Mounting the QuadCharger

The Dolphin QuadCharger should be on a dry, stable surface. To easily adapt the QuadCharger to your environment, it can be mounted on a flat, horizontal surface such as a desktop or workbench, or a flat, vertical surface such as a wall.

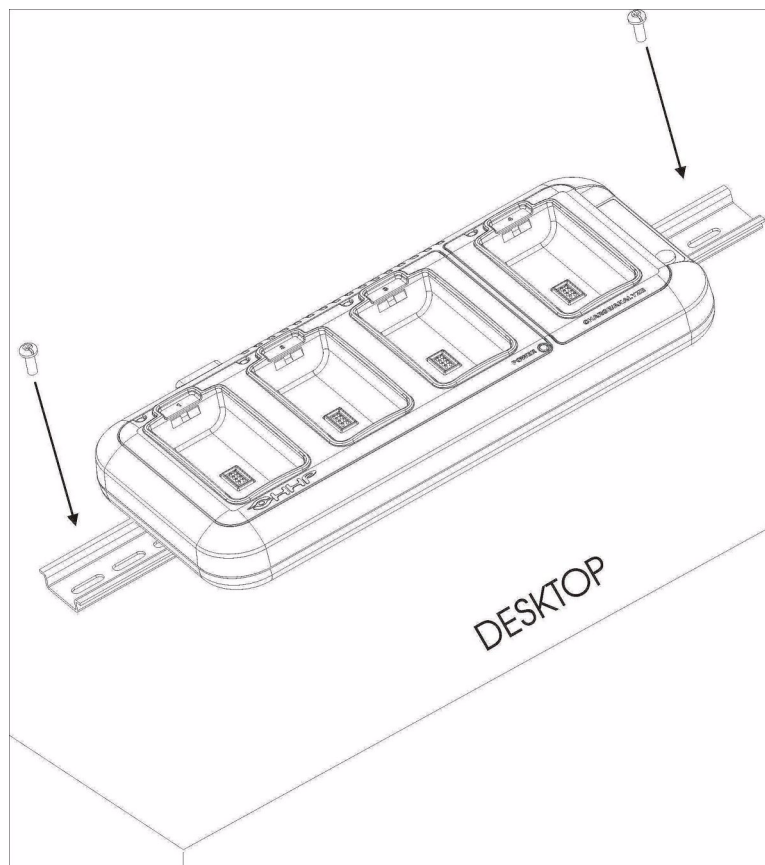When choosing a location, always bear in mind that

- the mounting location must allow users easy access to power switch and power connector
- the QuadCharger should be oriented so that users can easily read the labels, especially for the Battery Analyzer.

Mounting with the DIN rail

All Dolphin charging/communication cradles have a DIN rail (7.5 X 35 mm) slot on the bottom panel to enable secure mounting.

To mount the QuadCharger, you slide the DIN rail slot along the bottom panel and secure it. Then, using the appropriate nuts and bolts, secure the DIN rail to the desk or wall.
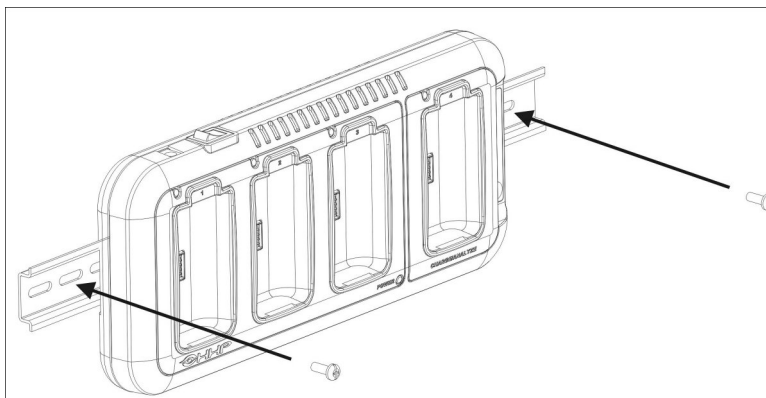
Desk Mounting

The following graphic displays how to desk-mount a QuadCharger.

Wall Mounting

The following graphic displays how to wall-mount a QuadCharger.

Troubleshooting

If you encounter problems with your Dolphin QuadCharger, refer to chart below for possible solutions. If problems persist, please contact HHP Technical Support.

Problem	Issue
The "CHARGING" LED does not come on when I insert a battery pack into the Dolphin QuadCharger	Check the power connections on the Dolphin QuadCharger; make sure the POWER switch is ON and the battery pack is properly seated.
The red status LED comes on during charging.	Try to charge the battery in one of the other charging pockets. If the red Status LED comes on again, then the problem is associated with the battery pack. If the red status stays with the charging pocket, the problem is associated with the charging circuity.
The red status LED remains on without a battery in the charging pocket.	An error occurred during the self-diagnostic test for that particular charging pocket. Call HHP Product Service and request an RMA. See Warranty, Support, and Service on page 15-1. for additional warranty and return information.

Dolphin Mobile Base

Overview

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 theMobile Base, its main battery pack charges in less that four hours. The serial connector supports RS-232 communication and power out to peripheral devices, such as hand-held scanners.

As the hub of your Dolphin 9500/9550 mobile data collection system, the Mobile Base performs three important functions: 1) charging, 2) communications, and 3) storage.

Charging

The Mobile Base provides power to the Dolphin terminal which enables the terminal to charge its battery.

Communications

The Mobile Base can transmit reliable data communications at speeds of up to 115K baud through its RS-232 serial port.
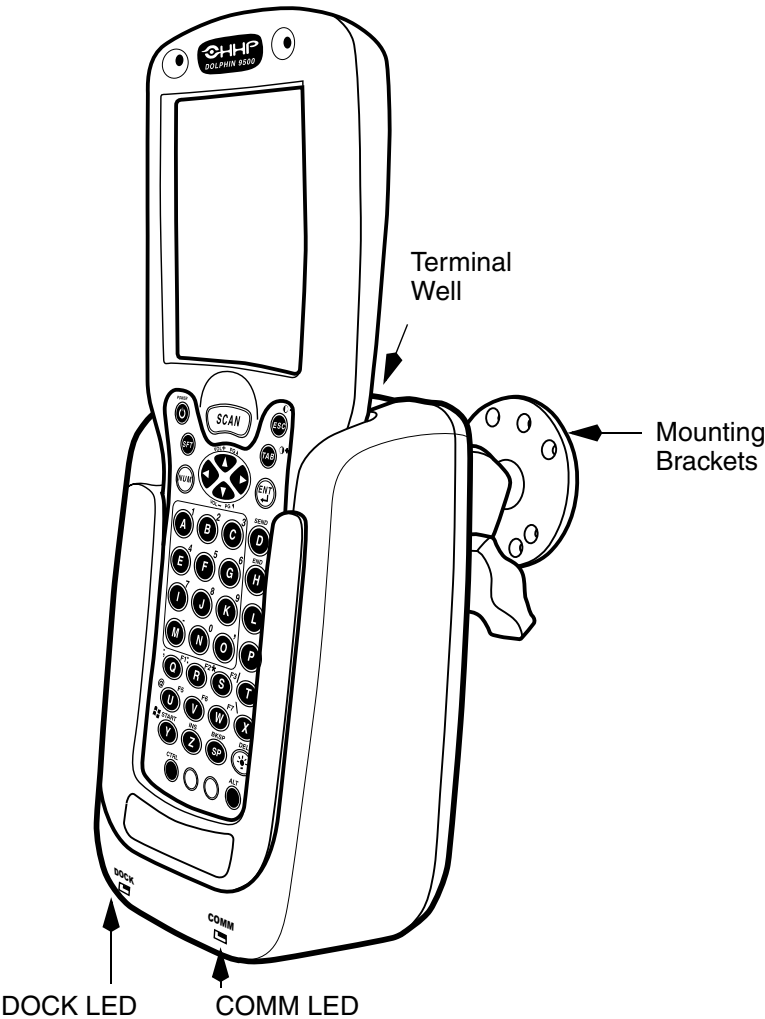
Convenient Storage

The Mobile Base is a safe and convenient storage receptacle for the Dolphin 9500/9550 mobile computer.

Mobile Base parts and functions

Front Panel

The front panel of the Mobile Base has one slot. The following graphic features the Mobile Base with the Dolphin 9500 inserted into the Terminal Well.

Terminal Well

Mounting Brackets

DOCK LED   COMM LED

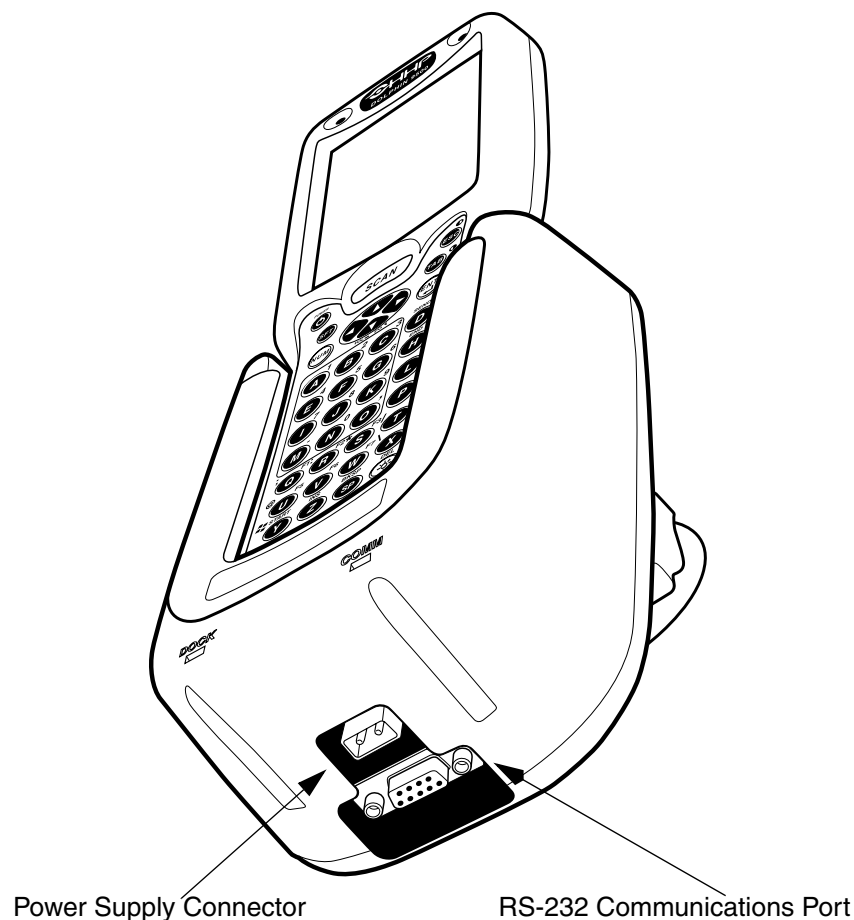|	
Terminal Well	Place the terminal in this well to communicate with a host device and to charge the mobile computer's battery. There is a special
Mounting Brackets	Use these to mount the Mobile Base to a fixed location.
DOCK LED	Turns solid green when the Dolphin Terminal is properly seated into the Dolphin Mobile Base.
COMM LED	Indicates the status of data transfer between the Host Device and the Dolphin Terminal

COMM LED color	**Indicates that…**
Red	Data is being sent from the Host Device to the Dolphin Mobile Base.
Green	Data is being sent from the Dolphin Mobile Base to the Host Device.
Orange	Data is being sent at high data rates.

Bottom Panel

The power supply and RS-232 connectors are located on the bottom of the unit.

Power Supply Connector   RS-232 Communications Port

Power Supply Connector

Use this connector to attach a power supply to the Mobile Base. The power supply provides power for communications and battery charging. The Dolphin 9500/9550 Mobile Base can be powered from an external DC power source of between 11 Vdc to 48 Vdc.

The optional HHP cigarette lighter adapter cable allows the Mobile Base to be powered from a standard 12 Vdc cigarette lighter outlet in a vehicle.

The Mobile Base can also be powered using the supplied pigtail power cable by "hard wiring" into the vehicle power bus.

CAUTION!   Always be sure the power source is within the specified range and observe correct input voltage polarity.

RS-232 Communications Port

Use a standard serial cable to connect this port to a host RS-232 device; see Mobile Base Serial Connector on page 14-8.

Powering the Dolphin Terminal

When seated in the Mobile Base, the Dolphin terminal receives the power to charge its main battery and run its internal circuitry.

The Dolphin terminal can be stored indefinitely in the Mobile Base without damage to the terminal or the Mobile Base. Keep the Mobile Base plugged into the power source so that the Dolphin terminal battery pack stays fully charged.

Charging a Dolphin Terminal

The Mobile Base supplies charging power to the Dolphin terminal so that the terminal can monitor the charging of its battery pack. This charging method protects the battery from being damaged by overcharging. Therefore, the Dolphin terminal may be stored indefinitely in the Mobile Base without damage to the terminal, the battery pack, or the Mobile Base.

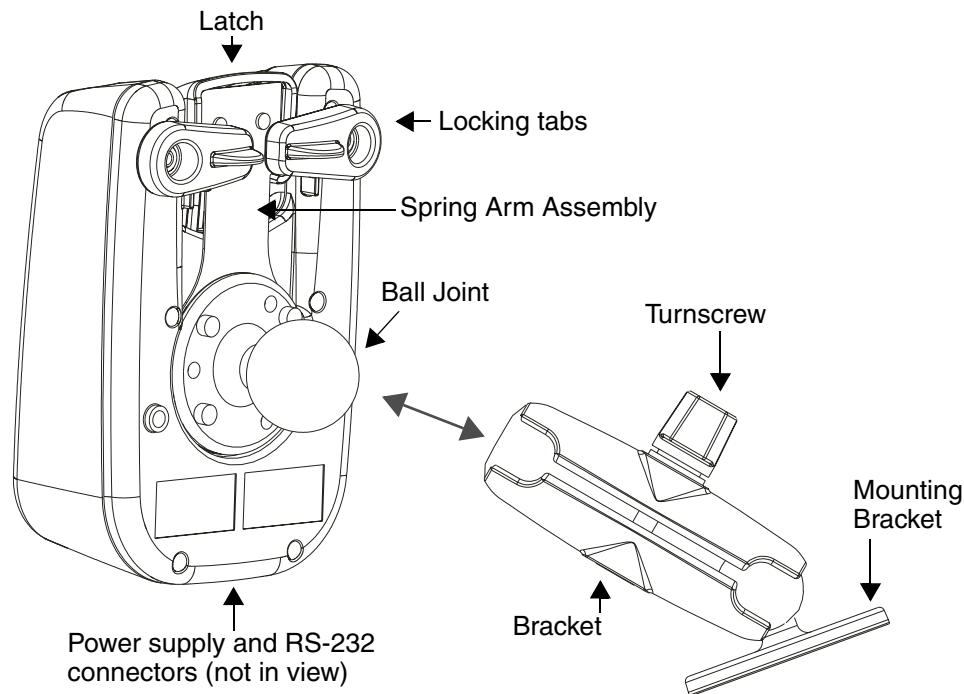To charge a Dolphin terminal, complete these steps:

1 Insert a battery pack into the Dolphin terminal.

2 Place the terminal, imager window up and the LCD visible, in the Terminal Well of the Mobile Base.

3 Let it glide down into the well until it stops.

4 When the Dolphin terminal is properly seated, the DOCK LED on the Mobile Base turns solid Green.
   The terminal begins charging automatically.

Installing the Dolphin Mobile Base

To install the Dolphin Mobile Base, you need to mount it securely to an appropriate location and supply it with power.

Mounting the Mobile Base

The adjustable mounting bracket holds the terminal securely in place and gives the user a variety of options for mounting the Mobile Base. When selecting a location, keep in mind that the power supply and serial connectors point straight out the bottom panel.

Latch

Locking tabs

Spring Arm Assembly

Ball Joint

Turnscrew

Mounting Bracket

Bracket

Power supply and RS-232 connectors (not in view)

To mount the Mobile Base, complete these steps:

1 Loosen the turnscrew.

2 Insert the ball joint of the mounting bracket to the back of the bracket.

3 Insert the ball joint on the back of the Mobile Base into the other side of the bracket.

4 Tighten the turnscrew to secure both ball joints.

5 Secure the mounting bracket to the appropriate location.

Back of Mobile Base

Latch

The latch holds the back of the terminal securely in place. The graphic above displays the mounting of a Dolphin 9500 terminal. There is a special latch available for the Dolphin 9550 that accommodates the pistol-grip handle.

Locking tabs

When positioned as shown in the above graphic, the locking tabs secure the spring arm assembly, latch, and terminal in place. When seating a terminal, turn both arms up to allow the spring arm to move as necessary while the terminal is being inserted. After the terminal is seated, turn both arms toward the center to lock them.

Spring Arm Assembly

The spring arm assemble is the column that connect the latch to the back of the Mobile Base.

Ball Joints

There are two ball joints: one on the back of the Mobile Base and one on the mounting bracket. Both ball joints are inserted into the bracket and secured to mount the Mobile Base.

Connectors

The power and RS-232 connectors are located on the bottom panel. For more information, see Bottom Panel on page 14-3.

Mounting

Bracket

The bracket contains the turnscrew and two slots. Ball joints are inserted into each slot and secured with the turnscrew.

Turnscrew

Located on the top of the bracket. Rotate the turnscrew to secure or loosen the ball joint slots.

Mounting Bracket

The mounting bracket is what you attach to the mounting surface. It is comprised of a ball joint and flat disk. The disk contains drill holes you use to secure the Mobile Base to the mounting surface.

Powering to the Dolphin Mobile Base

Note: HHP recommends that you leave the Mobile Base connected to its power source at all times.

The Mobile Base is powered via the power connector on the bottom panel; see Bottom Panel on page 14-3. Both the power and serial connectors are straight out, not at an angle.

The Mobile Base must be powered by a 12 to 48 volt DC source.

Setting up for Communications with the Mobile Base

The Mobile Base RS-232 interface allows the Dolphin terminal to communicate to a personal computer, modem, or any standard RS-232 device using a standard serial cable and communications software.

Connecting the Cables

Connect the Mobile Base to the host computer or other device by plugging an RS-232 serial cable into the RS-232 Communications Port on the bottom of the Mobile Base. Plug the other end of the RS-232 serial cable into the correct port on the host RS-232 device.

The wiring of your cable depends on whether the other device is set up as a Data Communications Equipment (DCE) or Data Terminal Equipment (DTE) device.

The Mobile Base Communication Port is configured as a DCE device. To communicate with a DTE device such as a computer, use a standard (or straight-through) RS-232 cable. To communicate with a DCE device, use either a null modem adapter in line with a standard RS-232 cable, or a null-modem serial cable.
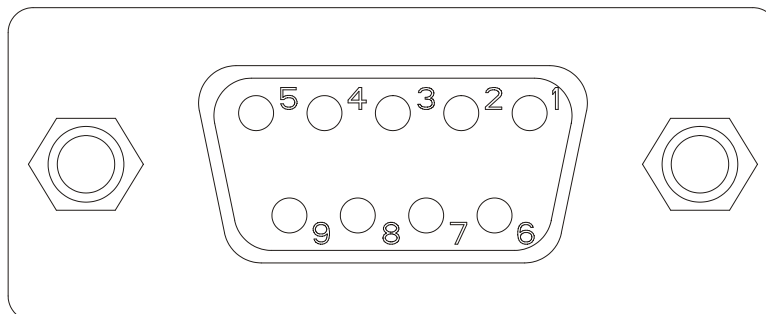
RS-232 Pin Configuration

Mobile Base /Host Port (DCE) Pin / Input Signal	IBM AT DB9 (DTE)	IBM XT DB25 (DTE)	Modem DB25 (DCE)
2 / (RD)	2	3	2
3 / (TD)	3	2	3
5 / (SG)	5	7	7
4 / (DTR)	4	20	6
6 / (DSR)	6	6	20
7 / (RTS)	7	4	5
8 / (CTS)	8	5	4

Refer to this table if you want to make your own cables. To do so, you must determine if your host RS-232 device is

- 9-pin or 25-pin and
- configured as a DCE or DTE device.

Mobile Base Serial Connector

The following diagram displays the serial connector of the Mobile Base.

Pin #	Description
1	Internal Jumper to Pin 6
2	TXD
3	RXD
4	DSR
5	GND
6	DTR
7	CTS
8	RTS
9	5 VOLT OUT

Note: Signals Referenced for a DTE Device

The Mobile Base connector is straight to the printed circuit board (PCB). The ninth pin sends 500mA at 5V power out. This can power a peripheral device such as a mobile printer provided that that peripheral device can accept 500mA at 5V.
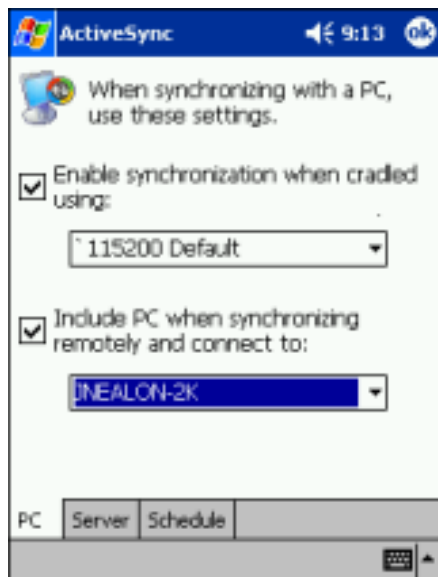
Configuring the Dolphin Terminal

Communications Properties must be configured appropriately on the Dolphin 9500/9550 terminal for it to communicate with the Mobile Base.

To set Communications Properties:

1 Click Start > ActiveSync > Tools > Options.

2 Click the PC Connection tab

3 Check the Enable Synchronization check box.

4 Select the appropriate baud rate for connecting to the RS-232 Host Device; 11520 is the default.

5 Click **OK** and close the ActiveSync window on the Dolphin 9500/9550.

6 Place the Dolphin in the Mobile Base.

Warranty, Support, and Service

Limited Warranty

Hand Held Products, Inc., d/b/a HHP ("HHP") warrants its products to be free from defects in materials and workmanship and to conform to HHP's published specifications applicable to the products purchased at the time of shipment. This warranty does not cover any HHP product which is (i) improperly installed or used; (ii) damaged by accident or negligence, including failure to follow the proper maintenance, service, and cleaning schedule; or (iii) damaged as a result of (A) modification or alteration by the purchaser or other party, (B) excessive voltage or current supplied to or drawn from the interface connections, (C) static electricity or electro-static discharge, (D) operation under conditions beyond the specified operating parameters, or (E) repair or service of the product by anyone other than HHP or its authorized representatives.

This warranty shall extend from the time of shipment for the duration published by HHP for the product at the time of purchase ("Warranty Period"). Any defective product must be returned (at purchaser's expense) during the Warranty Period to HHP's factory or authorized service center for inspection. No product will be accepted by HHP without a Return Materials Authorization, which may be obtained by contacting HHP. In the event that the product is returned to HHP or its authorized service center within the Warranty Period and HHP determines to its satisfaction that the product is defective due to defects in materials or workmanship, HHP, at its sole option, will either repair or replace the product without charge, except for return shipping to HHP.

EXCEPT AS MAY BE OTHERWISE PROVIDED BY APPLICABLE LAW, THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER COVENANTS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, ORAL OR WRITTEN, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

HHP'S RESPONSIBILITY AND PURCHASER'S EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT. IN NO EVENT SHALL HHP BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, AND, IN NO EVENT, SHALL ANY LIABILITY OF HHP ARISING IN CONNECTION WITH ANY PRODUCT SOLD HEREUNDER (WHETHER SUCH LIABILITY ARISES FROM A CLAIM BASED ON CONTRACT, WARRANTY, TORT, OR OTHERWISE) EXCEED THE ACTUAL AMOUNT PAID TO HHP FOR THE PRODUCT. THESE LIMITATIONS ON LIABILITY SHALL REMAIN IN FULL FORCE AND EFFECT EVEN WHEN HHP MAY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH INJURIES, LOSSES, OR DAMAGES. SOME STATES, PROVINCES, OR COUNTRIES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

All provisions of this Limited Warranty are separate and severable, which means that if any provision is held invalid and unenforceable, such determination shall not affect the validity of enforceability of the other provisions hereof.

The limited duration of the warranty for the Dolphin 9500 and Dolphin 9550 terminals is as described below:

- Terminals with an integrated imager are covered by a two-year limited warranty.
- Touch screens are covered by a one-year limited warranty.
- The limited duration of the warranty for the Dolphin HomeBase, Mobile Base, Mobile Charger, and QuadCharger is for one year.
- The limited duration of the warranty for batteries is one year. The battery life will be greatly increased when following the specific battery instructions in the user guide. Batteries returned to HHP in a reduced state may or may not be replaced under this warranty.
- Use only power adapters approved for use by HHP. Failure to do so may result in improper operation or damage to the unit and will void the warranty.

Hand Held Products, Inc. extends these warranties only to the first end-users of the products. These warranties are non-transferable.

How to Extend Your Warranty

HHP offers a variety of service plans on our hardware products. These agreements offer continued coverage for your equipment after the initial warranty expires. For more information, contact your HHP sales representative, customer account representative or the Product Service Marketing Manager or your Authorized Reseller.

Return Information

Should your unit or any of the peripherals prove to be defective within the stated warranty period from the date of purchase, return the product, as described in the Repair Maintenance Authorization (RMA) procedures below, and we will, at our option, repair or replace the product, to whatever extent HHP deems necessary to restore the product to proper operating condition, without any charge to you.

Note: You **must** obtain an RMA number to receive service from any of HHP's repair facilities. Failure to obtain an RMA number before shipping your product to this repair facility can delay the processing of your repair request. Please contact the Product Service facility (numbers listed below) nearest you to receive an RMA number. If you need to return your unit, refer to the Service and Repair section of the HHP website (www.hhp.com) for the appropriate address.

Reseller purchase

If you purchased the product from an Authorized HHP Reseller, contact the Reseller with the unit's serial number. Your Reseller will contact HHP, on your behalf, to arrange for the unit to be serviced.

Calling

If you purchased the product directly from HHP, or have been instructed by your Reseller to contact HHP directly, call the Product Service Department in your area to request an RMA number.

Requirements

When calling for service at any of our repair facilities, please be prepared to give the following information:

• Product type and serial number
• Brief description of problem
• Dated Proof-of-Purchase

If your equipment is still covered under the initial end-user's product warranty, please notify the Product Services Representative when you call.

Service and Repair Locations.

North America/Canada	**Latin America**	**Asia Pacific**
HHP Corporate Offices Telephone: (800) 782-4263, option 3 Fax: (704) 566-6015 E-mail: ProductService@hhp.com	HHP Latin America Telephone: +1 239-263-7600 Fax: +1 239-263-9689 E-mail: LASupport@hhp.com	HHP Asia/Pacific Telephone: +852-2511-3050 Fax: +852-2511-3557 E-mail: chuie@hhp.com
Europe, Middle East, and Africa (EMEA) HHP Europe Telephone:+ 31 (0) 40 29 01 633 Fax: + 31 (0) 40 2901631 E-mail: EuroService@hhp.com	**Brazil** HHP Brazil Telephone: +55 (21) 2494-7060 Fax: +55 (21) 2494-5033 E-mail: suporte@hhp.com.br	**Japan** HHP Japan Telephone: +813 5842 6325 Fax: +813 5842 6335 E-mail: KobayashiT@hhp.com

Shipping

If you must return your unit, place the product in its original packaging with a copy of your original invoice (this helps avoid possible service delays) and ship the product prepaid to the appropriate address below. For your protection, we recommend you insure any equipment being sent to HHP.

Write the RMA number on the mailing label under the address.

Note: Please make note of the RMA number (if required) and the product's serial number before shipping.

Repair

After repair or replacement of the equipment, HHP will ship the product, at our cost, to your location. Non-warranty repairs will be returned, at the customer's expense, unless otherwise requested. Units currently under a service agreement will be shipped per the service agreement.

Technical Assistance

If you have a question or problem with your unit, you can obtain technical assistance from HHP's Application Support department.

North America/Canada:

Telephone: (800) 782-4263, Option 4 (8 a.m. to 6 p.m. EST)
Fax number: (315) 685-4960
E-mail: support@HHP.com

Europe, Middle East, and Africa:

Telephone
European Ofc: +31 (0) 40 29 01 600
U.K. Ofc: +44 1925 240055
E-mail: euro_support@HHP.com

Asia:

Telephone: +852-2511-3050
E-mail: asia_support@HHP.com

Latin America:

Telephone: (239) 263-7600
E-mail: la_support@HHP.com

A

Appendix - A

Overview

This appendix provides useful tools for programming and managing your Dolphin 9500/9550 terminal.

General Windows Keyboard Shortcuts

Use the keyboard shortcuts in the chart below to navigate the Dolphin 9500 and Dolphin 9550 terminal keyboards. These are standard keyboard shortcuts for WIndows applications.

Press these keys,	To…
CTRL + C	Copy
CTRL + X	Cut
CTRL + V	Paste
CTRL + Z	Undo
DELETE	Delete
CTRL + RIGHT ARROW	Move the insertion point to the beginning of the next word.
CTRL + LEFT ARROW	Move the insertion point to the beginning of the previous word.
CTRL + DOWN ARROW	Move the insertion point to the beginning of the next paragraph.
CTRL + UP ARROW	Move the insertion point to the beginning of the previous paragraph.
SHIFT with any of the arrow keys	Select more than one item in a window or on the desktop, or select text within a document.
CTRL+A	Select all.
ALT+ENTER	View properties for the selected item.
ALT+TAB	Switch between open items.
ALT+ESC	Cycle through items in the order they were opened.
ALT + Tap on Touch screen	Right click
CTRL+ESC	Display the **Start** menu.
ALT+Underlined letter in a menu name	Display the corresponding menu.
Underlined letter in a command name on an open menu	Carry out the corresponding command.
BACKSPACE	View the folder one level up in My Computer or Windows Explorer.
ESC	Cancel the current task.

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

For single-handed operation, the **Shift** (SFT) key only modifies 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. 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. 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.