



# IMAGETEAM™ 4200

*Hand Held Linear Imager*



# Quick Start Guide

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# Table of Contents

## Getting Started

IT4200 with Green LED Aimer	
Imager Identification .....	1
Connecting the Imager for USB .....	3
USB Interface Selection .....	3
Connecting Imager for Keyboard Wedge (Powered by Host) .	4
Keyboard Wedge .....	4
Useful Menu Bar Codes .....	6
Manual/Serial Trigger Mode .....	6
Presentation Mode .....	6
Suffix Selections .....	6
Resetting the Standard Product Defaults .....	6
To Add a Test Code I.D. Prefix to All Symbologies .....	7
Beeper and LED Sequences and Meaning .....	7
Repairs .....	7
Maintenance .....	7
Cleaning the Imager's Window .....	7
Inspecting Cords and Connectors .....	8
Replacing the Interface Cable .....	8
Troubleshooting .....	9
Obtaining Factory Service .....	10
Statement of Agency Compliance .....	11
Regulatory and Safety Approvals .....	11
UL and cUL Statement .....	11
LED Safety Statement .....	11
C-Tick Statement .....	11
Patents .....	12
Solids and Water Protection .....	12
Limited Warranty .....	12



# Getting Started

## *IT4200 with Green LED Aimer Imager Identification*

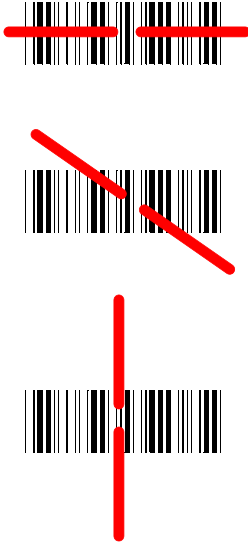


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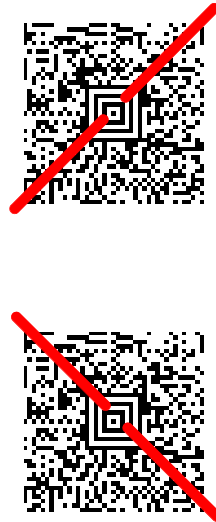
## Reading Techniques

The imager has a view finder that projects a bright red or green aiming beam that corresponds to the imager's horizontal field of view. The aiming beam should be centered over the bar code, but it can be positioned in any direction for a good read.

Linear bar code



2D Matrix symbol



The aiming beam is smaller when the imager is closer to the code and larger when it is farther from the code. Symbologies with smaller bars or elements (mil size) should be read closer to the unit. Symbologies with larger bars or elements (mil size) should be read farther from the unit. To read single or multiple symbols (on a page or on an object), hold the imager at an appropriate distance from the target, pull the trigger, and center the aiming beam on the symbol. If the code being scanned is highly reflective (e.g., laminated), it may be necessary to tilt the code up 15° to 18° to prevent unwanted reflection.

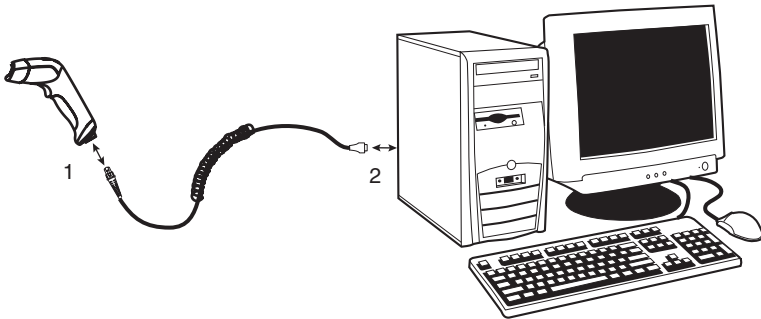
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## Connecting the Imager for USB

A imager can be connected to the USB port of a computer.

1. Connect the appropriate interface cable to the imager.
2. Connect the other end of the cable to the computer.

*Note: The cable must be connected at the imager end (1) before the PC (2) end is connected.*



3. The imager beeps.
4. Scan the appropriate bar code below for the desired USB configuration.

### USB Interface Selection

*Note: USB Keyboard and USB HID drivers are included with Microsoft® Windows® 98 SE or later. The USB COM Port Emulation driver can be downloaded from the Hand Held Products website ([www.handheld.com](http://www.handheld.com)).*



USB Keyboard (PC)  
(Default)



USB HID Bar Code Imager



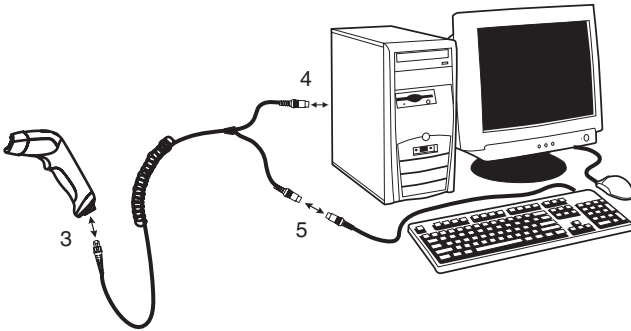
USB COM Port Emulation

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## ***Connecting Imager for Keyboard Wedge (Powered by Host)***

A imager can be connected between the keyboard and PC as a “keyboard wedge.” The following is an example of a keyboard wedge connection:

1. Turn off power to the terminal/computer.
2. Disconnect the keyboard cable from the back of the terminal/computer.
3. Connect the appropriate interface cable to the imager.
4. Connect the other end of the cable to the computer.
5. Connect the keyboard to the cable.



6. Turn the terminal/computer power back on. The imager beeps.
7. Scan the keyboard wedge configuration code below.

### ***Keyboard Wedge***



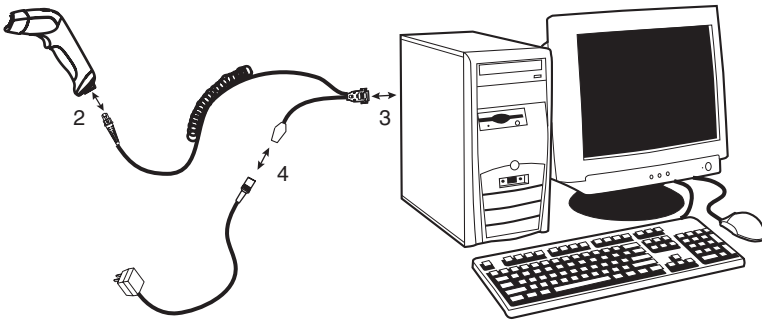
IBM PC AT and Compatibles  
with CR suffix



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## ***Connecting the Imager for RS-232 Serial Port (External Power)***

1. Turn off power to the terminal/computer.
2. Connect the appropriate interface cable to the imager.



3. Plug the serial connector into the serial port on your computer.
4. Connect the external power supply to the cable.
5. Power up the computer and imager.

## ***RS-232 Serial Port***

Scanning the RS-232 interface bar code, programs the imager for an RS-232 interface at 38,400 baud, parity–none, 8 data bits, 1 stop bit, and adds a suffix of a CR LF.



RS-232 Interface

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## *Useful Menu Bar Codes*

### *Manual/Serial Trigger Mode*



Manual/Serial Trigger

### *Presentation Mode*



Presentation Mode

### *Suffix Selections*



Add CR Suffix



Add CR, LF Suffix



Add Tab Suffix



Clear All Suffixes

### *Resetting the Standard Product Defaults*



Standard Product Default Settings

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## *To Add a Test Code I.D. Prefix to All Symbologies*



Add Code I.D. Prefix  
(Temporary)

## *Beeper and LED Sequences and Meaning*

<b>LED Indication</b>	<b>Beeper Indication</b>	<b>Cause</b>
<b>Normal Operation</b>		
Green Flash	1 beep	Successful read
<b>Menu Operation</b>		
Green Flash	2 beeps	Successful menu change
	3 beeps	Unsuccessful menu change

## *Repairs*

User repairs and/or upgrades are not to be performed on this product. These services are to be performed only by an authorized service center.

## *Maintenance*

The IT4200 provides reliable and efficient operation with a minimum of care. Although specific maintenance is not required, the following periodic checks ensure dependable imager operation:

### *Cleaning the Imager's Window*

Reading performance may degrade if the imager's window is not clean. If the window is visibly dirty, or if the imager isn't operating well, clean the window with a soft cloth or lens tissue dampened with water (or a mild detergent- water solution). If a detergent solution is used, rinse with a clean lens tissue dampened with water only.

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The imager's housing may also be cleaned the same way.



**Caution:**

**Do not submerge the imager in water. Do not use abrasive wipes or tissues on the imager's window – abrasive wipes may scratch the window.**

**Never use solvents (e.g., acetone, benzene, ether, or phenol-based agents) on the housing or window – solvents may damage the finish or the window.**

### *Inspecting Cords and Connectors*

Inspect the imager's interface cable and connector for wear or other signs of damage. A badly worn cable or damaged connector may interfere with imager operation. Contact your Hand Held Products distributor for information about cable replacement.

### *Replacing the Interface Cable*

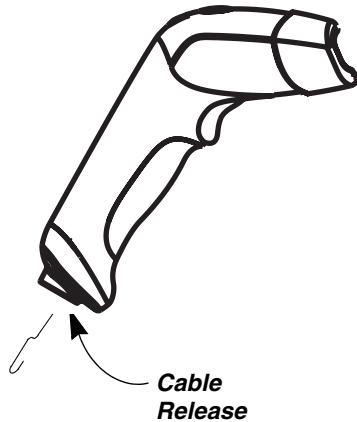
The standard interface cable is attached to the imager with an 10-pin modular connector. When properly seated, the connector is held in the IT4200 imager's handle by a flexible retention tab. The interface cable is designed to be field replaceable.

- Order replacement cables from IT4200 or from an authorized distributor.
- When ordering a replacement cable, specify the cable part number of the original interface cable.

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## ***To Replace the IT4200 Interface Cable:***

1. Turn the power to the host system OFF.
2. Disconnect the imager's cable from the terminal or computer.
3. Locate the small hole on the side of the imager's handle. This is the cable release.
4. Straighten one end of a paper clip.
5. Insert the end of the paper clip into the small hole and press in. This depresses the retention tab, releasing the connector. Pull the connector out while maintaining pressure on the paper clip, then remove the paper clip.
6. Replace with the new cable. Insert the connector into the opening and press firmly. The connector is keyed to go in only one way, and will click into place.



## ***Troubleshooting***

The imager automatically performs self-tests whenever you turn it on. If your imager is not functioning properly, review the following Troubleshooting Guide to try to isolate the problem.

*Is the power on? Is the aiming illumination line on?*

If the aiming illumination line isn't illuminated, check that:

- The cable is connected properly.
- The host system power is on (if external power isn't used).
- The trigger works.

*Is the imager having trouble reading your symbols?*

If the imager isn't reading symbols well, check that the symbols:

- Aren't smeared, rough, scratched, or exhibiting voids.
- Aren't coated with frost or water droplets on the surface.
- Are enabled in the imager or in the decoder to which the imager connects.

*Is the bar code displayed but not entered?*

The bar code is displayed on the host device correctly, but you still have to press a key to enter it (the Enter/Return key or the Tab key, for example).

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You need to program a suffix. Programming a suffix enables the imager to output the bar code data plus the key you need (such as "CR") to enter the data into your application.

*The imager won't read your bar code at all.*

1. Verify that your bar code symbology is enabled. You may validate this by reading the UPC bar code below. If it reads this code, please contact Technical Support. (See ["Technical Support" on page 11](#)).

**UPC A**



0 123456 7890

If you aren't sure what programming options have been set in the imager, or if you want the factory default settings restored, scan [See "Resetting the Standard Product Defaults" on page 6](#).

### ***Obtaining Factory Service***

Hand Held Products, Inc. provides service for all its products through service centers located in Hong Kong. To obtain warranty or non-warranty service, return the unit to Hand Held Products, Inc. (postage paid) with a copy of the dated purchase record attached.

**Asia Pacific**

Hand Held Products Asia/Pacific  
Telephone: +852-2511-3050  
Fax: +852-2511-3557  
E-mail: [apservice@handheld.com](mailto:apservice@handheld.com)

**Japan**

Hand Held Products Japan  
Telephone: +81-3-5770-6312  
Fax: +81-3-5770-6313  
E-mail: [apservice@handheld.com](mailto:apservice@handheld.com)

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## ***Technical Support***

If you need assistance installing or troubleshooting your imager, please call your Distributor or your Hand Held Products, Inc. technical support office:

**Asia Pacific:**

Telephone: Int+852-3188-3485 or 2511-3050

E-mail: [aptechsupport@handheld.com](mailto:aptechsupport@handheld.com)

## ***Statement of Agency Compliance***

The IT4200 meets or exceeds the requirements of all applicable standards organizations for safe operation. However, as with any electrical equipment, the best way to ensure safe operation is to operate them according to the agency guidelines that follow. Please read these guidelines carefully before using your system.

## ***Regulatory and Safety Approvals***

This product is marked with CEXXXX in accordance with the Class I product requirements specified in the R&TTE Directive, 1999/5/EC.

The equipment is intended for use throughout the European Community.

## ***UL and cUL Statement***

UL listed UL60950 and CSA 22.2 No.950. cUL listed UL60950 and CSA 22.2 No 950.

## ***LED Safety Statement***

This device has been tested in accordance with IEC60825-1 LED safety, and has been certified to be under the limits of a Class 1 LED device.

## ***C-Tick Statement***

Conforms to AS/NZS 3548. C-Tick number: N10410.

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## ***Patents***

Please refer to the product packaging for patent information.

## ***Solids and Water Protection***

The IT4200 has a rating of IP41, immunity of foreign particles and dripping water.

## ***Limited Warranty***

Hand Held Products, Inc., ("Hand Held Products, Inc.") warrants its products to be free from defects in materials and workmanship and to conform to Hand Held Products, Inc.' published specifications applicable to the products purchased at the time of shipment. This warranty does not cover any Hand Held Products, Inc. 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 Hand Held Products, Inc. or its authorized representatives.

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

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OTHERWISE) EXCEED THE ACTUAL AMOUNT PAID TO HAND HELD PRODUCTS FOR THE PRODUCT. THESE LIMITATIONS ON LIABILITY SHALL REMAIN IN FULL FORCE AND EFFECT EVEN WHEN HAND HELD PRODUCTS 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. Use of any peripherals not manufactured/sold by Hand Held Products, Inc. voids the warranty. This includes but is not limited to: cables, power supplies, cradles, and docking stations. Hand Held Products, Inc. extends these warranties only to the first end-users of the products. These warranties are nontransferable.

The limited duration of the warranty for the IT4200 is one (1) year.





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