
FCC Compliance

The Dolphin mobile computer meets or exceeds all applicable standards and has been manufactured to the highest level of quality.

Dolphin 9500/9550 Batch Terminal

The Dolphin 9500/9550 Batch complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1 Devices may not cause harmful interference.
- 2 Devices must accept any interference received, including interference that may cause undesired operation.

Dolphin 9500/9550 RF Terminal with 802.11b and/or Bluetooth Radio

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

In accordance with FCC 15.21, changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet helpful: "Something About Interference." This is available at FCC local regional offices. Our company is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by our company. The correction will be the responsibility of the user. Use only shielded data cables with this system.

In accordance with FCC 15.21, changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION! This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

For body worn operation, to maintain compliance with FCC RF exposure guidelines, use only accessories that contain no metallic components and provide a separation distance of 15mm (0.6 inches) to the body. Use of other accessories may violate FCC RF exposure guidelines and should be avoided.

Canadian Compliance

This Class B digital apparatus complies with Canadian ICES-003.

Operation is subject to the following two conditions: 1. Devices may not cause harmful interference. 2. Devices must accept any interference received, including interference that may cause undesired operation. To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

Regulatory and Safety Agency Approvals

Parameter	Specification
RF Approvals	
U.S.A	FCC Part 15.247
Canada	RSS 210 Certified
Europe	ETS 300 328 Certified
Mexico	Telecom RCPHAD002-485

The CE mark on the product indicates that the system has been tested to and conforms with the provisions noted within the 89/336/EEC Electromagnetic Compatibility Directive and the 73/23/EEC Low Voltage Directive.

Dolphin 9500/9550 RF 802.11b and/or Bluetooth R&TTE Compliance Statement

The HHP Dolphin 9500RF and Dolphin 9550RF are in conformity with all essential requirements of the R&TTE Directive (1999/5/EC). This equipment has been assessed to the following standards:

Parameter	Specification
R&TTE	EN 300 328-2:2000 EN 301 489-1 (August 2000) EN 301 489-17 (Sept. 2000) EN 60950: 1992 Incl Amdt 1-4,11 EN 50361: 2001

This product is marked with **CE 0681** in accordance with the Class II product requirements specified in the R&TTE Directive, 1999/5/EC.

The equipment is intended for use throughout the European Community. Its authorization for use in France is restricted as follows:

PAN European Frequency Range: 2.402 - 2.480 GHz

Restricted Frequency Range for use in France: 2.448 - 2.480 GHz

Pacemakers, Hearing Aids and Other Electrically Powered Devices

Most manufacturers of medical devices adhere to the IEC 601-1-2 standard. This standard requires devices to operate properly in an EM Field with a strength of 3V/m over a frequency range of 26 to 1000MHz.

The maximum allowable field strength emitted by the Dolphin is 0.3V/m according to Subpart B of Part 1 of the FCC rules. Therefore, the Dolphin RF will have no effect on medical devices that meet the IEC specification.

Microwaves

The radio in the Dolphin RF terminal operates on the same frequency band as a microwave oven. Therefore, if you use a microwave within range of the Dolphin RF terminal you may notice performance degradation in your wireless network. However, both your microwave and your wireless network will continue to function.

The Dolphin Batch terminal does not contain a radio, and therefore, is not affected by microwave ovens.

Care and Cleaning of the Dolphin 9500/9550

When needed, clean the image engine window and the LCD display with a clean, non-abrasive, lint-free cloth. The terminal can be cleaned with a damp cloth.

Getting Started

Overview

The Dolphin 9500/9550 mobile computer is designed for easy, single-handed mobile data collection. Each mobile computer is equipped with a PXA255 400MHz RISC processor built to run the Windows® Pocket PC platform.

Dolphin 9500/9550 computers are available with different types of 2D imagers and wireless radios to meet most any enterprise mobile data collection requirement. There are three keyboard options and a 240 x 320 pixel, backlit 1/4 VGA display available in color or monochrome.

The Dolphin 9500/9550 platform contains an integrated imager that can take digital images such as shipping manifests and recipient signatures in addition to decoding standard linear and two-dimensional symbologies.

Adapting the Dolphin to your environment

The Dolphin 9500/9550 comprises one element of an enterprise data collection system. The 9500 line includes various models, peripherals, and accessories that you can combine to suit your exact needs.

Dolphin 9500/9550 Models and Options

HHP's family of Dolphin 9500/9550 mobile data collection terminals includes these models:

The Dolphin 9500 Batch terminal

This is a Microsoft® Windows® Pocket PC programmable mobile computer with a unique, ergonomic shape designed for single-handed use. The standard Dolphin 9500 is available with 64 MB RAM and 32 MB non-volatile FLASH and integrated digital imager. An optional Secure Digital (SD) memory interface offers additional memory. The industrial, mechanical connector supports serial RS-232 up to 115 Kbps and USB communications at 12 Mbps. It also features an IrDA infrared port to communicate data to portable printers and IrDA compliant devices.

The Dolphin 9550 Batch

This mobile computer offers the same enhanced productivity features of the Dolphin 9500 terminal with the added convenience of an integrated pistol grip-style form factor for high volume scanning applications.

The Dolphin 9500 WLAN and Dolphin 9550 WLAN

These terminals integrate the basic functionality of the Batch terminals with the choice of an integrated 802.11b direct sequence radio that allows the terminal to communicate with a host computer through a wireless local area network (WLAN).

The Dolphin 9500/9550 WPAN

This terminal allows Bluetooth communications to Bluetooth enabled devices such as printers, mobile phones, access points, Bluetooth enabled PC's, etc.

The Dolphin 9500/9550 WLAN and WPAN

This terminal features the capabilities of both 802.11b and Bluetooth configurations.

Image Engine Options

Dolphin 9500/9550 terminals may be equipped with one of the following:

- IT4000 SR: red or green aimer option scans from 2.5 to 12.5 in. (6.3 to 32 cm.)
- IT4000 SF: red or green aimer option scans from 2.1 to 8.9 in. (5 to 22.6 cm.)

Dolphin 9500/9550 Peripherals

Each of the following items is sold separately to enhance your Dolphin 9500/9550 terminals capabilities.

Dolphin HomeBase™

The Dolphin HomeBase charging and communication cradle supports both RS-232 and USB communications, which make it able to interface with the majority of PC-based enterprise systems. When a terminal is seated in the HomeBase, its main battery pack charges in less than four hours. In addition, the HomeBase contains an auxiliary battery well that charges a spare Li-ion battery.

See [Dolphin 9500/9550 HomeBase™](#) on page 12-1.

Dolphin Mobile Base

The Dolphin Mobile Base charging and communication cradle is designed specifically for in-premise and in-transit data collection applications. It features a flexible mounting bracket, a cigarette lighter adapter, and power cable to adapt it to your environment.

When a terminal is seated in the Mobile Base, its main battery pack charges in less than four hours. The serial connector supports RS-232 communication and power out to peripheral devices, such as hand-held scanners.

See [Dolphin Mobile Base](#) on page 14-1.

Dolphin QuadCharger™

The Dolphin QuadCharger is a four-slot charging station for Dolphin Li-ion battery packs. It can charge each battery in less than four hours. The fourth slot features a battery analyzer that completely resets and re-calibrates a battery and displays its resulting capacity.

See [Dolphin QuadCharger](#) on page 13-1.

Dolphin 9500/9550 Accessories

Each of the following items is sold separately to enhance your Dolphin 9500/9550 terminals capabilities.

Charging/Communication Cables

USB and serial versions that connect the Dolphin 9500/9550 directly to both a peripheral device and a power source.

Dolphin Mobile Charger

Plugs the terminal directly into a vehicle cigarette lighter/power port for power and battery charging. This accessory converts the 12 Volts out of the vehicle to the 9 Volts required by the terminal.

Protective Enclosure

Wraps around the terminal to protect it from wear and tear.

Protective Holster

Secures the terminal for mobile use.

Dolphin Mobile Mount

The Dolphin Mobile Mount solution can be used to securely hold the Dolphin 9500 computers in place in the cab of any vehicle. Used in conjunction with the Mobile Charger to power the terminal, the Dolphin 9500 can be adapted to almost any in-transit environment.

Li-ion Battery Pack

7.4v, 14.8 watt hour Lithium Ion rechargeable battery for the Dolphin.

Bar Code Symbolologies Supported

Symbology type	Symbologies supported
1D symbologies	Code 3 of 9, Interleaved 2 of 5, EAN, Codabar, Code 11, Code 128, Code 93, TCIF Linked Code 39 (TLC39), Universal Product Code (UPC), RSS.
2D symbologies	PDF417, MaxiCode, Data Matrix, QR Code, Aztec Code, Code 49.
Composite codes	RSS-14, Codablock F, Aztec Mesa, EAN-UCC.
OCR codes	OCR A and OCR B.
Postal codes	Postnet and most international 4 state codes, Planet Code, British Post, Canadian Post, KIX (Netherlands) Post, Australian Post, Japanese Post.

Using the Dolphin 9500/9550 for the First Time

Terminology Note

In this manual, the terms “click” and “tap” are used interchangeably. Both mean using the stylus or a finger on the touch screen of the Dolphin 9500/9550 to perform a task. Those tasks usually direct you to click or tap an operation button or icon.

Follow these steps to begin using your Dolphin 9500/9550 terminal.

- 1 Unpack and check the terminal and documentation.
- 2 Install the main battery pack and charge it and the internal backup battery completely.
- 3 Start the Dolphin mobile computer.
- 4 Align the screen.
- 5 Set the time zone.
- 6 Wait for the Autoinstall to finish.
- 7 Verify that the Dolphin 9500/9550 terminal is working properly.

Step 1. Unpack the Carton and Check its Contents

Inspect the package to see that the following items and accessories (if ordered) are included:

- Dolphin 9500/9550 mobile computer
- Battery pack (7.4v Li-Ion)
- CD-ROM—Dolphin 9500/9550 Software Development Kit and User's Guide
- CD-ROM—Microsoft companion CD
- Dolphin 9500 Quick Start Guide

Note: Be sure to keep the original packaging in the event that the Dolphin terminal should need to be returned for service.

Step 2. Charge the Main and Backup Batteries

WARNING! Use **only** the battery packs provided by HHP. The use of any other battery pack in the Dolphin 9500/9550 terminal **will** void your warranty and may result in damage to the Dolphin terminal or battery.

The Li-Ion battery is packaged separately and ships discharged of all power. It must be charged completely before initial use. When installed in the terminal, the battery pack can be charged in the HomeBase, Mobile Base, or with the appropriate charging cable. When not installed in the terminal, battery packs can be charged in the QuadCharger or the auxiliary well of the HomeBase.

The internal backup battery maintains the application data stored in RAM and system clock when the terminal's main battery pack is discharged or removed from the terminal.

Time to Charge: Four hours for the main battery pack, eight hours for the internal backup battery the first time.

Install the main battery pack

- 1 Unpack the main battery pack. Hold the terminal with the front panel (keyboard) facing down.
- 2 The Dolphin 9500 ships with the handstrap installed and fastened with a clip on the back of the bottom panel. Push the clip of the handstrap down and away from the terminal to unhook it. Move the strap up and away from the battery compartment.
- 3 Insert the end without the locking tab into the top of the battery well and snap the battery into place with a hinging motion. The battery case serves as the back cover of the terminal.
- 4 For the 9500, reattach the handstrap by positioning it down over the battery case and sliding the clip back into the place.

Note: To remove the battery pack, loosen the handstrap as directed above, press the locking tab on the battery pack away from the bottom panel, and pull the battery pack up with a hinging motion.

Charging with the HomeBase or Mobile Base

- 5 Connect the base unit to the appropriate power source.
- 6 Place the terminal in the terminal well of the base unit. The main battery begin charging immediately.

Charging with a serial or USB cable

-
- 1 Plug the cable into the connector on the bottom panel.
 - 2 Plug the adapter into the appropriate power source. The main battery begin charging immediately.

Step 3. Start the Dolphin 9500/9550 Mobile Computer

Follow these steps to start your Dolphin 9500/9550 mobile computer.

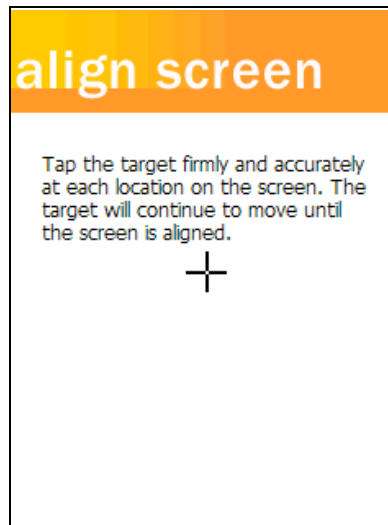
- 1 Install the charged battery pack in the Dolphin terminal.
- 2 The red LED illuminates and the green LED blinks for approximately three seconds.
NOTE: DO NOT PRESS ANY KEYS WHILE THE TERMINAL IS BOOTING UP.
- 3 The terminal initializes and the HHP splash screen displays for a few seconds.



- 4 The system performs a hard reset. Follow the instructions that appear when the display activates again.

Step 4. Align the Screen

After a hard reset, you are prompted to align the screen:

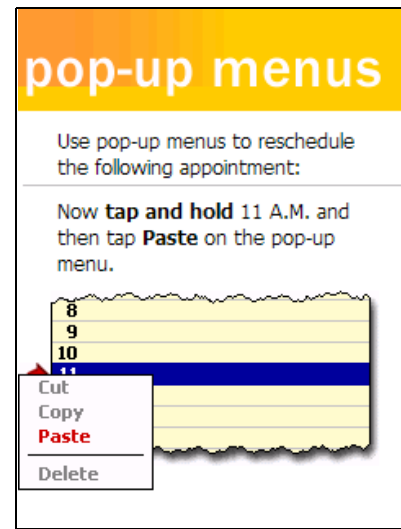
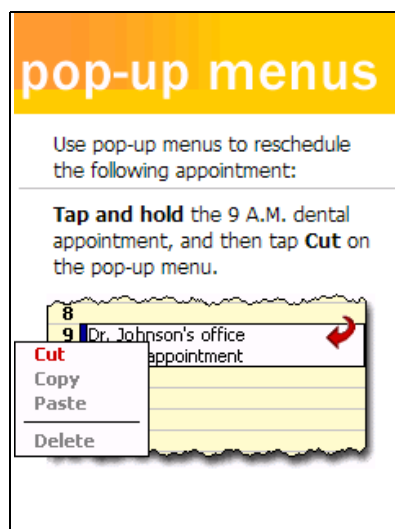
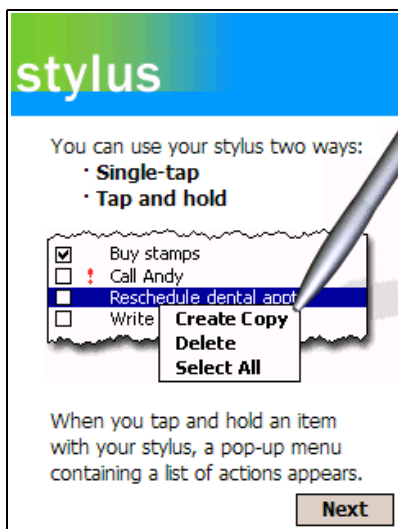


Tap the Target

- Use the stylus shipped with your Dolphin terminal to tap the target wherever it appears on the screen. Alignment should always be performed with a stylus designed for touch screen applications. The small point is required for accurate calibration. The stylus should be oriented at a 90 degree angle to the screen surface.
- Press the stylus firmly into the center of the cross-hair target once and release. Do not “double-tap” the target. You will be prompted to repeat this process for a total of five targets.

Note: You can align the screen at any time in the future by going to Start > Settings > System tab > Screen > Align Screen.

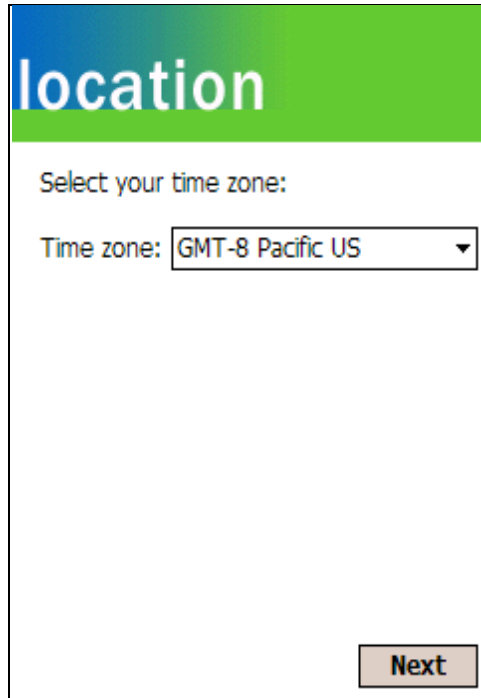
After aligning the screen, follow the directions on the screen which take you through a simple exercise showing how to use the stylus and pop-up menus.



Note: HHP recommends using screen protectors for Dolphin 9500/9550 terminals; especially for those terminals used within applications that require high-volume interfacing with the touch screen. Screen protectors help prevent damage to the touch screen and are easily installed. Screen protectors can be purchased at any major computer retail store or directly from HHP, Inc. Please contact HHP directly for part numbers and pricing.

Step 5. Set the Time Zone

After screen alignment is completed, the Location screen shown below displays.

The screenshot shows a screen titled 'location' with a green header. Below the header, the text 'Select your time zone:' is displayed. Underneath, there is a label 'Time zone:' followed by a drop-down menu showing 'GMT-8 Pacific US'. A 'Next' button is located at the bottom right of the screen.

location

Select your time zone:

Time zone: GMT-8 Pacific US ▼

Next

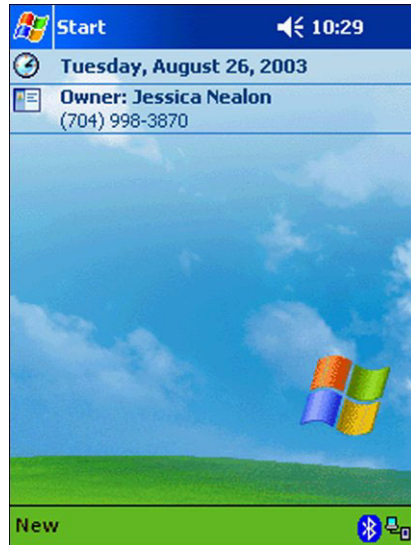
Setting Time Zone

Use the drop-down menu to select your time zone, and tap Next. This does not necessarily set the correct time; only the time zone. You set the time and date manually. See [Setting the Time and Date](#) on page -11..

After setting the time zone, you are finished with the initial setup of your Dolphin mobile computer. The system begins autoinstalling.

Step 6. Autoinstall

After setting the time zone, your Dolphin 9500/9550 begins installing programs automatically. For each set of programs that load, you should see a small install screen with a bar going across it to indicate that a program is loading. When the last program loads, the system performs a warm reset ending up at the Today screen.

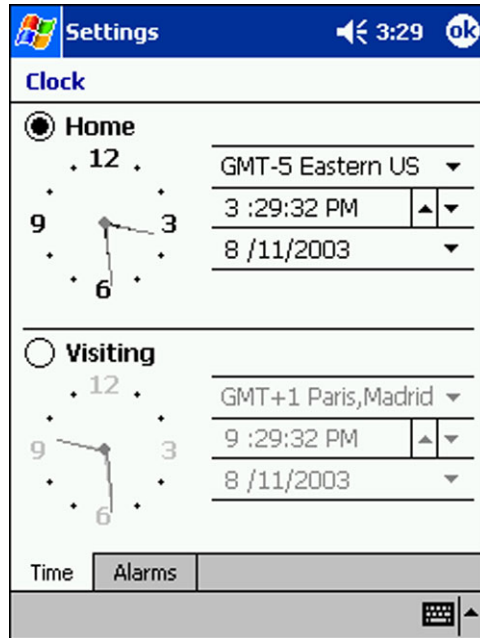


Programs installed

All configurations of the Dolphin 9500/9550 install the HHP Demos and HHP Utilities. If the terminal is configured with a wireless radio, the appropriate radio drivers and utilities for each radio install.

Setting the Time and Date

It is a good idea to set the time and date now before you begin using the device. You must set the time zone first. To set the time and date, go to **Start > Settings > Systems tab > Clock** to set the date and time.



Note: You need to re-set the time and date after every hard reset of the terminal.

Step 7. Verifying That Your Dolphin 9500/9550 is Working Properly

After you have completed the initial setup and set the time and date, the Dolphin 9500/9550 terminal is ready to use. Run the Image and/or Scan demo to verify that the terminal is operating properly and test the imaging functionality.

To verify image capture:



- 1 Go to **Start > HHP Demos > Image Demo**.

- 2 Press the **SCAN** key. A preview of the image appears on the terminal's screen.
- 3 Release the **SCAN** key. The image is captured.
- 4 Press the **ESC** key to go back to the main menu.

To verify decoding:



- 1 Go to **Start > HHP Demos > Scan Demo**.

- 2 Press the **SCAN** key, aim the terminal at a bar code and the red SCAN LED illuminates. When a good scan is obtained, the green SCAN LED illuminates and the terminal beeps. Information about the bar code scanned appears on the screen.
- 3 Press the **ESC** key to exit the demo and return to the main menu.

Putting the Dolphin in Suspend Mode

To conserve power, press the Power key to put the Dolphin terminal into suspend mode. The terminal may also go into “suspend mode” when it is inactive for a programmed period of time, as defined by the application.

To wake the Dolphin terminal from suspend mode, press the Power or SCAN keys.

The Dolphin terminal also goes into suspend mode if you remove the main battery pack while the terminal is powered on. In this case, to wake the Dolphin terminal from suspend mode, install a charged battery and press the Power or SCAN keys.

WARNING! If the main battery and back-up battery are ever fully discharged of power, the terminal will perform a hard reset when power is restored. The terminal will be restored to its original state. All data stored in RAM memory will be lost.

Resetting the Dolphin

Soft Reset or Warm Boot

You would perform a soft reset of the terminal if the device hangs or will not function correctly. The soft reset re-boots the device without losing all data.

To warm boot the Dolphin 9500/9550 terminal:

- 1 Press and hold the Control (CTRL) and the SHIFT (SFT) keys for approximately 10 seconds, then release.
- 2 Release the keys and the terminal resets. The red and green LEDs comes blink for approximately three seconds.
- 3 The terminal will initialize and after a few seconds display the Today screen.

Hard Reset

Under some conditions, you may need to reset the Dolphin 9500/9550 terminal with a hard reset. These may include:

- Resetting the operating system
- Resetting the terminal back to factory defaults
- Resetting the terminal after a bootloader, keyboard, and kernel upgrade

CAUTION! A hard reset erases all the data stored in RAM memory and all RAM installed applications.

To perform a hard reset:

- 1 Press and hold the Control (CTRL) and the Escape (ESC) keys for approximately 10 seconds.
- 2 Release the keys and the terminal resets. The red and green LEDs comes blink for approximately three seconds.
- 3 When you turn on the terminal again, it will need to be reconfigured; see [Start the Dolphin 9500/9550 Mobile Computer](#) on page 2-7.

Dolphin 9500/9550 Overview

System Features

Processor

The Dolphin 9500/9550 terminal is equipped with an Intel® X-Scale 400MHz RISC microprocessor that runs on a 100 MHz RAM BUS, making it one of the most powerful Pocket PC platforms on the market.

Operating System

Microsoft® Pocket PC is a compact, highly efficient, scalable operating system. Its open architecture facilitates development of applications for energy-efficient data collection devices like the Dolphin 9500/9550 terminal.

Memory

Main Board

The memory configuration for the Dolphin 9500/9550 terminals is 64 MB RAM and 32 MB non-volatile FLASH.

Secure Digital Card (SD)

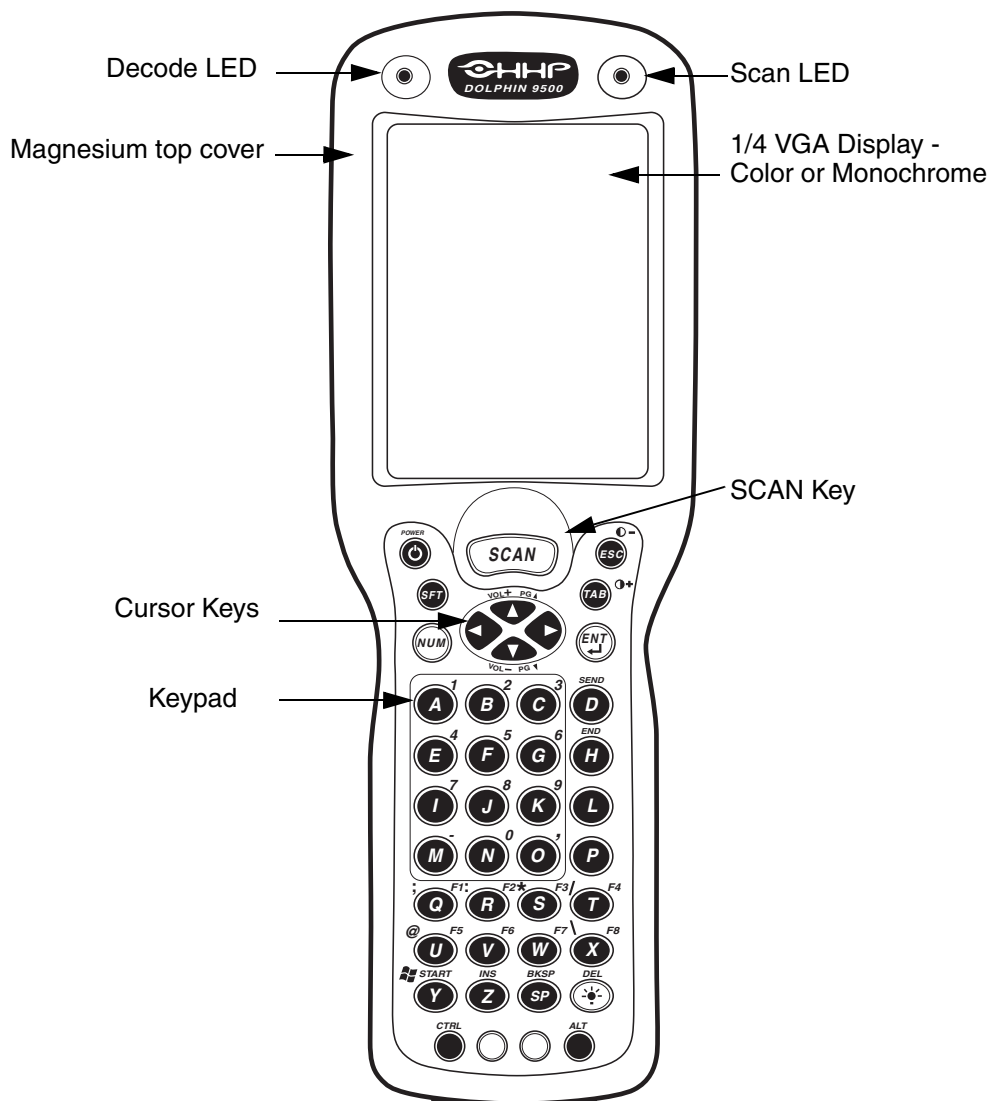
Dolphin 9500/9550 terminals have one user accessible Secure Digital (SD) memory interface for additional application and data storage capacity. Additional secure digital upgrades of 64 MB, 128 MB, and 256 MB are available. The secure digital card socket is user accessible while preserving the terminal's environmental rating.

Wireless Radio Options

Radio options for Dolphin 9500/9550 terminals include an integrated 802.11b and integrated Bluetooth wireless network adapter.

Front Panel Features

This section describes features on the Dolphin 9500/9550 terminal front panel.



LEDs

There are two red light emitting diodes (LEDs) located at the top of the LCD display. Both are software programmable.

Scan LED

The LED located in the upper right corner is the Scan LED. It illuminates red when you press the SCAN key to activate the scan engine.

Decode LED

The LED located in the upper left corner is the Decode LED. It illuminates green when the bar code software successfully decodes a scanned bar code.

1/4 VGA Display

The Dolphin 9500/9550 screen is a 240 x 320 pixel, 3.5" 1/4 VGA display with an industrial protective lens. It is equipped with a touchscreen that can be activated with a stylus (included with the terminal) or finger. The display is available in 16-level grayscale monochrome and color TFT versions.

The backlight for both the monochrome and white LCD color display enable viewing in low-light conditions. To conserve power, the backlight can be programmed to automatically turn off after a prescribed amount of time; see page 4-7.

SCAN Key

The SCAN key is centrally located for easy access with the right or left hand. When pressed, the SCAN key activates the scan. It also functions as an on or system wakeup control for the terminal.

On the 9550 terminal, scan activation and system wakeup is also activated by pressing the trigger on the handle.

Cursor Keys

The centrally located cursor keys enables fast navigation in Windows® Pocket PC and data application environments.

Three Keyboard Options

The Dolphin 9500/9550 keyboards feature durable keys that are backlit for easy use in dark and dim lighting conditions. The silver background enhances the readability of the numeric keys. Important keys, such as the SCAN key, are centrally located for both right- and left-hand use, easy imaging, bar code scanning, and application navigation.

There are three keyboard options for the Dolphin 9500/9550 terminals:

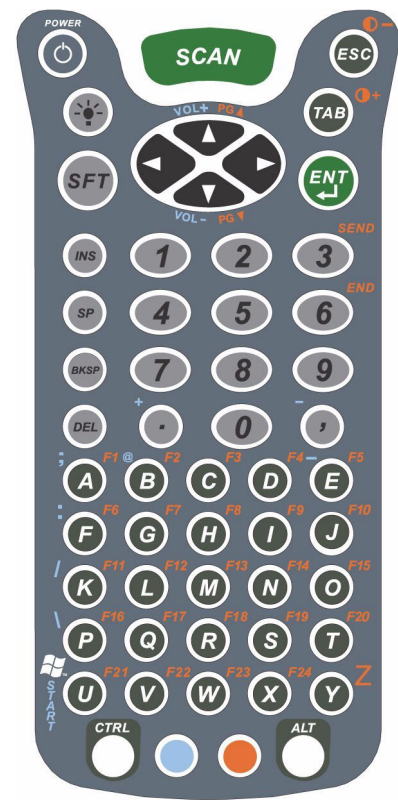
35-key numeric/alpha keyboard



43-key numeric/alpha keyboard



56-key alpha/numeric keyboard



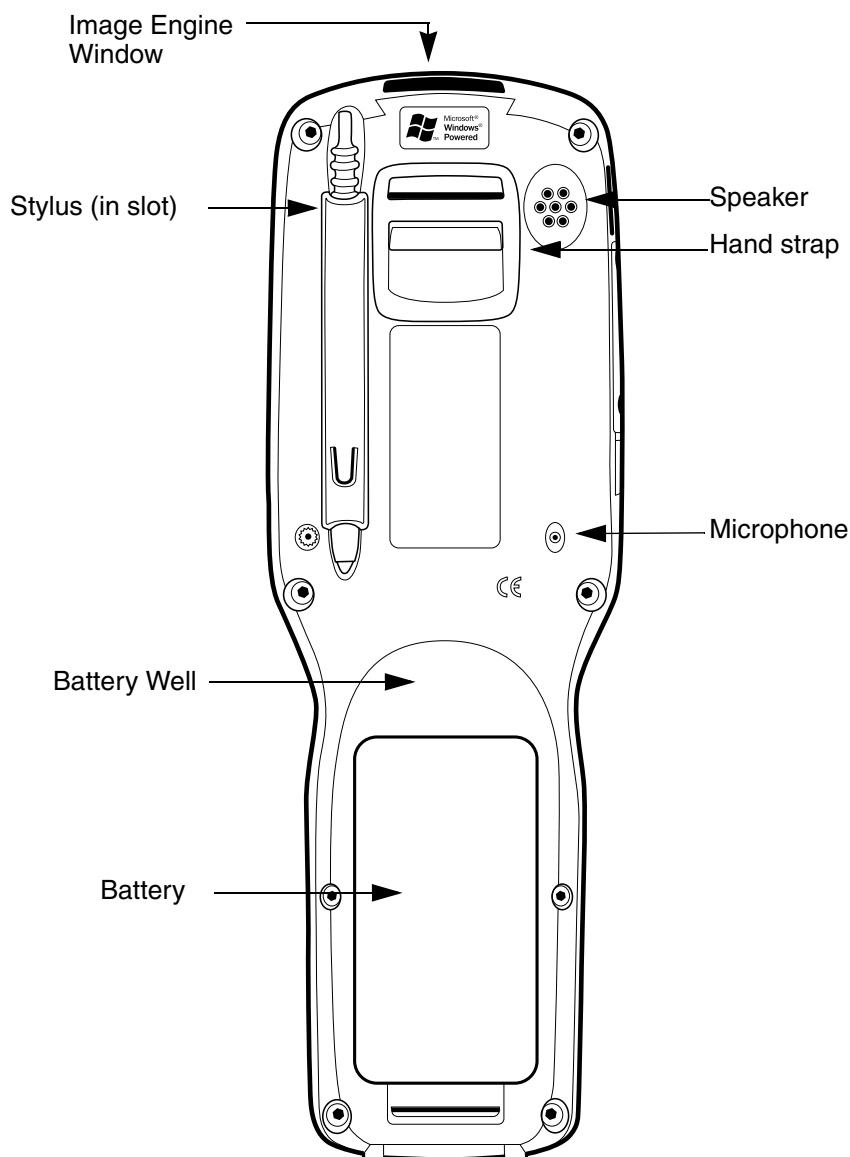
For a complete overview of each keyboard, see [Appendix A](#) on page [A-1](#).

Back Panel Features

Note: The safety labels on the back panel are specific to each terminal's configuration.

Dolphin 9500

This following graphic describes features on the back panel of the Dolphin 9500 terminal.



Note: Because the back panel of the Dolphin 9550 features a pistol-grip handle, it is featured in the following section

Image Engine Window

Dolphin 9500/9550 terminals come equipped with an image engine that reads and decodes linear, stacked linear (PDF417), and 2D matrix bar code symbologies. With the latest CMOS-based technology, the engine works like a digital camera and enables digital image capture, signature capture and reading OCR characters.

Digital images taken with the Dolphin 9500/9550 terminal have a maximum image size of 640 x 480 pixels and may have up to a 256 gray scale image definition. Files formats supported for image storage include Bitmap (.bmp), JPEG (.jpg) and Portable Network Graphics (.png).

For a frontal view of the Image Engine Window, see [Image Engine Window](#) on page 3-6.

Speaker

The Dolphin 9500/9550 terminal has an integrated speaker that sounds audio signals as you scan bar code labels and enter data. The operating frequency range is 500Hz at 71 dB up to 80 dB. The speaker can also be used for playing sounds (e.g., WAV files).

Hand Strap

The Dolphin 9500 has an integrated elastic hand strap to provide a comfortable, secure grip on the terminal. It is attached to the terminal with a clip on the bottom panel; see [Hand strap clip](#) on page 3-9. If desired, the strap may be adjusted or removed.

Microphone

Dolphin 9500/9550 terminals feature an integrated microphone that provides audio input to the terminal.

Battery/Battery Well

The Battery Well is a recessed area on the back of the Dolphin that holds the Li-Ion battery pack. For more information, see [Batteries](#) on page 3-10.

Stylus

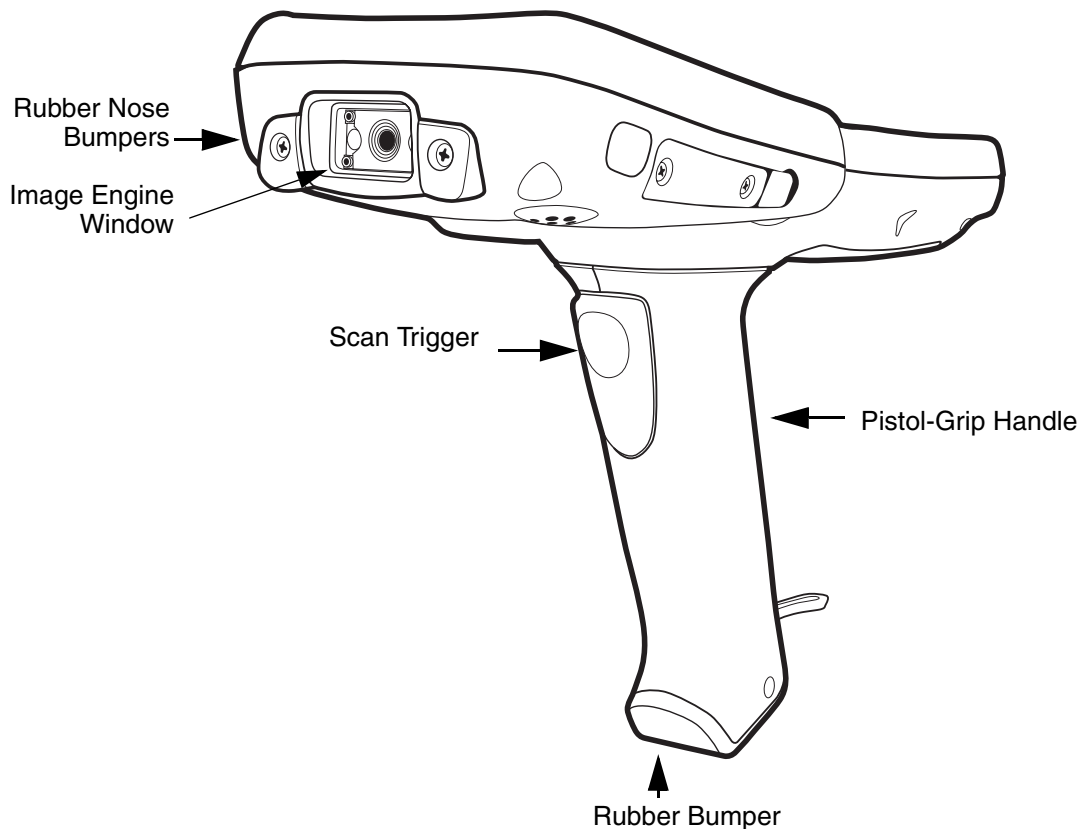
The stylus is used to operate the touchscreen display. The back panel features this storage slot to hold the stylus when not in use.

Dolphin 9550

This section describes the back panel of the Dolphin 9550. It contains the same features as the Dolphin 9500 described in the previous section with the additions of

- a pistol-grip handle to hold and maneuver the terminal with greater ease,
- a scanner/imager trigger on the handle that activates the scan, and
- rubber bumpers that enable the terminal to rest safely and securely when not in use.

The following is a graphic of the 9550 bottom panel.



Rubber Nose Bumpers

See [Rubber Nose Bumpers](#) on page 3-7.

Image Engine Window

This is the front view of the window. For more information, see [Image Engine Window](#) on page 3-4.

Scan Trigger

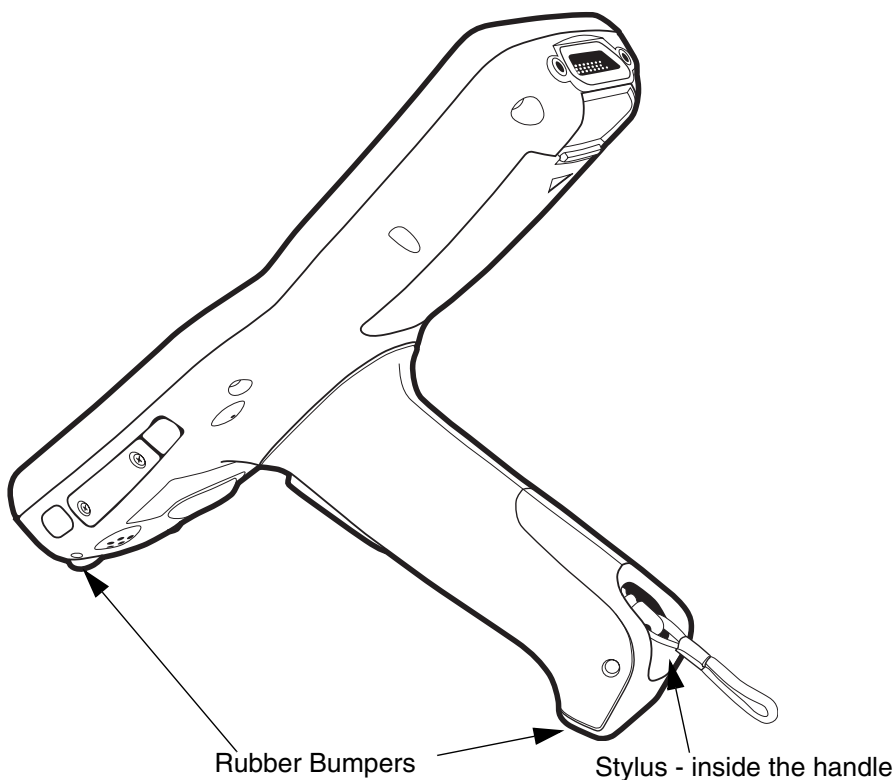
The scan trigger provides comfortable two-finger scan activation.

Pistol Grip Handle

The comfortable, ergonomic handle is integrated into the back panel for a solid, secure grip. It was designed specifically for use in rapid, high volume scanning applications and features rubber surface details for improved handle grip, comfort, and shock absorption.

Rubber Nose Bumpers

The rubber bumpers enable the Dolphin 9550 to rest in a stable, nose-down position when the unit is set on a flat surface. The following graphic shows the Dolphin 9550 in a nose-down position, resting on its rubber bumpers.

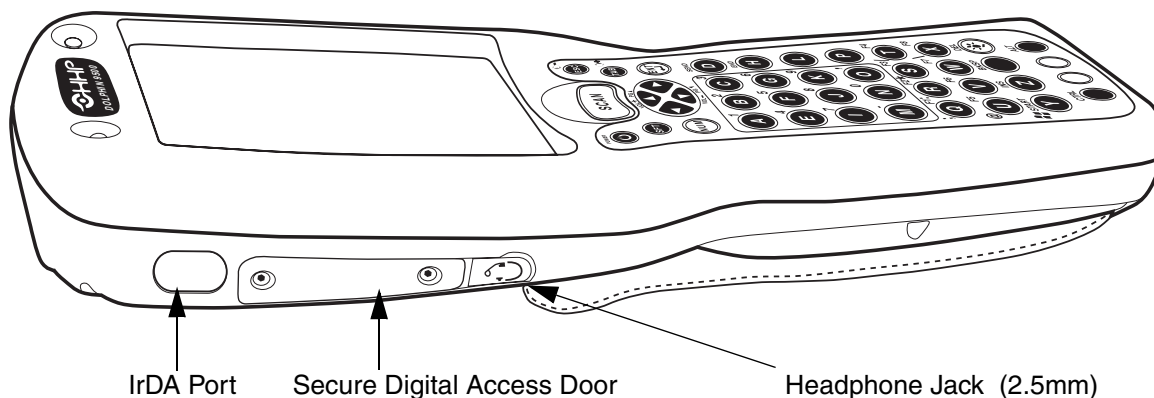


Stylus

The stylus is used to operate the touchscreen display. The Dolphin 9550 back panel stores the stylus inside the pistol-grip handle.

Side Panel Features

The following graphic shows the left, side panel.



IrDA Port

The IrDA (Infrared Communications) Port allows the Dolphin to communicate with IrDA-enabled devices such as PC's, printers, modems, or other Dolphin 9500/9550 terminals. The maximum speed is 115kbps.

Secure Digital Memory Interface

Dolphin 9500/9550 terminals have an industry standard Secure Digital (SD) memory interface. The Secure Digital Access Door seals the memory interface from moisture and particle intrusion and provides secure storage for read/write data. However, the SD is user-accessible. The user can gain access to it by opening the access door manually.

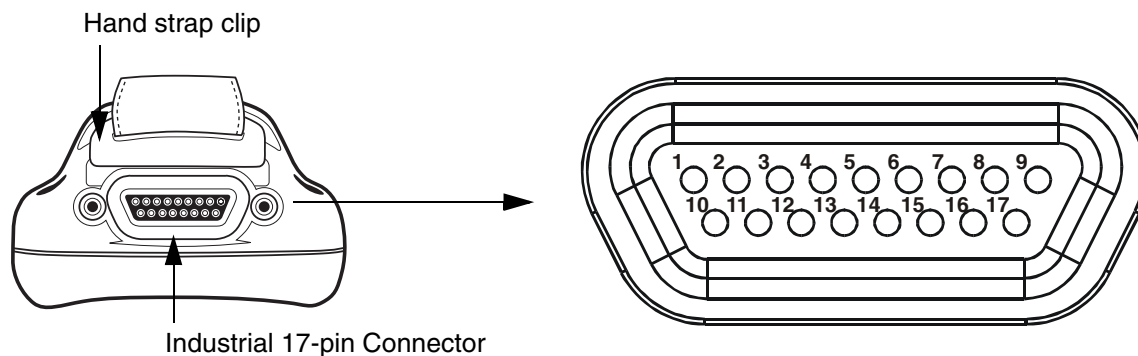
Terminals can be custom-configured with SD memory from 64MB, 128MB, to 256MB.

Headphone Jack

Dolphin 9500/9550 terminals contains a 2.5mm audio plug for stereo audio playback. This jack can also serve as a standard headset interface for audio/voice.

Bottom Panel Features

This following graphics describe the bottom panel of the Dolphin 9500/9550.



Pin #	Description
1	+USB
2	PWR
3	N / C
4	N / C
5	N / C
6	N / C
7	GND
8	5V OUT
9	DTR
10	-USB
11	USB DET
12	RI
13	DSR
14	RXD
15	RTS
16	TXD
17	CTS

NOTE: SIGNALS REFERENCED FOR A DTE DEVICE

Industrial 17-pin Mechanical Connector

The bottom panel of the Dolphin 9500/9550 features a custom, industrial 17-pin connector. This serial port is designated as COM port 1. When seating in the HomeBase or Mobile Base, the terminal powered through this connection and the main battery in the battery well is charged. If the base unit is connected to a desktop computer, this connector also transmits data.

The connection to the peripheral can be RS-232 or USB. The maximum RS-232 speed is 115kbps with seven baud rate settings. USB communication runs at 12 Mbps. This port also provides power out (to peripheral devices) at 500mA at 5V.

With the addition of the special cable that connects directly to this connector, Dolphin 9500/9550 can connect and provide power to a peripheral device directly.

Batteries

The Dolphin 9500/9550 features intelligent battery technology. It is comprised of two types of battery power: the backup battery that resides inside the terminal and the battery pack inserted into the back panel of the terminal. They are designed to work together to prevent data loss when the terminal is in use over long periods.

Both must be completely charged before using the Dolphin 9500/9550 for the first time.

Internal Backup Battery

Located inside the terminal, the backup battery is a 3.6 Volt nickel metal hydride (NiMH) battery. The internal backup battery is not user-replaceable.

Purpose

The Dolphin's internal backup battery prevents the terminal from being reset if you need to remove and replace the main battery pack. It retains RAM data and allows the real-time clock to remain operational for up to 30 minutes when the main battery pack is removed.

Charging

To function properly, the internal backup battery must be fully charged before using the terminal for the first time. The initial charge cycle takes approximately eight hours. After that, if the internal backup battery becomes fully discharged of power, it will require a minimum of 10 hours of charging time to function normally.

When not connected to an external power source such as the Dolphin HomeBase, the internal backup battery is charged by the main battery pack. If the terminal is left without the main battery pack for more than 30 minutes, the internal backup battery will need to be recharged.

Note Data and programs stored in FLASH is not lost even if the internal backup battery fails. However, you must reset the real-time clock using the Pocket PC Time and Date function.

Guidelines

Follow these guidelines to maximize the life of the Dolphin's backup battery:

- Keep a charged Li-Ion battery pack in the Dolphin. The internal battery will prematurely discharge if there is not at least a partially charged battery in the terminal.
- Put the Dolphin in the HomeBase connected to power when the terminal is not in use.

Main Battery Pack

CAUTION! Use only the 7.4V Li-ion battery packs provided by HHP. The use of any other battery pack in the Dolphin 9500/9550 terminal will void your warranty and may result in damage to the Dolphin terminal or battery.

The 7.4V, 14.8 watt hour Lithium Ion (Li-Ion) battery pack is the primary power source for the Dolphin. For the location of the Li-Ion battery on the terminal, see [Battery/Battery Well](#) on page 3-5.

The Li-Ion battery is designed to operate in a temperature range of -10 to 50°C (14 to 122°F). They can be stored between -30 to 80°C (-22 to 176°F).

Managing Battery Power

Data and files saved on the Dolphin 9500/9550 terminal may be stored in RAM, so it is important to maintain a continuous power supply to the terminal. When the main battery pack becomes low, the Low Battery Charge icon will appear in the notification tray at the top of the screen. The Critical icon will appear when the battery is critically low. There is also a Low Battery icon that will appear when the backup battery is low.

Letting the backup battery become fully discharged will cause the terminal to lose all data in RAM. Therefore, you should keep a charged battery pack in the Dolphin at all times to conserve the internal backup battery. When you remove a battery pack, insert another charged pack in the Dolphin. The internal battery will prematurely discharge if there is not at least a partially charged battery in the terminal.

The battery status indicator displays in the notification tray when the battery is low or critically low. If there is no indicator, the battery is adequately charged.

If the main battery is low and the terminal is in suspend mode, pressing the SCAN or Power button will not wake up the Dolphin 9500/9550 terminal; you must replace the discharged battery with a fully charged battery.

Setting Critical and Low Battery Points

The Dolphin 9500/9550 may be programmed to display warnings when the battery reaches critical and low battery points. There are two entries defined in the registry. The specific settings are:

[HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Power]

“CriticalBatt”=dword:a

“LowBatt”=dword:19

“CriticalBatt”=dword:a

This sets the Critical Battery point to 10 percent (a hex = 10 decimal). The critical battery is the point at which the customer is warned that the battery charge is very low. This warning will be posted every 3 minutes until the situation is corrected.

“LowBatt”=dword:19

This sets the Low battery point to 25 percent (19 hex = 25 decimal). The low battery setting is the point at which the user is alerted that the battery is low. The user is notified only once for a low battery.

These are the default values. Developers can set these parameters from 0 (no warning at all) to 99 (would nearly always warn). The warnings do not appear when the terminal is on external power.

Checking Battery Power

The Battery Status screen displays information about current battery status and allows you to set options that can conserve battery power.

To open the Battery Status screen:

- 1 Select **Start>Settings>System>Power**.
- 2 Select your preferences.
- 3 Tap **OK** to save the changes and exit.

Charging the Battery Pack

You can charge the Dolphin’s main battery pack with one of the following methods:

- Place the battery pack in the Dolphin 9500/9550 terminal and then place the terminal in the terminal well of the HomeBase or Mobile Base.
- Connect a charging/communication cable to the 17-pin connector and plug the cable into a power outlet.
- Place the battery pack in the Dolphin QuadCharger.
- Place the battery back in the Auxiliary Battery Well of the HomeBase.

Storing Batteries

To maintain optimal performance from batteries, follow these guidelines below when storing them:

- Avoid storing batteries outside the specified range of -4 to 104° F (-20 to 40°C) or in extremely high humidity.
- For prolonged storage, do not keep batteries stored in a charger that is connected to a power source.

Guidelines for Battery Use and Disposal

The following are general guidelines for the safe use and disposal of batteries:

- Use only the battery supplied, recommended, or approved by HHP.
- Replace a defective batteries immediately as it could damage the Dolphin terminal.
- Never throw a used battery in the trash. It contains heavy metals and should be recycled according to local guidelines.
- Don't short-circuit a battery or throw it into a fire. It can explode and cause severe personal injury.
- Excessive discharge damages a battery. Recharge the battery when your terminal indicates low battery power.
- Although your battery can be recharged many times, it will eventually be depleted. Replace it after the battery is unable to hold an adequate charge.
- If you are not sure the battery or charger is working properly, please send it to HHP or an authorized HHP service center, for inspection.

Dolphin 9500/9550 Technical Specifications

System Architecture	
Processor:	Intel® X-Scale PXA255 400MHz
Development Environment:	Dolphin SDK for Pocket PC 2002 supports Embedded VB or C++®, Dolphin .NET SDK for Pocket PC 2002 supports Visual Studio.NET®, VB.NET®, C#.NET, HHP custom libraries and utilities.
Operating Platform:	Microsoft® Pocket PC Professional Edition
Third-Party Software:	Support for Connect Terminal Emulation software (TNVT, 3270, 5250), Java Virtual Machine (JVM) runtime, ITScriptNet™
Memory:	64MB RAM x 32MB non-volatile Flash
Data Inputs	
Imager/Scanner:	IT4000 SR decodes from 2.5 to 12.5 in. (6.3 to 32 cm.) OR IT4000 SF- with green aimer decodes from 2.1 to 8.9 in. (5 to 22.6 cm.) Specifications are for 100% UPC Code.
1D Symbolologies Read:	Code 3 of 9, Interleaved 2 or 5, EAN, Codabar, Code 128, Plessey, Code 11, Code 93, UPC, RSS
2D Symbolologies Read:	PDF417, MaxiCode, Data Matrix, QR, RSS Composite, Aztec, OCR
Composite Codes	RSS -14, Codablock F, Aztec Mesa, EAN ·UCC
OCR Fonts:	OCR-A, OCR-B
Three Keyboard Options:	35-key numeric-shifted alpha, 43-key alpha-shifted numeric, and 56-key full alpha/numeric
Data Outputs	
Display:	1/4 VGA (240 x 320 portrait mode) color TFT LCD or monochrome display with industrial-grade touch screen
I/O Ports:	Custom, industrial, mechanical connector supports communications—USB at 12Mbps, serial RS-232 up to 115Kbps— and charging via cradles or AC adapter cables, IrDA port-Integrated, Speaker-Integrated, Microphone-Integrated, Headset-jack
Mass Storage:	User-accessible Secure Digital (SD) memory interface
Wireless Radio Options	
WLAN:	IEEE 802.11b DSSS WLAN radio
WWAN: (9500 only)	GSM/GPRS Tri-band (900, 1800, 1900 MHz) radio with accessible SIM card interface
WPAN:	Bluetooth® radio
Physical	
Dimensions:	9.6"L x 3.45"W x 1.66"D at display (24.53 x 8.76 x 4.23 cm), 2.7"W x 1.5"D at grip (6.9 x 3.8 cm)
Weight:	9500 terminal—Batch: 19.7 oz. (558 gm); WLAN: 20.2 oz. (573 gm), WPAN: 20 oz. (567 gm), WLAN/WPAN: 20.3 oz. (576 gm) 9550 terminal—Batch: 23.4 oz. (663 gm); WLAN: 23.9 oz. (677.5 gm)
Operating Temperature:	14 to 122°F (-10°C to 55°C); can operate in temperatures lower than -20°C with potential degradation in performance depending on the application
Storage Temperature:	-22 to 176°F (-30°C to 80°C)
Humidity:	95% humidity, non-condensing
Electrical Static Discharge:	15 kv on all surfaces

Dolphin 9500/9550 Technical Specifications

Impact Resistance:	Withstands multiple 5ft. (1.5m) drops onto concrete
Environmental Resistance:	Independently certified to meet IP64 standards for moisture and particle resistance
Power:	Lithium-Ion battery technology – 7.4V, 14.8 watt-hour main battery with hot-swappable design for fast replacement in the field
Other:	Integrated stylus with optional tether and removable hand strap
Peripherals/Accessories	
Dolphin HomeBase™	Charging/communications cradle with Auxiliary Battery Well. Data transfer via RS-232 serial or USB ports.
Dolphin Mobile Base	Mobile charging/communication cradle. Data transfer via RS-232 serial. Power out at 5 volts for peripheral devices.
Dolphin QuadCharger™	Four-slot battery charger that charges four batteries in under four hours. One slot doubles as a battery analyzer.
Dolphin Mobile Charger	Charges a Dolphin terminal by plugging into a vehicle cigarette lighter/power port.
Dolphin NetBase	Four-slot charging/communication cradle designed for Ethernet-based communications.
Dolphin ChargeBase™	Four-slot charging cradle—each slot holds, powers, and charges a terminal.
Charging/Communication cables	USB or serial cables that charge and communicate with the terminal directly—without a cradle.
Li-Ion Battery Pack	7.4V, 14.8 Watt Hour Lithium Ion rechargeable main battery for the Dolphin.
Regulatory Approvals	
FCC-CE-Radio Country:	US/Canada, R&TTE
Dolphin, HomeBase, QuadCharger, and ChargeBase are trademarks of HHP. Microsoft, Windows, and the Windows Logo are registered trademarks or trademarks of Microsoft Corporation. Intel is a registered trademark of Intel Corporation. The BLUETOOTH trademarks are owned by Bluetooth SIG, Inc., U.S.A. and licensed to HHP.	

Using the Dolphin 9500/9550 Mobile Computer

Entering Data

To enter data, you may:

- Use the 35-key, 43-key or 56-key keypads
- Collect images or scan bar code data into data fields
- Use the Soft Input Panel (SIP) to enter typed text, either by using the soft keyboard or other input method
- Write directly on the screen
- Draw pictures on the screen
- Use Microsoft® ActiveSync® to synchronize or copy information from your desktop computer. For more information on ActiveSync, see ActiveSync Help on your desktop computer.

Touch screen

HHP recommends using screen protectors to protect the touch screen; especially when used with applications that require high-volume interfacing with the touch screen. Screen protectors help prevent damage to the touch screen display and are easily installed. Screen protectors can be purchased at any major computer retail store or directly from HHP.

For touch screen input, use the included stylus or your finger. Which method you choose depends on which one is best for your application. While there is a great deal of variation in different applications, for buttons or icons that are close together, you will generally achieve greater accuracy with the stylus.

CAUTION! Use of other objects, such as paper clips, pencils, or ink pens can damage the input panel and will void the warranty.

Imaging

Dolphin 9500/9550 terminals are equipped an image reader that reads 1D and 2D bar codes, OCR characters and can capture images, such as signatures and gray scale pictures. The imager features a green aiming beam that is used to aim the image reader against the bar code or item being read.

The terminal supports two types of image decoding for use in various bar code reading and imaging applications: full-area imaging and Advanced Linear Decoding (ALD).

Full-area imaging

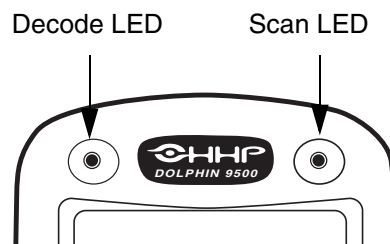
Full-area imaging provides omni-directional reading of linear and non-linear 1D and 2D bar codes, OCR, signature capture, and picture taking. When reading all bar code types using full-area imaging, a positive read can be obtained from most any position. To achieve the best read, the aiming beam should be centered horizontally across the bar code.

ALD

ALD provides fast reading of linear and stacked linear bar codes. To achieve a positive read when reading linear 1D and PDF417 bar codes, the imager's aiming beam should be centered horizontally across the bar code. When ALD is enabled, the reader does not read matrix or postal codes.

Decoding a bar code - aiming the beam

- 1 Point the Dolphin 9500/9550 terminal directly at the bar code. The imager faces straight out.
- 2 Press the **SCAN** key on the Dolphin 9500/9550 to project the imager's green aiming beam. The aiming beam should be oriented in line with the bar code to achieve the quickest read. A range of 4-10 inches (10-25 cm) is recommended.
- 3 Center the aiming beam over the bar code. The red Scan LED illuminates when the user presses the SCAN key, and the green Decode LED illuminates when a bar code is successfully decoded and the terminal beeps.



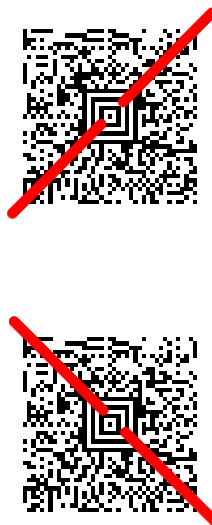
Note: On the Dolphin 9550, you can use the Scan Trigger instead of the SCAN key. For more information, see [Scan Trigger](#) on page 3-6.

Refer to the following chart for beam angle information

Linear bar code



2D Matrix symbol



The aiming beam is smaller when the terminal is held closer to the code and larger when it is farther from the code. Symbolologies with smaller bars or elements (mil size) should be read closer to the unit. Symbolologies with larger bars or elements (mil size) should be read farther from the unit.

Capturing Images

The image-capture process is an intuitive, split-second operation for experienced users. By following the basic guidelines, new users can easily develop their own technique and, with practice, quickly learn to adapt it to different application environments.

Image preview

When the imaging process is initiated, the Dolphin 9500/9550 displays a preview of the image on the touch screen. This is a live video image of what the imager is currently viewing. This enables you to improve your aim and verify the image before you take it. The live video preview has a slightly degraded appearance compared to the captured image. This is normal.

The Scan key



The Scan key captures images on both the Dolphin 9500 and the Dolphin 9550 terminals. It is the only way to capture an image on the 9500, while on the 9550, you can also use the scan trigger on the pistol-grip handle.

Image quality and file size

The image quality and related file size are determined by the data compression method used by your software application. When first captured, the image is saved in the JPEG file format. The average size will be approximately 4-8K. However, the size of each JPEG depends on the content of each image—the more complex the content, the larger the file size.

For the highest quality (and often the smallest file size), take grayscale images.

To capture images on the Dolphin 9500

Complete these basic steps:

- 1 To aim, point the display end of the Dolphin 9500 straight on the target.
- 2 Press the **SCAN** key to preview the image. A live video image appears on the terminal screen. Use it as a guide while you position and aim the terminal. You may find it helpful to start by moving the terminal away from and then closer to the target.
- 3 When the desired image is displayed on the terminal screen, release the **SCAN** key to capture the image. For best results hold the Dolphin terminal as still as possible when you release the SCAN key.

To capture images on the Dolphin 9550

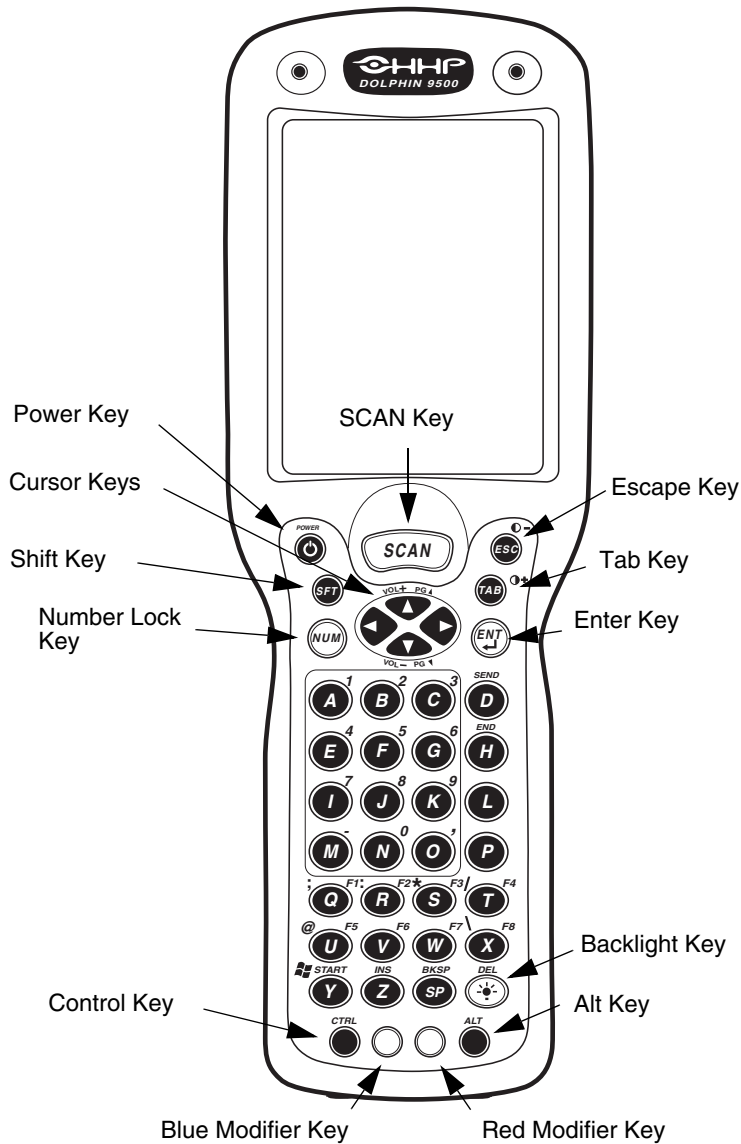
Complete these basic steps:

- 1 Holding the pistol-grip handle in either hand, point the display end of the 9550 directly at the target.
- 2 Press and hold the **Scan Trigger** to preview the image. A live video image appears on the terminal screen. Use it as a guide while you position and aim the terminal. You may find it helpful to start by moving the terminal away from and then closer to the target.
- 3 When the desired image is displayed on the terminal screen, release the **Scan Trigger** to capture the image. For best results hold the Dolphin terminal as still as possible when you release the SCAN key.

Note: As noted above, you can also use the SCAN key as directed for the Dolphin 9500.

Using the Keyboard

The Dolphin 9500/9550 has three keyboard configurations; see [Three Keyboard Options](#) on page 3-3. For a complete overview of the each configuration and the special key combinations associated with each, see [Appendix](#) on page A-1.



Dolphin 9500/9550 43-Key Front View

Using the Cursor Keys

Use the cursor keys to navigate around on an application screen. The use of these keys can vary depending on the application.

Press	To ...
	Move the cursor up one row or line.
	Move the cursor down one row or line.
	Move the cursor one character to the right.
	Move the cursor one character to the left.

Using the Modifier Keys

All three versions of the Dolphin 9500/9550 keyboard feature the standard PC keyboard modifier keys, Shift (SFT), Alt, and Ctrl. To enable single-handed operation, the SFT key modifies only the next key pressed; it must be pressed and released before each key you wish to modify.

The Ctrl and Alt keys are located on the bottom row. There are two additional modifier keys located on the bottom row of the keyboard: one blue and one red.



Functions of the Alt and Ctl keys depend on the software application in use.

The blue and red keys are used in combination with other keys to type the corresponding color-coded characters and functions. For charts of the key combinations associated with each keyboard layout, see [Appendix](#) on page A-1.

The Red and Blue keys modify only the next key pressed; these keys must be pressed and released before each key you wish to modify to the Blue or Red case.

Special Keys

SCAN Key	The SCAN key activates the scan on both 9500/9550 terminals. It also “wakes” the terminals from sleep mode. Its position allows convenient one-handed image-taking and/or bar code decoding.
Power Key	The Power key puts the terminal into and wakes the terminal from suspend mode.
Shift (SFT)	The Shift key toggles the keyboard from upper case alphabet mode to lower case alphabet mode and back. Caps Lock may also be toggled by pressing the red modifier key followed by the Shift key or by double-tapping the Shift key. When Caps Lock is toggled on, the Shift key makes characters upper case; when it is toggled off, the Shift key makes keys lower case.
Enter (ENT)	The Enter key confirms data entry.
Escape (ESC)	The Escape key performs a cancel action.
Tab	The Tab key moves the cursor to the next tab stop or the next control on a form.
Backlight 	By default, the Backlight key turns the keyboard backlights on and off. The display backlight can be programmed to your specifications by going to Start > Settings > System tab > Backlight. The display Backlight then functions according to your settings. For color displays, when the backlight has turned off, pressing any key on the keyboard or tapping the touch screen turns it back on.
Number Lock (NUM)	This key is included only on the 43-key keyboard option which defaults to alphabetic mode. The Number Lock key toggles between the alphabetic and numeric modes.
Alpha Lock (ALPHA)	This key is included only on the 35-key keyboard option which defaults to numeric mode. The Alpha key toggles between the numeric and alphabetic modes.
Backspace (BKSP)	This key appears on both the 35 and 56-keyboard options. The Backspace key moves the cursor back one space for each time the key is pressed. Backspace is a shifted function on the 43-key keyboard version. To delete a single character, press Red key + SP. To delete multiple characters, press Red key + SP and hold down the SP key.
Delete (DEL)	This key appears on both the 35 and 56-keyboard options. The Delete key deletes one character for each time the key is pressed. Delete is a shifted function on the 43-key keyboard version.

Key Combinations

There are some keyboard functions and special characters not defined on the Dolphin 9500/9550 keyboards or overlays. For charts of the key combinations associated with each keyboard layout, see [Appendix](#) on page [A-1](#).

Communication Media Options

Via the Industrial Connector

The 17-pin industrial connector supports USB and RS-232 communications. Its power output is 500mA at 5V. When connected properly, it enables the user to connect the Dolphin 9500/9550 terminal to external devices such as scanners and printers.

For more information about the 17-pin industrial connector, see [Bottom Panel Features](#) on page 3-9..

Via the IrDA Port

The IrDA port allows the Dolphin 9500/9550 to send data via pulses of light to and from other IrDA-compliant devices, such as printers and PCs or to other Dolphin 9500/9550 terminals.

Via the 802.11b Radio

The Dolphin 9500/9550 may be equipped with a WiFi®-compliant, interoperable 2.4 GHz 802.11b direct sequence spread spectrum wireless local area network (WLAN) radio.

Via Bluetooth Radio

The Dolphin 9500/9550 may be equipped with a Bluetooth wireless personal area network (WPAN) radio.

Software Communication Programs

Microsoft® ActiveSync® v3.7

In the Dolphin 9500/9550 Microsoft® development environment, ActiveSync® is a tool for developers. It allows Pocket PC devices like the Dolphin 9500/9550 to exchange and synchronize application data with a desktop computer.

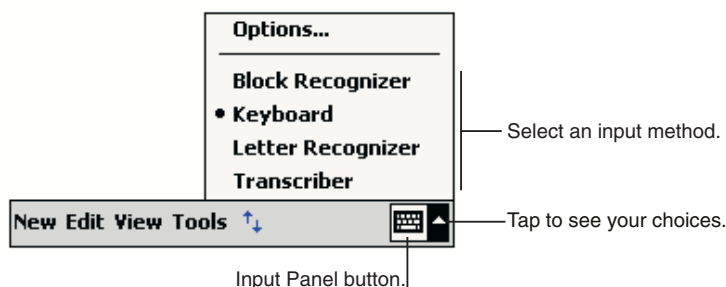
RAS

Short for *Remote Access Services*, a feature built into Windows NT® that enables users to log into an NT-based LAN using a modem, X.25 connection or WAN link. RAS is fully supported and allows the use of PPP or SLIP connections for network connectivity.

Entering Text Using the Input Panel

Use the input panel to enter information in any program on the Dolphin mobile computer. You can either type on the soft keyboard or write on the touch screen using Letter Recognizer or Block Recognizer. In either case, the characters appear as typed text on the screen.

To show or hide the input panel, tap the Input Panel button. Tap the arrow next to the Input Panel button to see your choices.



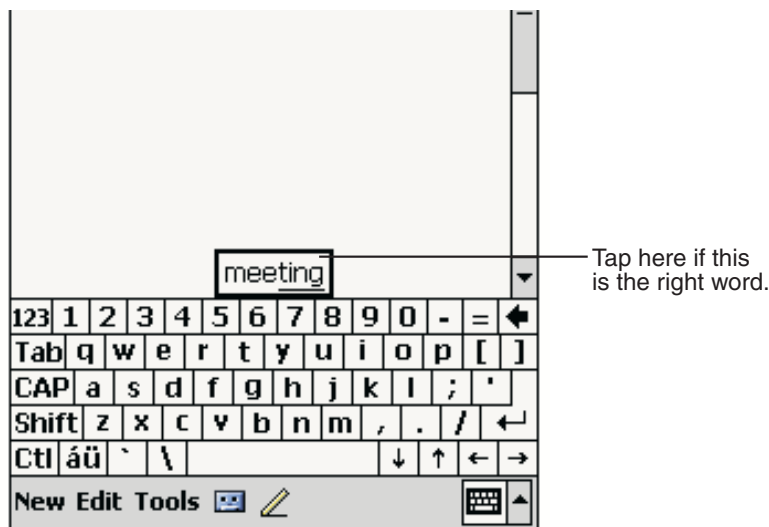
Note: The Transcriber must be installed separately from the Dolphin 9500/9550 Companion CD.

When you use the input panel, your terminal anticipates the word you are typing or writing and displays it above the input panel. When you tap the displayed word, it is inserted into your text at the insertion point. The more you use your Dolphin 9500/9550 terminal, the more words it learns to anticipate.

To change word suggestion options, such as the number of words suggested at one time, tap **Start> Settings>Personal >Input> Word Completion** tab.

Using the Soft Keyboard

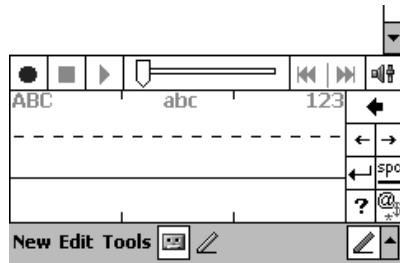
- 1 Tap the arrow next to the Input Panel button and select **Keyboard**.
- 2 On the soft keyboard that is displayed, tap the keys with your stylus.



Using the Letter Recognizer

With Letter Recognizer you can write letters using the stylus just as you would on paper.

- 1 Tap the arrow next to the Input Panel button and then **Letter Recognizer**.
- 2 Write a letter in the box.

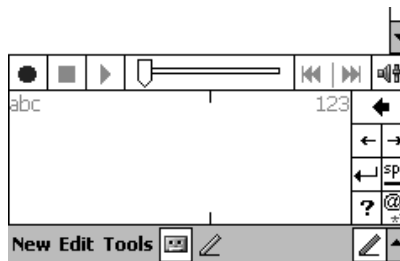


When you write a letter, it is converted to typed text that appears on the screen. For specific instructions on using Letter Recognizer, with Letter Recognizer open, tap the question mark next to the writing area.

Using the Block Recognizer

With Block Recognizer you can input character strokes using the stylus that are similar to those used on other devices.

- 1 Tap the arrow next to the Input Panel button and then **Block Recognizer**.
- 2 Write a letter in the box.



When you write a letter, it is converted to typed text that appears on the screen. For specific instructions on using Block Recognizer, with Block Recognizer open, tap the question mark next to the writing area.

Selecting Text

To edit or format typed text, select it by dragging the stylus across the text. You can cut, copy, and paste text by tapping and holding the selected words and then tapping an editing command on the pop-up menu, or by tapping the command on the **Edit** menu.