IMAGETEAM™ 4230 Quick Start
Guide

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Getting Started

IT4230 with Green LED Aimer
Imager Identification

HHP IT4230
S/N:A1234 4320
F/W:A123456789

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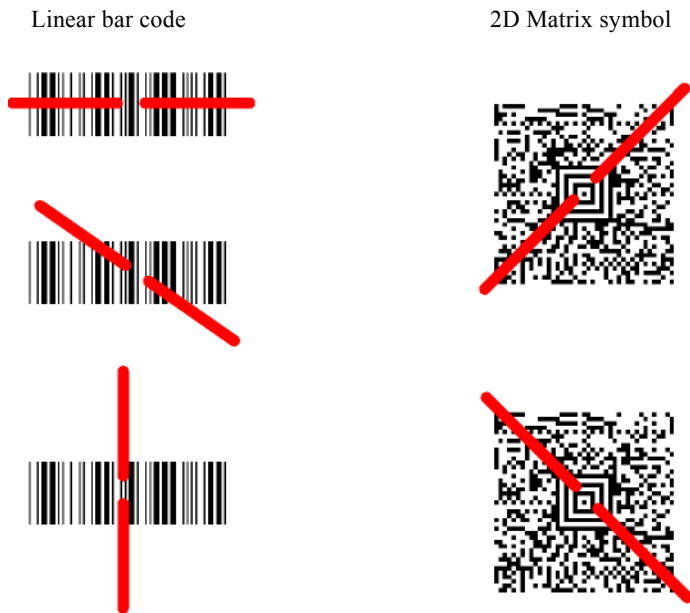
The aiming beam is smaller when the imager is closer to the code and larger when it is farther from the code. Symbologies with smaller bars or elements (mil size) should be read closer to the unit. Symbologies with larger bars or elements (mil size) should be read farther from the unit. To read single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

IT4230 Models

Models	Description
4320XX	Cordless Area Imager - Green aimer

Cordless System: Main Components

Battery Contained in Handle

Battery Charge Jack
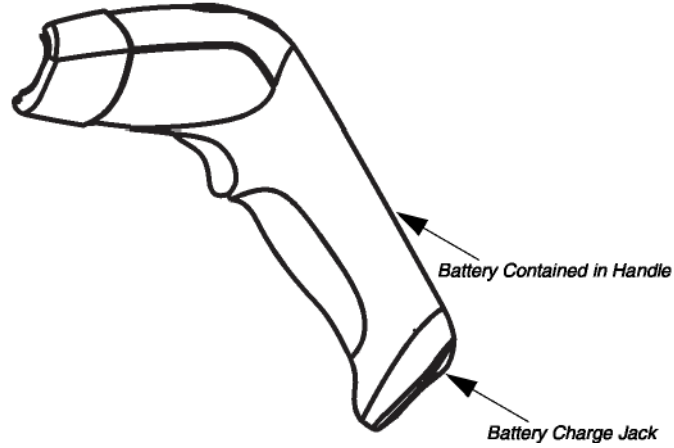
About the Battery

⚠ Use only the Li-ion battery packs provided by Hand Held Products. The use of any battery pack not sold by Hand Held Products will void your warranty and may result in damage to your unit.

Power is supplied to the cordless imager by a rechargeable battery that is integrated in the imager handle. Each imager is shipped with a battery.

Charging Information

The battery is designed to charge using a wall adapter.

⚠ Only use the battery charger supplied with the imager. Using another power supply may damage the imager.

Plug the adapter into the bottom of the imager's handle.

Battery Recommendations

Batteries are shipped discharged and need to be fully charged prior to first use.

The battery is a lithium ion cell and can be used without a full charge. It also can be re-charged without fully discharging, without impacting the battery life. There is no need to perform any charge/discharge conditioning on this cell type battery.

Do not disassemble the battery. There are no user-serviceable parts in the battery.

Replace a defective battery immediately since it could damage the IT4230.

Don't short-circuit a battery or throw it into a fire. It can explode and cause severe personal injury.

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 if the battery or charger is working properly, send it to Hand Held Products or an authorized Hand Held Products service center for inspection.

Proper Disposal of the Battery

When the battery has reached the end of its useful life, the battery should be disposed of by a qualified recycler or hazardous materials handler. Do not incinerate the battery or dispose of the battery with general waste materials. You may send batteries to Hand Held Products (postage paid). The shipper is responsible for complying with all federal, state, and local laws and regulations related to the packing, labeling, manifesting, and shipping of spent batteries. Contact the Product Service Department (page 12) for recycling or disposal information. Since you may find that your cost of returning the batteries significant, it may be more cost effective to locate a local recycle/disposal company.

Using the Imager with Bluetooth Devices

The IT4230 imager may be used with other Bluetooth devices. If the imager goes out of and back within range of the Bluetooth device, it automatically reconnects to the device.

Tested Bluetooth Adapters

The following Bluetooth adapters have been verified to operate with the IT4230.

Note: Communication with other devices may be possible; however, only those listed have been tested for compatibility with the IT4230.
    Billionton BT USB Adapter Class 1 (p/n UBTCR3C1A-B)

- Belkin BT USB Adapter Class 1 (F8T001 ver 2.11)
- Blaze BT USB Adapter Class 1 (BTU01 B)
- EagleTec BT USB Adapter Class 1 (ET-BTHC1U-A)

Example of Connecting IT4230 with a PC
Note: This example applies to a PC with Windows® 2000 only.

The Bluetooth Serial Port Service on a computer allows a remote device, the IT4230 imager, to establish a wireless link with the computer. The wireless link can then be used as though a physical serial cable connects the IT4230 and the computer. The link is initiated by the IT4230 operating in server mode, but once the link is established the IT4230 and computer swap modes and the IT4230 becomes the client.
At the time of manufacture the imager is configured to operate in server mode. Also, whenever the "DEFAULT" menu bar code symbol is scanned, the IT4230 reverts to server mode.

The process to establish a link between an IT4230 and a computer equipped with Bluetooth is as follows:
1. Configure the computer's Bluetooth "Local Services" serial port to start auto-matically.

2. Pull and release the trigger on the IT4230 to insure that the imager is powered up.

3. Scan the "DEFAULT" menu symbol to insure that the imager is in server mode.
4. Run "Discover Bluetooth Devices" on the computer.

5. Connect to serial port, if the computer is configured for a secure connection, the user will be prompted for the IT4230's pin code If desired, the user can set the IT4230's pin code with the bar code menu prior to initiating this process. The default value for the pin code is 1234.

6. The IT4230 and the computer then create a link and automatically swap modes, with the imager becoming the client and the computer the server.

7. Open the computer application that is to receive data from the IT4230, using the COM port number indicated for the Bluetooth Serial Port in the computer's list of "Local Services".

Changing Bluetooth PIN Code

Some devices require a PIN code as part of the Bluetooth security features. Your imager's default PIN is 1234, which you may need to enter the first time you connect to your PDA or PC. To change the PIN, scan the bar code below and then scan the appropriate numeric bar codes from the Programming Codes on page 9. Scan **Save** to save your selection.

Bluetooth PIN

Out-of-Range Alarm

If your imager is out range, an alarm sounds.
Note: If you are out of range when you scan a bar code, you will receive an error beep. You receive the error beep since the data could not be communicated to the host.

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

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

||||||||||||||||||||||||
Add Code I.D. Prefix
(Temporary)

Reset Imager

||| ||||||||||||||||||||||||||
eset Imager

Show Software Revision

||| |||||||||||||||||||||||||
Show Revision

Programming Codes

||||| ||||||| ||| |||
0

||| |||||||| ||| |||||
1

||| | ||||||| ||| |||
2

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3

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4

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5

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6

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7

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8

||| | ||||| ||| |||
9

||| || |||||| || ||| |||
Save

||| | |||| |||| || ||| |||
Discard

Note: If you make an error while scanning the digits (before scanning Save), scan Discard, scan the correct digits, and **Save** *again.*

Beeper and LED Sequences and Meaning

LED Indication	Beeper Indication	Cause
Normal Operation		
Red Flash	None	Battery low
Green Flash	1 beep	Successful communication or linking
Red, Blinking	3 beeps	Failed communication
Menu Operation		
Green, Flash	2 beeps	Successful menu change
Red, Blinking	3 beeps	Unsuccessful menu change

Repairs

Except for battery replacement, 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 IT4230 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.

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 charge adapter 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 charge adapter replacement.

Changing the IT4230 Battery:

1. Remove the screw on the end cap.

2. Remove the battery from the handle.

3. Insert battery.

4. Replace end cap and screw.
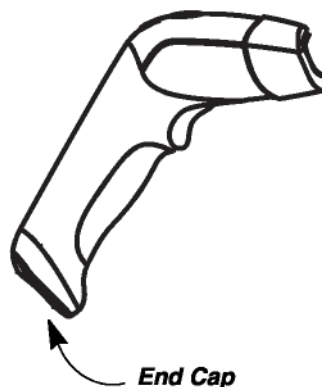
Troubleshooting

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.

End Cap

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

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

- The battery is charged.
- 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).
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 a the UPC bar code below. If it reads this code, please contact Technical Support. (See "Technical Support" on page 12).

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 7.

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

Japan

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

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*

Statement of Agency Compliance

The IT4230 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

Japan Korea Taiwan

Parameter	Specification
	VCC1
	MIC
	BSMI

Regulatory Approvals for Bluetooth Radio Devices

RF devices are designed to comply with the most current applicable standards on safe levels of RF energy developed by the Institute of Electrical and Electronics Engineers (IEEE) and the American National Standards Institute (ANSI) and have been recommended for adoption by the Federal Communications Commission (FCC).

Parameter	Specification
RF Approvals	
China	SRRC
Japan	TELEC
Korea	RR DTG
Taiwan	

Bluetooth Radio Device R&TTE Compliance Statement

The IT4230 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 (2002-08)
	EN 301 489-17 (2002-08)
	EN 60950:2000
	EN 50361:2001

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.

Bluetooth Qualified Product

Bluetooth Qualified Body approved as a Bluetooth Class I radio.

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.

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment

Patents

Please refer to the product packaging for patent information.

Solids and Water Protection
The IT4230 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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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 IT4230 is one (1) year.

Federal Communications Commission (FCC) Statement

15.21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)
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. However, there is no guarantee that interference will not occur in a particular installation. 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.

Operation is subject to the following two conditions:

1) this device may not cause interference and

2) this device must accept any interference, including interference that may

cause undesired operation of the device.

FCC RF Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an

uncontrolled environment. End users must follow the specific operating

instructions for satisfying RF exposure compliance. This transmitter must not be

co-located or operating in conjunction with any other antenna or transmitter.

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