>Feedback</i>	<i>True</i> or <i>False</i>	The value is <i>True</i> if the device supports remote feedback.
<i>Supported Fmts</i>	<i>None</i> or <i>JPEG</i>	Indicates the supported image format.
<i>Max Image Rect</i>	(0,0,0,0) or (0,0,639,479)	Indicates the image size in pixels. Laser based devices display the value (0,0,0,0). Imager based devices display the max image size in pixels. The (0,0) entry indicates the pixel value at the upper left hand corner, and the (639,479) indicates the pixel value at the lower right hand corner.

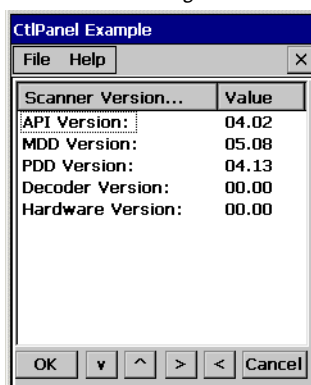
2. Tap **OK** to return to the *CtlPanel Example* window.



## Scanner Version

Use the *Scanner Version* window to view the scanner version information.

1. From the *CtlPanel Example* window, launch *Scanner Settings - Scanner Version*. The *Scanner Version* window appears.



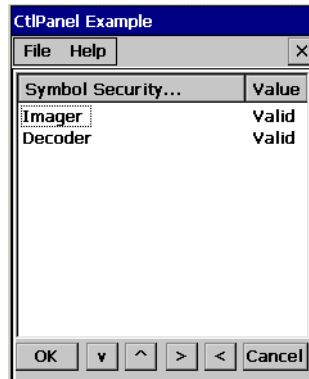
**Figure 3-22. Scanner Version Window**

2. Tap **OK** to return to the *CtlPanel Example* window.

## **Symbol Security**

Use the *Symbol Security* window to view the security information. The values should always be *Valid* to indicate that a valid security key is present in the device to enable running the features.

1. From the *CtlPanel Example* window, launch *Symbol Security*. The *Symbol Security* window appears.



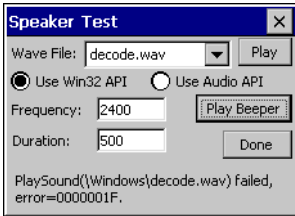
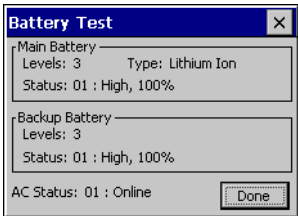
**Figure 3-23. Symbol Security Window**

2. Tap **OK** to return to the *CtlPanel Example* window.

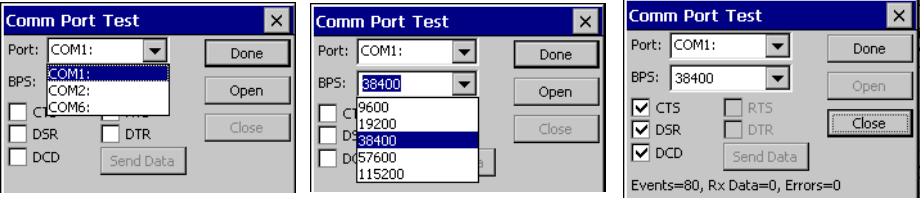
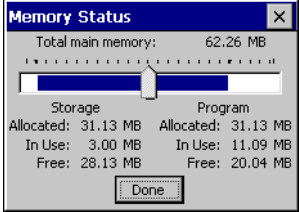
## SelfTest

Use *SelfTest* to test the device functions. [Table 3-10](#) lists the tests and the test descriptions.

**Table 3-10. Self Test Descriptions**

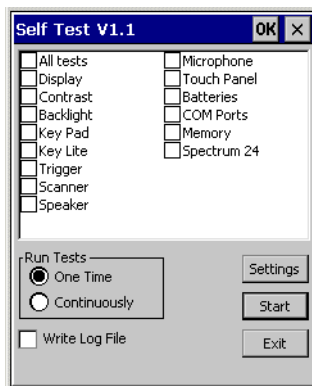
Test	Description																				
<i>All tests</i>	Performs all tests.																				
<i>Display</i>	Tests the display function.																				
<i>Contrast</i>	Tests the display contrast function. Note, color devices do not support contrast levels. An error message appears stating that the device does not support contrast levels.																				
<i>Backlight</i>	Tests the display backlight function.																				
<i>Key Pad</i>	Tests the keypad function.																				
<i>Key Light</i>	Tests the keypad backlight function.																				
<i>Trigger</i>	Press a yellow scan button to test the trigger function. Tap and hold the <b>Trig1 Stg1</b> , <b>Trig1 Stg2</b> , <b>Trig2 Stg1</b> , <b>Trig2 Stg1</b> , <b>Trig3 Stg1</b> , or <b>Trig3 Stg2</b> buttons to test the software programmed trigger sequences.																				
<i>Scanner</i>	Tests the scan function.																				
<i>Speaker</i>	<p>Tap the <b>Wave File Play</b> button to test the speaker with sample beeps.</p> <p>Tap the <b>Use Win32 API</b> radio button to test using the Windows API or tap the <b>Use Audio API</b> to test using the Symbol API.</p>  <p>Note, properly functioning devices that do not have the optional .wav file capability return the following error message: <i>PlaySound(\\Windows\\decode.wav) failed, error=0000001F</i> when the <b>Wave File Play</b> button is selected. For these devices, use the <b>Play Beeper</b> button to test the beeper function.</p>																				
<i>Microphone</i>	Tests the (optional) microphone function.																				
<i>Touch Panel</i>	Provides a test box, used to test the touch panel.																				
<i>Batteries</i>	<p>Displays a battery status window.</p> <div style="display: flex; justify-content: space-around;"> <table border="1" data-bbox="532 1516 699 1654"> <thead> <tr> <th>Battery Level</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Very Low</td> </tr> <tr> <td>2</td> <td>Low</td> </tr> <tr> <td>3</td> <td>High</td> </tr> </tbody> </table> <table border="1" data-bbox="750 1516 976 1709"> <thead> <tr> <th>Status</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>High</td> </tr> <tr> <td>02</td> <td>Low</td> </tr> <tr> <td>04</td> <td>Critical</td> </tr> <tr> <td>08</td> <td>Charging</td> </tr> <tr> <td>255</td> <td>Unknown status</td> </tr> </tbody> </table>  </div>	Battery Level	Value	1	Very Low	2	Low	3	High	Status	Description	01	High	02	Low	04	Critical	08	Charging	255	Unknown status
Battery Level	Value																				
1	Very Low																				
2	Low																				
3	High																				
Status	Description																				
01	High																				
02	Low																				
04	Critical																				
08	Charging																				
255	Unknown status																				

**Table 3-10. Self Test Descriptions (Continued)**

Test	Description
Com Ports	<p>Displays a <i>Comm Ports</i> test window.</p>  <ol style="list-style-type: none"> <li>1. Tap to select a COM port from the <i>Port</i> drop-down menu.</li> <li>2. Tap to select a <i>BPS</i> rate from the <i>BPS</i> drop-down menu.</li> <li>3. Tap <b>Send Data</b> to start the COM port test. The <i>Comm Ports Test</i> window displays the results.</li> <li>4. Tap <b>Done</b> to exit.</li> </ol>
Memory	<p>Displays a memory status window. Drag the slide bar to change the memory allocation.</p> 
Spectrum 24	<p>Displays a WLAN Test window. Note, this test is not applicable to all radio types.</p>

To use the *SelfTest* utility:

1. From the *Test Applications* window, launch the *SelfTest* utility. The *Self Test* window appears.



**Figure 3-24. Self Test Window**



Tap the *One Time* radio button to run each of the tests only once, or tap the *Continuously* radio button to run the tests continuously, or until the prompt to stop running them is selected.

Tap the *Write Log File* checkbox to save the test results to the *Selftest.log* file located in the *\Temp* directory. To view the test results use *ActiveSync* to move the file to the host computer and then view it using a text editor. Only one test log file name is used, the next time the write log file test is saved, it appends the existing *Selftest.log* file.

2. Tap **Settings** the *Self Test Settings* window appears.

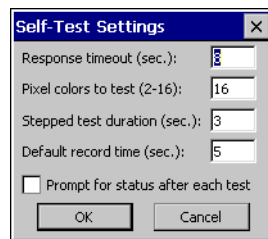
3. Tap the setting value to highlight and enter new setting values (if required).



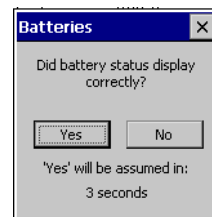
Note

Tap the *Prompt for status after each test*, check box to display a test confirmation window after the completion of each test. The test confirmation window prompts the user to confirm if the test was successfully completed. If the *Write Log File* check box is also selected (see [Figure 3-24](#)), a test results log file is saved that includes the user response to the confirmation window prompt. Do not select this checkbox if the confirmation window is not required.

4. Tap **OK** to accept the displayed settings or tap **Cancel** to return to the default settings. The application returns to the *Self Test* window.



Self Test Settings



Test Confirm Window

**Figure 3-25. Self Test Settings Windows**

5. From the *Self Test* window, select a check box to enable a test. De-select the check box to disable the test. [Table 3-10](#) describes the tests.
6. Tap **Start** to start the self test for the selected items.
7. Follow the prompts provided for the test.
8. Tap **Exit** to exit.



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What topics need to be added to the index, if applicable?

\_\_\_\_\_  
\_\_\_\_\_

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\_\_\_\_\_  
\_\_\_\_\_

What can we do to further improve our manuals?

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**72E-68901-01**  
**Revision A - April 2005**