



# IMAGETEAM™ 4410 LR/LX

## Hand Held 2D Image Reader

The Hand Held Products IMAGETEAM™ (IT) 4410 Image Reader can be configured as either a hand held or fixed mount device that reads matrix, stacked linear, and conventional linear bar codes, as well as a single line of OCR-A and OCR-B fonts. Multi-line OCR applications can also be read. The IT4410 has the power to capture and download images to a PC for applications, such as signature capture, PC-based decoding, and image lift requirements.

The IT4410 Reader can be used in retail, packaging, transportation, printed circuit board manufacturing, electronic component manufacturing, and clinical/diagnostic applications that include test tube and reagent package labels.

The IT4410 can be configured for keyboard wedge, Non Decoded Output (Code 128 emulation), TTL RS-232, or True RS-232. The IT4410 connects to all popular PCs and portable data terminals. The Non Decoded Output mode can be used with external wedge decoders and portable terminals or other devices without 2D decoding capability.

The IT4410 features integrated processing for a one-piece scanning solution -- no additional boxes or electronics needed. The reader provides omni-directional and auto-discrimination decoding for symbologies, such as MaxiCode, PDF417, QR, Data Matrix, Aztec code, RSS code, composite codes, postal codes, Code 39, Code 93, Interleaved 2 of 5, Codabar, Code 128, UPC, and EAN. Additional symbologies will be added based on market demand.

Because the IT4410 is a fixed focus device, four product models with different focal points are available. The IT4410LX, designed for reading wide codes at up to 15 inches on PDF, has a focal point of 7 inches from the nose. It is ideal for reading the 1D and 2D labels found in the transportation industry. The IT4410LR, designed for low and medium density codes, has a focal point of 5 inches from the nose. It is ideal for general 2D applications (postal, retail, and asset tracking). The high density (HD) models of the IT4410 are highlighted in a separate data sheet.

### Features & Benefits

#### **2D Image Reader**

*Hand held or fixed mount image reader for reading and decoding 2D symbologies and capturing images.*

#### **Supports All Popular 2D Symbologies**

*Fixed mount IT4410 supports all popular matrix and stacked linear symbologies: MaxiCode, Aztec, Aztec Mesa, Data Matrix, PDF417, QR, and MicroPDF417.*

#### **Fixed Position Reader**

*Opens up new 2D bar code and image capture possibilities for fixed scanning applications.*

#### **Omni-Directional Scanning**

*CMOS-based video technology and image processing gives the IT4410 full omni-directional scanning, even on linear codes, greatly simplifying operator training and increasing productivity.*

#### **Aiming**

*The IT4410 has a bright, intuitive aiming line.*

#### **Omni-Directional Scanning**

*CMOS-based video technology and image processing gives the IT4410 full omni-directional scanning, even on linear codes, greatly simplifying operator training and increasing productivity.*

#### **Autodiscriminates Between Supported Symbologies and Fonts**

*Reads all major linear, stacked linear, and matrix bar codes as well as machine readable fonts used in Optical Character Recognition (OCR).*

# IMAGETEAM™ 4410 LR/LX

## Performance

**LX Focal Point:** 7 inches from nose  
**LR Focal Point:** 5 inches from nose

<b>LX Working Range:</b> (typical)	<b>12 pt OCR-A</b>	<b>10 mil Linear</b>	<b>13 mil UPC</b>	<b>15 mil Data Matrix</b>	<b>6.6 mil PDF</b>	<b>10 mil PDF</b>
	<b>12 cpi</b>	<b>(.025 cm)</b>	<b>(.033 cm)</b>	<b>(.038 cm)</b>	<b>(.017 cm)</b>	<b>(.038 cm)</b>
	<b>Near</b>	1.6 in. (4.1 cm)	2.1 in. (5.3 cm)	2.3 in. (5.8 cm)	3.7 in. (9.4 cm)	4 in. (10.2 cm)
<b>Far</b>	12.3 in. (31.2 cm)	9.5 in. (24.1 cm)	13 in. (33 cm)	5.9 in. (15 cm)	6.3 in. (16 cm)	9.8 in. (24.9 cm)

<b>LR Working Range:</b>	<b>12 pt OCR-A</b>	<b>5 mil Linear</b>	<b>13 mil UPC</b>	<b>15 mil Data Matrix</b>	<b>6.6 mil PDF</b>	<b>10 mil PDF</b>
	<b>12 cpi</b>	<b>(.013 cm)</b>	<b>(.033 cm)</b>	<b>(.038 cm)</b>	<b>(.017 cm)</b>	<b>(.025 cm)</b>
	<b>Near</b>	1.9 in. (4.8 cm)	3 in. (7.6 cm)	1.9 in. (4.8 cm)	2.0 in. (5.1 cm)	2.7 in. (6.9 cm)
<b>Far</b>	8.7 in. (22.1 cm)	4.3 in. (10.9 cm)	9.4 in. (23.9 cm)	5.8 in. (14.7 cm)	5.2 in. (13.2 cm)	7.7 in. (19.6 cm)

**Rotational Sensitivity:** 360°  
**Viewing Angle:** ±45°  
**Ambient Light:** Total darkness to 100,000 lux (full sunlight)  
**Aiming:** 660nm LEDs provide bright aiming line

## Symbologies

**2 Dimensional:** MaxiCode, PDF417, MicroPDF417, Aztec, Aztec Mesa, Data Matrix, QR Code, Code 49, UCC Composite, Snowflake\*, Vericode\*, Dataglyphs\*

**Linear:** Code 39, Code 128, Codabar, UPC, EAN, I 2 of 5, RSS, BC 412\*, Code 93, Codablock  
\* available to licensed users only

**Postal:** Postnet (US), BPO4 State, Canadian 4 State, Japanese Post, KIX (Dutch Post), Planet Code

**OCR Fonts:** OCR-A, OCR-B

**Interfaces:** RS232, Wedge, and HHLC (Code 128 Emulation)

## Programmable

**Options:** Baud, Parity, Data Formatting, Code Options

## Mechanical/Electrical

### Dimensions

**Length:** 6.1 in. (15.4 cm)  
**Height:** 5.6 in. (14.2 cm)  
**Width:** 2.50 in. (6.4 cm)  
**Weight w/o cord:** 7 oz. (198 g) or less

**Power Requirements:** 4 to 9 volts

**Current Draw:** Lower Power Mode - average @ 5 VDC-40mA  
Medium Power Mode - average @ 5VDC-125mA  
High Power Mode - average @ 5VDC-175mA

**Standby Current:** < 200µA @ 5V

## Environmental

### Temperature

**Operating:** -0°C to 50°C  
**Storage:** -40°C to +70°C

**Humidity:** 95% RH, non condensing at 50°C

**Shock:** 10 drops 5 ft. to concrete @ room temperature

**ESD:** Functional after 15KV discharge

**Agency:** FCC Class B, CE

**Seal Rating:** IP52



Complies with EMC 89/336/EEC and LVD 73/23/EEC

## Worldwide Offices

### Offices Serving North America

Skaneateles Falls, NY  
Tel: (315) 685-8945  
or, in the U.S.: (800) 782-4263  
Fax: (315) 685-3172  
Charlotte, NC  
Tel: (704) 537-1444  
Fax: (704) 532-4191

### Offices Serving Europe, Middle East, and Africa

Europe  
Tel: Int +31 (0) 40 24 24 486  
Fax: Int +31 (0) 40 24 25 672  
United Kingdom  
Tel: Int +44 (0) 1 925 240055  
Fax: Int +44 (0) 1 925 631280  
France  
Tel: Int +33 (0) 1 461 04111  
Fax: Int +33 (0) 1 461 04120

### Germany

Tel: Int +49 (0) 7 477 151377  
Fax: Int +49 (0) 7 477 151378

### Offices Serving Asia and the Pacific Rim

Hong Kong  
Tel: Int +852 2511 3050/2511 3132  
Fax: Int +852 2511 3557

### Japan

Tel: Int +813 52127392  
Fax: Int +813 32617372

### Offices Serving Latin America

Naples, Florida  
Tel: (941) 263-7600  
Fax: (941) 263-9689

Web Site Address [www.handheld.com](http://www.handheld.com)

Welch Allyn Data Collection, Inc. and Hand Held Products, Inc. ("Hand Held Products") ©1999-2001, Hand Held Products. All rights reserved. Printed in the U.S.A.  
Due to Hand Held Products' continuing product improvement programs, specifications and features herein are subject to change without notice.