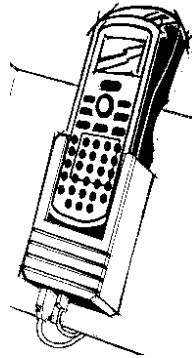


Hand Held Products, Inc.

# Dolphin VehicleBase™ User's Guide



Rev. 1.0

P/N: 80010107

 **HAND HELD  
PRODUCTS®**

*Information Management in the Palm of Your Hand.*

# Dolphin VehicleBase™

## User's Guide

Release 1.0 (October 1998)

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## Chapter 1

# Introduction

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The Dolphin VehicleBase serves as a safe and convenient storage receptacle for the Dolphin terminal. There are two options available for the Dolphin VehicleBase:

- Charging/communications version provides standard communications functions and serves as a docking base for the Dolphin terminal. The optical communications port on the VehicleBase mates with the IrDA port on the Dolphin. This allows reliable data communications at speeds up to 115K baud.
- Charge-only version serves as a docking base for the Dolphin terminal

## Chapter 2 Getting Started

---

### Setting Up The Dolphin VehicleBase

The Dolphin VehicleBase should be setup on any dry, stable surface.

You must connect the Dolphin VehicleBase to a power source for any type of operation.

HHP recommends that you leave the Dolphin VehicleBase connected to its power source at all times, so that it is always ready to use.

### Connecting The Serial Cable\*

Plug the RS-232 serial cable into the Main Comm Port connector on Dolphin VehicleBase.

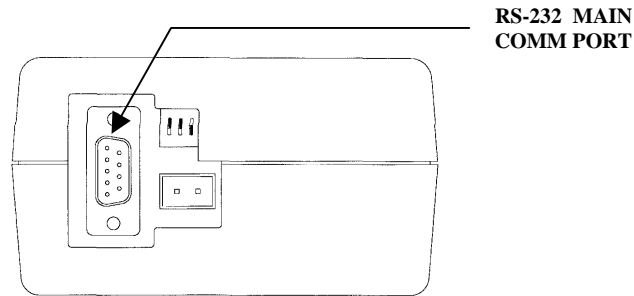


Figure 1: VehicleBase RS232 port

Plug the other end of the RS-232 serial cable into the correct port on your host RS-232 device.

Because the location for RS-232 ports can vary on different devices, we suggest you check with your host system operator, or the host computer/peripheral setup manual, to tell you the location of your RS-232 port.

See section on “Cables For The VehicleBase” for additional information on serial cable configuration.

**\*Does not apply to the Dolphin VehicleBase (charge only) version.**

### Supplying Power To The Dolphin VehicleBase

The Dolphin VehicleBase can be powered from either a 12 or 24 volt DC source. Power is connected to the input power connector located on the bottom panel.

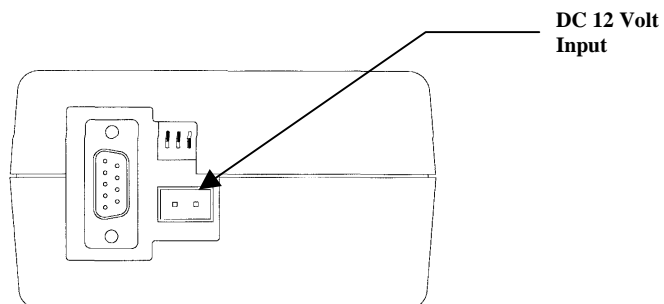


Figure 2: VehicleBase Bottom View

Two connection options are available:

- cigarette lighter adapter for 12 volt automotive systems and portable applications.
- direct connection through a fused cable assembly for 12 and 24 volt automotive systems.

The optional Power Condition Module (PCM) is inserted in-line with the fused cable assembly to provide protection against high voltage surges which can occur during certain fault conditions in an automotive electrical system (i.e. load dump). If the PCM is used for transient voltage protection, its input power cable should be connected to automotive power and its filtered output connected to the mating connector located on the bottom of the Dolphin VehicleBase.

Note: The PCM is optional for 12 volt automotive systems. However, it is recommended for 24 volt applications.

## Selecting The Baud Rate\*

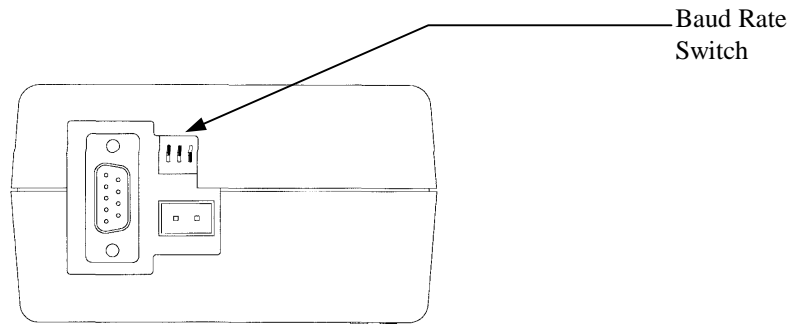


Figure 3: VehicleBase Bottom View

A three position raised rocker DIP switch is used to select the communication baud rate. The Dolphin VehicleBase comes preset at 9600. Switch position and the corresponding baud rates are shown in Figure 4.

The following table outlines the available baud rate selections.

Switch Position 1 2 3	Binary Value	Baud Rate
D D D	0	1200
U D D	1	2400
D U D	2	4800
U U D	3	9600
D D U	4	19200
U D U	5	38400
D U U	6	57600
U U U	7	115200

U = Up D = Down

Figure 4: Switch settings

Note: The Baud Rate switches are checked at power up. Changes in the switch settings will not be recognized until power is cycled.

**\*Does not apply to the Dolphin VehicleBase Charge Only Version**

## Inserting The Dolphin Terminal Into The VehicleBase

Place the Dolphin Terminal, Laser exit window up, in the Dolphin Terminal Well of the Dolphin VehicleBase. Let the Dolphin Terminal glide down into the well until it stops.

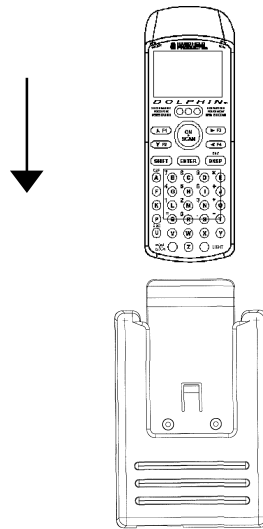


Figure 5: Inserting the Dolphin terminal into the VehicleBase

## Charging Batteries In The VehicleBase

The Dolphin VehicleBase supplies charging power to the Dolphin Terminal so that the Dolphin Terminal can monitor the charging of its own battery pack. This charging method protects the battery from being damaged by overcharging. Therefore, the Dolphin Terminal may be stored indefinitely in the VehicleBase without damage to the Dolphin Terminal, the battery pack, or the VehicleBase. Remember to keep the VehicleBase plugged in if you are using it to store the Dolphin Terminal. This will keep the Dolphin Terminal battery pack fully charged.

### Battery Temperatures

If possible, bring your rechargeable NiCad or NiMH battery packs to room temperature before recharging them; temperature has a marked effect on charging. The recommended temperature range is 10° to 35° C.

**Caution:** Do not attempt to recharge any battery pack in the Dolphin Terminal that is not manufactured by HHP especially for this device. To do so will void your warranty and can damage the Dolphin VehicleBase or the Terminal.

## Chapter 3

### Dolphin VehicleBase Features

---

The Dolphin VehicleBase provides the following basic features.

- The Dolphin VehicleBase provides a convenient interface from the Dolphin Terminal to any standard RS-232 device. (*Does not apply to the Dolphin VehicleBase Charge-Only Version*)
- The Dolphin VehicleBase protects the Dolphin Terminal when not in use.
- The Dolphin VehicleBase provides power to the Dolphin Terminal for battery charging.



## VehicleBase Side Panel Features

This section contains information regarding features located on the side of the Dolphin VehicleBase.

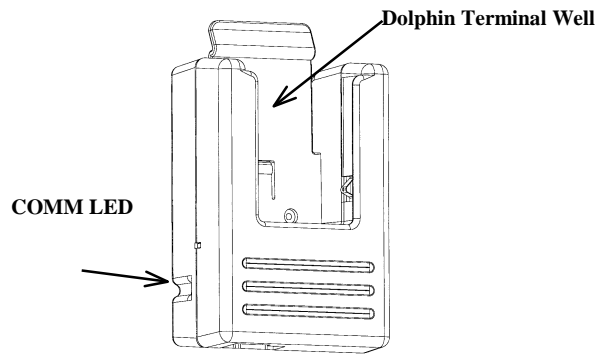


Figure 6: VehicleBase Side panel features.

### COMM LED\*

The COMM LED indicates the status of data transfer between the Host Device and the Dolphin Terminal. The LED is red when data is being sent from the Host Device to the Dolphin VehicleBase. The LED is green when data is being sent from the Dolphin VehicleBase to the Host Device. The LED may appear orange at high data rates.

*\*When using the Charge-Only version of the Dolphin VehicleBase, the CommLED functions as a terminal detection indicator. The LED illuminates GREEN when the Dolphin terminal is seated in the well.*

### Dolphin Terminal Well

The Dolphin Terminal slides into this well during both battery charging and communications with the Host Device.

## Chapter 5

# Cables for the VehicleBase

---

### Standard Serial Cable\*

The Dolphin VehicleBase provides a convenient interface that allows the Dolphin Terminal to interface to a PC, printer, or any other standard RS-232 device. To connect the Dolphin VehicleBase to your RS-232 device, you will need an RS-232 cable. The wiring of your cable depends on whether the other device is set up as a DCE (Data Communications Equipment) or DTE (Data Terminal Equipment) device.

The Dolphin VehicleBase Main 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 use a null modem serial cable.

*\*Does not apply to the Charge-Only version of the Dolphin VehicleBase.*

### Making Your Own Cable

You can make your own cables by following the pin configuration in Figure 14. To do so, you need to determine if your host RS-232 device is 9-pin or 25-pin, and whether the device is DCE or DTE.

VehicleBase /Host Port (DCE)	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

*Figure 7: Connections Between Dolphin VehicleBase and Other Devices*

## Chapter 7

# Warranty

---

### Who Is Covered By The Warranty

The Dolphin terminal and HomeBase offered by Hand Held Products, Inc. (HHP) are both covered with a one-year limited warranty. Hand Held Products, Inc. extends this warranty only to the first end-user of the product. This warranty is non-transferable.

### What's Covered By The Warranty

This warranty covers the Dolphin terminal and HomeBase and warrants them to be free from defects in materials and workmanship, under normal use and service, for a period of one year from date of purchase by the first end-user.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND FREEDOM FROM INFRINGEMENT. Neither HHP nor its marketing agents shall be liable for any direct, indirect, consequential, or incidental damages resulting from the use, results of use, or inability to use this product.

No one is authorized to change, add to, or otherwise alter this Warranty without the express written permission of an officer of HHP.

### What's Not Covered By The Warranty

This Warranty does not cover software, or damage to the product caused by modification, alteration, misapplication, misuse of, or physical abuse to the product; or damage due to repair or service to the product by anyone other than an Authorized HHP Service Center. This Warranty also excludes any damage to the product caused by circumstances outside of HHP's control, such as, but not limited to, lightning or fluctuation in electrical power.

### How Problems Should Be Handled

Should the Dolphin terminal or HomeBase prove to be defective within one year of date of purchase, return the product, as described in the 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.

## Return Information

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

If you purchased the product directly from Hand Held, or have been instructed by your Reseller to contact Hand Held directly, call the Customer Services Department in your area to request a Repair Maintenance Authorization (RMA) number. *Note: An RMA number is not needed for service at the Europe, the Middle East, Africa or United Kingdom repair facilities.*

### **North and South America, Asia, Pacific Rim**

(TEL)+1-(704)-537-1444

(FAX)+1-(704)-566-9904

### **Europe, Middle East and Africa :**

(TEL)+31-40 24 24 486

(FAX)+31-40 24 25 672

### **The United Kingdom :**

(TEL)+44 (0) 7000 426343

(FAX)+44 (0) 7074 426343

You must have an RMA number to receive service from the repair facility for North and South America, Asia and the Pacific Rim. Failure to obtain an RMA number before shipping your product to this repair facility can delay the processing of your repair request.

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

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

Place the product in its original packaging with a copy of your original invoice and ship the product prepaid to the appropriate address below:

### **North and South America, Asia, Pacific Rim**

Hand Held Products  
Customer Services Department  
7510 East Independence Blvd., #100  
Charlotte, NC 28227-9411

RMA Number: \_\_\_\_\_

### **Europe, Middle East and Africa :**

Hondsruglaan 87D  
5602 JA Eindhoven  
The Netherlands

### **The United Kingdom :**

Wessex House  
Oxford Road  
Newbury Berkshire, RG14 1PA  
United Kingdom

If your equipment is still covered under the initial end-user's product warranty, please notify the Customer Services Representative when you call. Please include a copy of the original invoice in the package to avoid possible service delays. For your protection, we recommend you insure any equipment being sent to HHP.

After repair or replacement of the equipment, Hand Held Products 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.

Please make note of the RMA number (if required) before shipping and the product's serial number for future reference.

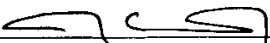


## How To Extend Your Warranty

Hand Held Products offers a variety of extended service plans on our hardware products. These agreements offer continued coverage for your equipment after the initial warranty expires. For more information, contact Hand Held or your Authorized Reseller.

# Appendix I

## Declaration of conformity

<b>DECLARATION OF CONFORMITY</b>		
<i>EC declaration of conformity for: 89/336/EEC EMC Directive</i>		
<b>1. Product Identification</b>		
Product name	: Vehicle Base	
Line of business	: Auto ID	
Model/type	: N/A	
Version	: N/A	
Additional information	: This Product was tested with the following: Dolphin 1 Terminal Bar Code Scanner	
<b>2. Manufacturer</b>		
Name	: Hand Held Products, Inc.	
Address	: 7510 E. Independence Blvd. #100 Charlotte, North Carolina 28227-9411	
Country	: United States Of America	
Authorized by manufacturer	: Corporate Body: Fleuri Kets V B.V. Kaatsheuvel The Netherlands	Trading as: Hand Held Products Europe Hondsruglaan 87d 5628 DB Eindhoven The Netherlands
<b>3. Test lab</b>		
Name	: Instrument Specialties	
Address	: Delaware Water Gap, Pennsylvania 18327-0136	
Country	: United States of America	
<b>4. Applied standards</b>		
<u>Product Standard</u>	<u>Basic Standard (Test Specification)</u>	<u>Description</u>
EN 55022:1995	EN 55022:1995	Conducted/Radiated Emissions
EN 50082-1	EN 61000-4-2:1995 EN 61000-4-4:1995 IEC 801-3:1984	Electrostatic Discharge Electrical Fast Transient Radiated RF EM Field
<b>5. Test report</b>		
EMC Test Report #56957		
<b>6. Declaration</b>		
We, mentioned at point 2, declare on our own full responsibility that the product mentioned at point 1 complies with the directive 89/336/EEC. This is based upon testing of a sample of the product mentioned at point 1, performed by the test lab mentioned at point 3, according to the harmonized standards corresponding to article 10 (1) of the directive 89/336/EEC. These standards are mentioned at point 4. The results of the tests are given in the report mentioned at point 5.		
<b>7. Authentication</b>		
Signature in behalf of authorized company mentioned at point 2 :		
		
J.H. Cottrell Jr., Managing Director, Hand Held Products Europe		
Date : 6 <sup>th</sup> October 1998 Place : Charlotte, USA		

