Datalogic Scanning, Inc. 959 Terry Street Eugene, Oregon 97402 Telephone: (541) 683-5700 Fax: (541) 345-7140

An Unpublished Work - All rights reserved. No part of the contents of this documentation or the procedures described therein may be reproduced or transmitted in any form or by any means without prior written per-mission of Datalogic Scanning, Inc. or its subsidiaries or affiliates ("Datalogic" or "Datalogic Scanning"). Owners of Datalogic products are hereby granted a non-exclusive, revocable license to reproduce and transmit this documentation for the purchaser's own internal business purposes. Purchaser shall not remove or alter any proprietary notices, including copyright notices, contained in this documentation and shall ensure that all notices appear on any expredictions of the documentation.

documentation and shall ensure that all notices appear on any reproductions of the documentation. Should future revisions of this manual be published, you can acquire printed versions by contacting your Datalogic representative. Electronic versions may either be downloadable from the Datalogic website (www.scanning.datalogic.com) or provided on appropriate media. If you visit our website and would like to make comments or suggestions about this or other Datalogic publications, please let us know via the "Contact Datalogic" page.

DISCLAIMER

Datalogic has taken reasonable measures to provide information in this manual that is complete and accurate, however, Datalogic reserves the right to change any specification at any time without prior notice. Datalogic is a registered trademark of Datalogic S.p.A. in many countries and the Datalogic logo is a trademark of Datalogic S.p.A. all licensed to Datalogic Scanning, Inc. All other trademarks and trade names referred to herein are property of their respective owners.

SERVICES AND SUPPOR

Datalogic provides several services as well as technical support through its website. Log on to **www.scanning.datalogic.com** and click on the <u>links</u> indicated for further information including:

PRODUCTS

Search through the links to arrive at your product page where you can download specific <u>Manuals</u> and <u>Software & Utilities</u> including:

- Datalogic Aladdin™ a multi-platform utility program, which allows device configuration using a PC. It provides RS232/USB-COM interface configuration as well as configuration barcode pointing.

SERVICES & SUPPORT

- Datalogic Services - Warranty Extensions and Maintenance Agreements

- Authorised Repair Centres

CONTACT US

E-mail form and listing of Datalogic Subsidiaries

WARRANTY

Datalogic warranties this product against defects in workmanship and materials, for a period of 24 months from the date of shipment, provided that the product is operated under normal and proper conditions.

Datalogic has the faculty to repair or replace the product; these provisions do not prolong the original

The warranty does not apply to any product that has been subject to misuse, accidental damage,

Datalogic Scanning, Inc. 959 Terry Street Eugene, OR 97402



dichiara che declares that the déclare que le bescheinigt, daß das Gerät declare que el

FireScan D1XX

e tutti i suoi modelli and all its models et tous ses modèles und seine Modelle

sono conformi alle Direttive del Consiglio Europeo sottoelencate: are in conformity with the requirements of the European Council Directives listed below: sont conformes aux spécifications des Directives de l'Union Européenne ci-dessous: den nachstehenden angeführten Direktiven des Europejaischen Rats: cumple con los requisitos de las Directivas del Consejo Europeo, según la lista siguiente

89/336/FFC FMC Direct

e 92/31/EE and et und emendamenti successivi further amendments ses successifs amendements späteren Abänderungen

Basate sulle legislazioni degli Stati membri in relazione alla compatibilità elettromagnetica ed alla sicurezza dei prodotti.

prodotti.

On the approximation of the laws of Member States relating to electromagnetic compatibility and product safety. Basée sur la législation des Etats membres relative à la compatibilité électromagnétique et à la sécurité des

Über die Annäherung der Gesetze der Mitgliedsstaaten in bezug auf elektromagnetische Verträglichkeit und

Ouer due Affinament que d'essezze de imiglieus staateit in Dezug du elektronlagifieus de Vertraglichieu una Produktsicheneit entsprechen. Basado en la aproximación de las leyés de los Países Miembros respecto a la compatibilidad electromagnética y las Medidas de seguridad relativas al producto.

Questa dichiarazione è basata sulla conformità dei prodotti alle norme seguenti: This declaration is based upon compliance of the products to the following standards: Cette déclaration repose sur la conformité des produits aux normes suivantes:

Diese Erklärung basiert darauf, daß das Produkt den folgenden Normen entspricht: Esta declaración se basa en el cumplimiento de los productos con la siguientes normas:

EN 55022 (CLASS B ITE), AUGUST 1994: AMENDMENT A1 (CLASS B ITE), OCTOBER 2000:

ENDMENT A1 (CLASS B ITE), OCTOBER 2000: DISTURBANCE O

EN 55024. SEPTEMBER 1998:

LIMITS AND METHODS OF MEASUREMENTS OF RADIO DISTURBANCE OF INFORMATION TECHNOLOGY EQUIPMENT

INFORMATION TECHNOLOGY EQUIPMENT. IMMUNITY CHARACTERISTICS. LIMITS AND METHODS OF MEASUREMENTS

♥DATALOGIC

FireScan[™] D131 READERS QUICK REFERENCE GUIDE



820001145eng (Rev. F)

[,]. F)

9/07

UPDATES AND LANGUAGE AVAILABILITY

UK/US

The latest drivers and documentation updates for this product are available on Internet.

Log on to: www.scanning.datalogic.com

ı

Su Internet sono disponibili le versioni aggiornate di driver e documentazione di questo prodotto. Questo manuale è disponibile anche nella versione italiana.

Collegarsi a: www.scanning.datalogic.com

=

Les versions mises à jour de drivers et documentation de ce produit sont disponibles sur Internet. Ce manuel est aussi disponible en version française.

Cliquez sur : www.scanning.datalogic.com

D

Im Internet finden Sie die aktuellsten Versionen der Treiber und Dokumentation für dieses Produkt. Die deutschsprachige Version dieses Handbuches ist auch verfügbar.

Adresse: www.scanning.datalogic.com

Ε

En Internet están disponibles las versiones actualizadas de los drivers y documentación de este producto. También está disponible la versión en español de este manual.

Dirección Internet : www.scanning.datalogic.com

March 1st, 2007









DISCONNECTING THE CABLE



COMPLIANCE

RS232

CONNECTIONS

<u>USB</u>

LASER SAFETY COMPLIANCE

The laser scanner conforms to the applicable requirements of both CDRH 21 CFR 1040 and EN60825-1 at the date of manufacture.

The laser light is visible to the human eye and is emitted from the window indicated in the figure $\mathbb{O}.$

Laser warning and classification label ②.

For installation, use and maintenance, it is not necessary to open the device.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light.

The laser scanner utilizes a low-power laser diode. Although staring directly at the laser beam momentarily causes no known biological damage, avoid staring at the beam as one would with any very strong light source, such as the sun. Avoid that the laser beam hits the eye of an observer, even through reflective surfaces such as mirrors, etc.

The following information is shown on the laser scanner device class label:



LASER LIGHT - DO NOT STARE INTO BEAM
CLASSZ LASER PRODUCT
MAX. OUTPUT RADIATION 1.0 m/W-EMITTED WAVE LENGTH 630-680 m
EN 60825-1:2001

LIANO LUCE LASER NON FISSARE IL RAGGIO APPARECCHIO LASER DI CLASSE 2 ANÇAIS RAYON LASER EVITER DE REGARDER LE RAYON

DEUTSCH LASERSTRAHLUNG
NICHT IN DEN STRAHL BLICK
PRODUKT DER LASERKLASS
ESPAÑOL RAYO LÁSER
NO MIRAR FIJO EL RAYO
APARATO LÁSERDE CLASE 2

FCC COMPLIANCE

Modifications or changes to this equipment without the expressed written approval of Datalogic could void the authority to use the equipment.

This device complies with PART 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference which may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a comment environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

POWER SUPPLY

This device is intended to be connected to a UL Listed/CSA Certified computer which supplies power directly to the reader or else be supplied by a UL Listed/CSA Certified Power Unit marked "Class 2" or LPS power source rated 5 V, minimum 200 mA, which supplies power directly to the reader via the power connector of the cable.

WEEE COMPLIANCE



DEFAULT VALUES

USB-KBD DEFAULT SETTINGS

USA keyboard, FIFO enabled, inter-character and inter-code delays disabled, control character emulation = ctrl+shift+key.

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, no header, terminator = ENTER, character replacement disabled.

RS232 Standard DEFAULT SETTINGS

9600 baud, no parity, 8 data bits, 1 stop bit, no handshaking, delay disabled, rx timeout 5 sec., ack/nack disabled, FIFO enabled, serial trigger lock disabled.

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, no header, terminator = CR-LF, character replacement disabled.

WEDGE DEFAULT SETTINGS

USA keyboard, caps lock off, caps lock auto-recognition enabled, num lock unchanged, inter-character and inter-code delays disabled, control character emulation = ctrl+shift+key.

DATA FORMAT: code identifier disabled, no field adjustment, code length not transmitted, *no header, terminator = ENTER*, character replacement disable.

interpret mode, conversion to code 39 disabled, output level normal, idle level normal, minimum output pulse 600 µs, overflow medium, inter-block delay disabled.

CODE SELECTION

Enabled codes

- EAN 8/EAN 13 / UPC A/UPC E without ADD ON check digit transmitted, no conversions
- Interleaved 2/5
- check digit control and transmission, variable length code; 4-99 characters
- Standard Code 39
- no check digit control, variable length code; 1-99 characters
- Code 128 variable length code; 1-99 characters

Disabled codes:

EAN 128, ISBT128, Code 93, Codabar, pharmaceutical codes, MSI, Plessey, Telepen, Delta IBM, Code 11, Code 16K, Code 49, RSS Codes

TECHNICAL FEATURES

FireScan™ D131

Electrical Features	
Power Supply	5 Vdc ± 5%
Consumption: Maximum Operating Sleep Mode/USB Suspend Mode	200 mA @ 5 Vdc 150 mA @ 5 Vdc <500 μA @ 5 Vdc
Max. Scan Rate	35 ± 5 scans/sec
Reading Indicators	Laser On (red) LED, Good Read (green) LED, adjustable tone beeper
Optical Features	
Light Source	Laser diode 630 - 680 nm
Power (peak)	0.9 mW
Scan angle	42° ± 2°
Laser Safety Class EN 60825-1 / CDRH	2
Reading Field	20 ~ 740 mm (40 mils)
Max. Resolution	0.12 mm (5 mils)
PCS	min. 15% (Datalogic Test Chart)
Environmental Features	
Working Temperature	0 °C to + 50 °C (+32° to +122 °F)
Storage Temperature	-20 °C to + 70 °C (-4° to +158 °F)
Humidity	90% non condensing
Drop Resistance	IEC 68-2-32 Test ED
(on concrete) ESD Protection	1.5 m (4.9 ft) 16 KV
Protection Class	IP30
	IF 30
Mechanical Features	
Weight (without cable)	about 210 g (7.4 oz)
Cable Length	2 m (6 ft 6 in)

RESTORE DEFAULT

RESTORE DEFAULT



To change the defaults refer to the HHD II Software Configuration Manual, part number 90ACC1877, or to the DL Sm@rtSet™ Configuration program, both

INTERFACE SELECTION

Select one of the interface codes according to your application

USB INTERFACE SELECTION

USB-KBD



USB-KBD - ALT-mode



USB-COM *



USB-IBM-Hand Held



When configuring USB-COM, the relevant files and drivers must be installed from the USB Device Installation software, which can be downloaded from the web site http://www.scanning.datalogic.com.

PEN EMULATION INTERFACE SELECTION



RS232 INTERFACE SELECTION

RS232 Standard



Nixdorf Mode A



Fuiitsu





WEDGE INTERFACE SELECTION

Wedge IBM AT or PS/2 PCs





PC Notebook - ALT mode

IBM AT - ALT mode

Many other interfaces are supported and can be selected from the HHD II Software Configuration Manual available online at www.scanning.datalogic.com. Other supported interfaces:

USB: USB-IBM-Table Top; USB-KBD-APPLE

WEDGE: IBM XT; IBM SURE1; IBM Terminal 3153; IBM Terminals 31xx, 32xx, 34xx, 37xx; Wyse Terminals ANSI – PC –ASCII – VT220 style Keyboards; Digital Terminal VT2xx/VT3xx/VT4xx; APPLE ADB Bus

KEYBOARD NATIONALITY

USB-KBD and Wedge users should select one of the following wedge keyboard nationality codes according to your keyboard.





English



Español







Japanese





USA (Default)



DATA FORMAT TERMINATORS

For your convenience, some common Terminators are given below. For other Header/Terminator selections, Data Format and Advanced Data Format parameters, see the HHD II Software Configuration Manual.

CR-LF









OPERATING TEST

Read the TEST code below



USING FIRESCAN™ SERIES READERS



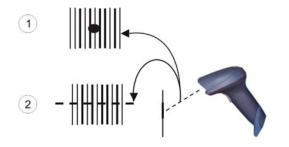


FireScan™ laser scanners automatically scan barcodes at a distance. Simply aim and pull the trigger. Code scanning is performed along the scan line emitted from the reading window.

This line must cross the entire code.

Successful scanning is obtained by tilting the scanner with respect to the barcode to avoid direct reflections, which impair the reading performance, see the figure

AIMING SYSTEM



FireScan™ laser scanners provide a programmable aiming system If enabled, the scan line emitted from the reading window is preceded by a red spot, which must illuminate the code center to get the best reading performance (see figure above, ①). Once the defined timeout is reached, the red spot disappears and is followed by the scan line to start the code scanning

After configuring the scanner, read one of the following codes to set desired aiming system timeout.

♦ aiming system disabled



