



Gryphon™ I GD4100

General Purpose Corded Handheld
Linear Imager Bar Code Reader



Quick Reference Guide

Datalogic ADC, Inc.

959 Terry Street
Eugene, OR 97402
USA

Telephone: (541) 683-5700

Fax: (541) 345-7140

©2009-2014 Datalogic ADC, Inc.

An Unpublished Work - All rights reserved.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 permission of Datalogic ADC, Inc. or its subsidiaries or affiliates ("Datalogic" or 'Datalogic ADC"). 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 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.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 and the Datalogic logo are registered trademarks of Datalogic S.p.A. in many countries, including the U.S.A. and the E.U. All other brand and product names may be trademarks of their respective owners.

Patents

See www.patents.datalogic.com for patent list.

This product is covered by one or more of the following patents:

Design patents: EP000870787, USD599799, USD606076,
ZL200830142386.5, ZL200930006852.1

Utility patents: EP0789315B1, EP0926620B1, EP0997760B1,
EP1128314B1, EP1128315B1, EP1164536B1, EP1217571B1,
EP1396811B1, EP1413971B1, EP1804089B1, EP1942442B1,
EP2315156B1, JP5192390B2, US5992740, US6098883, US6260764,
US6443360, US6454168, US6494376, US6517003, US6561427,
US6808114, US6997385, US7075663, US7387246, US7527198,
US8006904, US8113430, US8590795, US8662399, USRE41349,
ZL200680050007.8

Table of Contents

Gryphon™ I GD4100	5
Connect/Disconnect Cable	6
Connect Host Interface	6
Keyboard Wedge Interface	6
RS-232 Interface	7
USB Interface	7
Aim and Scan	7
Parts of the Imager	8
Scanning Modes	8
Programming Barcodes	11
Resetting the Standard Product Defaults	11
RS-232 Interface	12
IBM Interface	12
USB Interface	13
Keyboard Wedge Interface	14
Country Mode	16
Technical Features	21
LED and Beeper Indications	23
Ergonomic Recommendations	25
Regulatory Information	26
Power Supply	26
Radio Frequency Interference Requirements	28
Imager Labeling	29
Cleaning	32

NOTES

GRYPHON™ PRODUCT SERIES END USER LICENSE AGREEMENT

Notice to End User: The Datalogic Product you have acquired contains embedded Software, which is integral to the product's operation. This Software is being provided to you under license, subject to the terms and conditions of this Agreement. If you use the Datalogic Product, you will be deemed to have accepted the terms and conditions of this Agreement. If you do not intend to be bound to the terms of this Agreement, Datalogic is not willing to license the Software to you, you may not use the Datalogic Product or the Software, and you must contact the party from whom you acquired the Datalogic Product for instructions.

This End User Software License Agreement ("Agreement") is a legally binding agreement governing the licensing of the Software and Documentation by Datalogic Inc. and its Affiliates ("Datalogic") to the entity or person who has purchased or otherwise acquired a Datalogic Product ("End User"). For purposes of this Agreement, any software that is associated with a separate end-user license agreement is licensed to you under the terms of that license agreement. Datalogic and End User hereby agree as follows:

1. Definitions.

- 1.1 "Affiliate" means a business entity currently existing or later acquired that controls, is controlled by, or is under common control with Datalogic S.p.A.
- 1.2 "Documentation" means materials such as user's guides, program reference guides, quick reference guides, manuals, or similar materials associated with or related to the Datalogic Product, whether in printed, "online", or other form.
- 1.3 "Proprietary Information" means: (a) source code, object code, software, documentation, and any related internal design, system design, data base design, algorithms, technology, technical data or information, implementation techniques, and trade secrets related to the Software, (b) any other trade secrets marked appropriately or identified as proprietary or confidential, and (c) any information that End User, under the circumstances, should recognize as confidential. Proprietary Information does not include any information that the receiving party can establish was (1) in the public domain, (2) already in the receiving party's possession or rightfully known prior to receipt, (3) rightfully learned from a third party not in violation of any other's proprietary rights, or (4) independently developed without access to Proprietary Information.
- 1.4 "Datalogic Product" means the Datalogic® Gryphon™ series scanner product, including all embedded Software in and all Documentation related to such product, which has been purchased or otherwise acquired by End User, whether obtained directly or indirectly from Datalogic.
- 1.5 "Software" means any software or computer programs of Datalogic or its third party licensors in machine readable form which is embedded in the Datalogic Product, whether obtained directly or indirectly from Datalogic, including any replacement, update, upgrade, enhancement or modification.

2. Scope Of License Granted.

- 2.1 Datalogic grants to End User a non-exclusive, non-transferable, perpetual license to use the Software, solely on the Datalogic Product in which it is embedded ("designated Datalogic Product"), in machine-readable form only, solely for End User's internal business purposes. This Agreement does not convey ownership of the Software to End User. Title to the Software shall be and remain with Datalogic or the third party from whom Datalogic has obtained a licensed right. As used in this Agreement, the term "purchase" or its equivalents when applied to the Software shall mean "acquire under license." End User is not entitled to receipt or use of the source code to any Software.
- 2.2 End User shall not copy, modify, decompile, disassemble, reverse engineer, or otherwise reproduce or remanufacture the Software, whether modified or unmodified, nor sell, assign, sublicense, distribute, lend, rent, give, or otherwise transfer the Software to any other person or organization, for purposes other than as expressly provided in this Agreement, without Datalogic's prior written consent.

3. Transfers, Support.

- 3.1 Any copying, installing, reproduction, remanufacture, reverse engineering, electronic transfer, or other use of the Software on other than the designated Datalogic Product will be a material breach of this Agreement. However, Datalogic may elect not to terminate this Agreement or the granted licenses, but instead may elect to notify End User that End User is deemed to have ordered and accepted a license for each breaching use. End User shall pay Datalogic the applicable list price for such licenses as of the date of such breach.
- 3.2 End User shall not sell, assign, sublicense, distribute, lend, rent, give, or otherwise transfer the Datalogic Product to any third party unless such third party agrees with Datalogic in writing to be bound by the terms and conditions of this Agreement. Any such transfer of the Datalogic Product absent such agreement shall be null and void.
- 3.3 End User may obtain support for Software from Datalogic at Datalogic's standard support fees and under Datalogic's standard support terms and conditions in effect at the time the support is requested.

4. Intellectual Property.

End User acknowledges that the Software constitutes valuable trade secrets of Datalogic or Datalogic's third party licensors and that the Software is protected by intellectual property laws and treaties. The license set forth in this Agreement does not transfer to End User any ownership of Datalogic's or its third party licensors' copyrights, patents, trademarks, service marks, trade secrets, or other intellectual property rights and End User shall have no right to commence any legal actions to obtain such rights. End User shall not remove, modify, or take any other action that would obscure any copyright, trademark, patent marking, or other intellectual property notices contained in or on the Datalogic Product.

5. Proprietary Information.

- 5.1 End User acknowledges that Proprietary Information is the confidential, proprietary, and trade secret property of Datalogic and Datalogic's third party licensors and End User acquires no right or interest in any Proprietary Information.
- 5.2 End User shall not disclose, provide, or otherwise make available the Proprietary Information of Datalogic or its third party licensors to any person other than End User's authorized employees or agents who are under confidentiality agreement, and End User shall not use the Proprietary Information other than in conjunction with use of the Datalogic Product exclusively for End User's internal business purposes. End User shall take steps to protect the Proprietary Information no less securely than if it were End User's own intellectual property.
- 5.3 The provisions of this Proprietary Information Section shall survive and continue for five (5) years after the termination of this Agreement.

6. Limited Warranty.

- 6.1 Datalogic warrants that, under normal use and operation, the Datalogic Product will conform substantially to the applicable Documentation for the period specified in the Documentation. During this period, for all reproducible nonconformities for which Datalogic has been given written notice, Datalogic will use commercially reasonable efforts to remedy nonconformities verified by Datalogic. End User agrees to supply Datalogic with all reasonably requested information and assistance necessary to help Datalogic in remedying such nonconformities. For all defects reported to Datalogic within the warranty period, Datalogic's liability is limited to providing End User with one copy of corrections or responding to End User's problem reports according to Datalogic's standard assistance practices. Datalogic does not warrant that the product will meet End User's requirements or that use of the product will be uninterrupted or error free, or that Datalogic's remedial efforts will correct any nonconformance. This limited warranty does not cover any product that have been subjected to damage or abuse, whether intentionally, accidentally, or by neglect, or to unauthorized repair or unauthorized installation, and shall be void if End User modifies the product, uses the product in any manner other than as established in the Documentation, or if End User breaches any of the provisions of this Agreement.

-
- 6.2 EXCEPT AS PROVIDED IN THIS AGREEMENT, THE DATALOGIC PRODUCT IS PROVIDED "AS IS" AND DATALOGIC MAKES NO WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, WRITTEN OR ORAL, WITH RESPECT TO THE PRODUCT, AND SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

7. Infringement.

- 7.1 Datalogic will defend End User against any claim in a lawsuit that the Datalogic Product furnished hereunder infringe a United States patent or copyright of a third party and Datalogic will pay any damages finally awarded against End User by a court of competent jurisdiction that are attributable to such claim or will pay End User's part of any settlement that is attributable to such claim, provided, that 1) End User notifies Datalogic promptly in writing of the claim, 2) Datalogic controls the defense or settlement of the claim, and 3) End User cooperates fully with Datalogic in such defense or settlement. All notices of a claim should be sent to Datalogic ADC Inc., Legal Department, 959 Terry Street, Eugene, OR 97402.
- 7.2 In the defense or settlement of any such claim, Datalogic may, at its option, 1) procure for End User the right to continue using the Datalogic Product, 2) modify the Datalogic Product so that it becomes non-infringing, 3) replace the Datalogic Product with an equivalent product not subject to such claim, or 4) provide End User an opportunity to return the Datalogic Product and receive a refund of the purchase price paid, less a reasonable allowance for use.
- 7.3 Datalogic shall have no liability to End User for claims of infringement based upon 1) the use of any Datalogic Product in combination with any product which Datalogic has not either furnished or authorized for use with such Datalogic Product 2) the use of any Datalogic Product designed, manufactured, or modified to the specifications of End User, or 3) End User's modification of the Datalogic Product without written authorization from Datalogic.
- 7.4 THE FOREGOING STATES DATALOGIC'S COMPLETE AND ENTIRE OBLIGATION CONCERNING CLAIMS OF PATENT, COPYRIGHT, OR OTHER INTELLECTUAL PROPERTY INFRINGEMENT, CANCELS AND SUPERCEDES ANY PRIOR AGREEMENTS, WHETHER ORAL OR WRITTEN, BETWEEN THE PARTIES CONCERNING SUCH CLAIMS, AND WILL NOT BE MODIFIED OR AMENDED BY ANY PAST, CONTEMPORANEOUS, OR FUTURE AGREEMENTS OR DEALINGS BETWEEN THE PARTIES, WHETHER ORAL OR WRITTEN, EXCEPT AS SET FORTH IN A FUTURE WRITING SIGNED BY BOTH PARTIES.

8. Limitation Of Liability.

EXCEPT AS PROVIDED IN SECTION 7, DATALOGIC SHALL NOT BE LIABLE FOR ANY CLAIMS AGAINST END USER BY ANY OTHER PARTY. IN NO EVENT SHALL DATALOGIC'S LIABILITY FOR DAMAGES, IF ANY, WHETHER BASED UPON CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, STRICT LIABILITY, WARRANTY, OR ANY OTHER BASIS, EXCEED THE PRICE OR FEE PAID BY END USER FOR THE DATALOGIC PRODUCT. UNDER NO CIRCUMSTANCES SHALL DATALOGIC BE LIABLE TO END USER OR ANY THIRD PARTY FOR LOST PROFITS, LOST DATA, INTERRUPTION OF BUSINESS OR SERVICE, OR FOR ANY OTHER SPECIAL, CONSEQUENTIAL, CONTINGENT, INDIRECT, INCIDENTAL, PUNITIVE, EXEMPLARY, OR OTHER SIMILAR DAMAGES, EVEN IF DATALOGIC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

9. Government Restricted Rights; International Use.

- 9.1 Use, duplication, or disclosure of the Software by the U.S. Government is subject to the restrictions for computer software developed at private expense as set forth in the U.S. Federal Acquisition Regulations at FAR 52.227-14(g), or 52.227-19 or in the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013(c)(1)(ii), whichever is applicable.
- 9.2 If End User is using the Datalogic Product outside of the United States, End User must comply with the applicable local laws of the country in which the Datalogic Product is used, with U.S. export control laws, and with the English language version of this Agreement. The provisions of the "United Nations Convention on International Sale of Goods" shall not apply to this Agreement.

10. Termination.

- 10.1 Either party may terminate this Agreement or any license granted under this Agreement at any time upon written notice if the other party breaches any provision of this Agreement.
- 10.2 Upon termination of this Agreement, End User immediately shall cease using any nonembedded software and shall return to Datalogic or destroy all non-embedded software covered by this Agreement, and shall furnish Datalogic with a certificate of compliance with this provision signed by an officer or authorized representative of End User. For embedded software, End User agrees to sign a waiver prepared by Datalogic concerning further use of the embedded Software. End User's resumed or continued use of the embedded Software after termination shall constitute End User's agreement to be bound by the terms and conditions of this Agreement for such use.

11. General Provisions.

- 11.1 Entire Agreement; Amendment. This document contains the entire agreement between the parties relating to the licensing of the Software and supersedes all prior or contemporaneous agreements, written or oral, between the parties concerning the licensing of the Software. This Agreement may not be changed, amended, or modified except by written document signed by Datalogic.
- 11.2 Notice. All notices required or authorized under this Agreement shall be given in writing, and shall be effective when received, with evidence of receipt. Notices to Datalogic shall be sent to the attention of Contract Administration, Datalogic ADC Inc., 959 Terry Street, Eugene, OR 97402, or such other address as may be specified by Datalogic in writing.
- 11.3 Waiver. A party's failure to enforce any of the terms and conditions of this Agreement shall not prevent the party's later enforcement of such terms and conditions.
- 11.4 Governing Law; Venue: This Agreement and the rights of the parties hereunder shall be governed by and construed in accordance with the laws of the State of Oregon U.S.A, without regard to the rules governing conflicts of law. The state or federal courts of the State of Oregon located in either Multnomah or Lane counties shall have exclusive jurisdiction over all matters regarding this Agreement, except that Datalogic shall have the right, at its absolute discretion, to initiate proceedings in the courts of any other state, country, or territory in which End User resides, or in which any of End User's assets are located.
- 11.5 Attorneys' Fees. In the event an action is brought to enforce the terms and conditions of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, both at trial and on appeal.

- END -

Software Product Policy

Datalogic reserves the right to ship its products with the latest version of software/firmware available. This provides our customers with the very latest in Datalogic software technology.

The only exception to this policy is when the buyer has a signed contract with Datalogic that clearly defines the terms and conditions for making software/firmware changes in products shipped to the buyer.

Customers Under Software Support

Customers that elect to subscribe to Datalogic Software Maintenance and Support Agreement will receive 30 days advance notification of: (1) the release of a new software version; and/or (2) discontinuation of any prior software version that will no longer be supported. Datalogic will provide maintenance for a fee that will assist customers in transitioning to the next software version. If a customer is currently using the software version being discontinued, the customer may elect to transition to any one of the newer versions, depending on the hardware in use.

To arrange for a Software Maintenance and Support Agreement please contact your Datalogic sales person.

Gryphon™ I GD4100

With rich feature sets and extensive model options, the Gryphon™ product series from Datalogic represents the premium level of data collection equipment for general purpose applications. The Gryphon I linear imaging readers provide advanced reading performance and decoding for a wide variety of applications. The Gryphon GD4100 readers' ability to capture bar codes from near contact to over 1.0 m / 3.9 ft increases productivity and improves ergonomics for users. A wide scan angle reads very wide codes and renewed decoding capabilities increase throughput on hard-to-read, poor or damaged codes. All of these features combined with high-resolution decoding for labels as small as 3 mils, establishes the Gryphon I GD4100 readers as high-performance products and powerful data capture solutions.

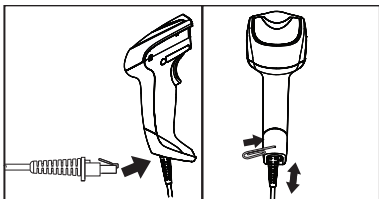
Datalogic's exclusive patented 'Green Spot' for good-read feedback directly on the code is ideal under dim lighting conditions or noisy environments. The Green Spot, together with the fast reading and decoding capabilities make the Gryphon I GD4100 readers the best choice to improve productivity in retail and office environments, hospitals, pharmacies, light industrial, warehouses and manufacturing plants.

The Gryphon I GD4100 readers offer two sets of multiinterface options: USB, Keyboard Wedge, RS-232 and Wand Emulation, or for use in point-of-sale (POS) environments, IBM 46XX, USB and RS-232. Both interface sets offer configuration flexibility and are easily adapted for migration or future changes to the host system. Remote Host Download lowers the service costs and improves operations allowing for hassle-free field upgrades while the desktop Datalogic Aladdin™ configuration program provides user-friendly features that simplify the start-up procedure, especially for inexperienced users.

The Gryphon GD4100 readers' stylish enclosures, reduced weight and physical dimensions together with a 1.8 m / 5.9 ft drop resistance and IP52 sealing rating produce a reliable, ergonomic solution with the combined excellence of ease of use and advanced reading capabilities.

1

Connect/Disconnect Cable

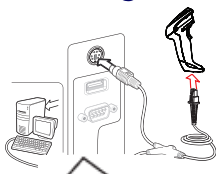


2

Connect Host Interface

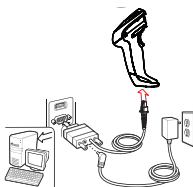


Keyboard Wedge Interface

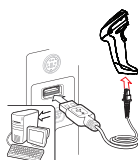




RS-232 Interface

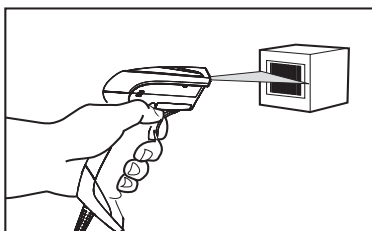


USB Interface

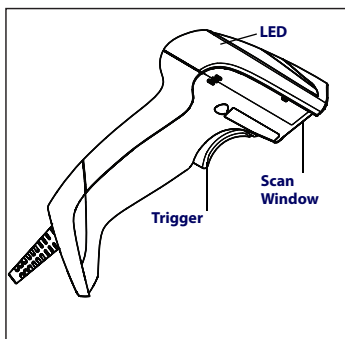


3

Aim and Scan



Parts of the Imager



Scanning Modes

The imager can operate in one of several scanning modes:

Trigger Single — When the trigger is pulled, scanning is activated until one of the following occurs:

- a programmable duration¹ has elapsed
- a label has been read
- the trigger is released

This mode is associated with typical handheld reader operation: when the trigger is pulled, scanning starts and the product scans until the trigger is released, or a label is read, or the maximum programmable duration¹ has elapsed.

Trigger Hold Multiple — When the trigger is pulled, scanning starts and the product scans until the trigger is released or a programmable duration¹ has elapsed. Reading a label does not disable scanning. Double Read Timeout² prevents undesired multiple reads while in this mode.

Trigger Pulse Multiple — When the trigger is pulled and released, scanning is activated until programmable duration¹ has elapsed or the trigger has been pulled again to transition to another state. Double Read Timeout² prevents undesired multiple reads while in this mode.

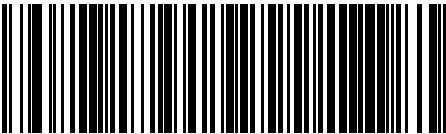
-
1. See the Product Reference Guide (PRG) for additional programmable features, in this case: Scanning Active Time.
 2. Double Read Timeout is also programmed using the PRG.
-

Flashing — The reader flashes¹ on and off regardless of the trigger status.

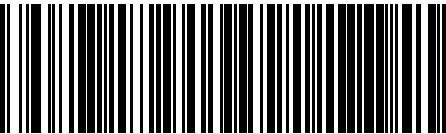
Always On — No trigger pull is required to read a barcode. Scanning is continually on. If the trigger is pulled, the reader acts as if it is in **Trigger Single** Mode. Double Read Timeout² prevents undesired multiple reads while in this mode.

Object Sense — No trigger pull is required to read a bar code. Scanning is turned on automatically when an item is placed in reader's field of view. If the trigger is pulled, the reader acts as if it is in **Trigger Single** mode. Double Read Timeout³ prevents undesired multiple reads while in this mode.

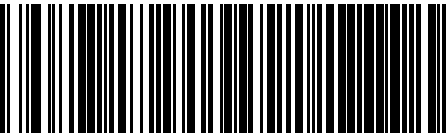
Trigger Object Sense — This mode is similar to **Object Sense**, except that a trigger pull is required to activate the decoder.



Scan Mode = Trigger Single



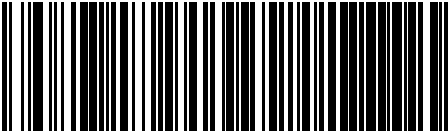
Scan Mode = Trigger Hold Multiple



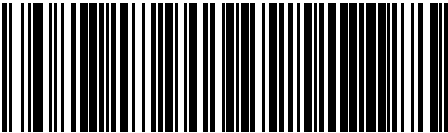
Scan Mode = Trigger Pulse Multiple

-
1. Controlled by Flash On Time and Flash Off Time. Use the PRG to program these options.
 2. Double Read Timeout is programmed using the PRG.
 3. Double Read Timeout is programmed using the PRG.

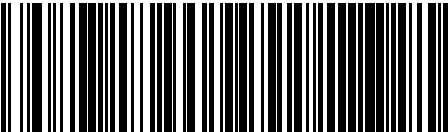
Scanning Modes (continued)



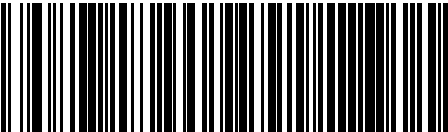
Scan Mode = Flashing



Scan Mode = Always On



Scan Mode = Object Sense



Scan Mode = Trigger Object Sense

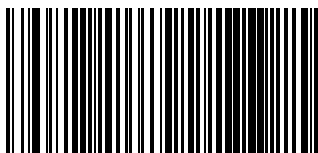
Programming Barcodes

For your convenience, this guide includes the programming barcodes required to configure the imager for use with different interface (terminal/host) types.

See the Product Reference Guide (PRG) for more complete information about programming and configurable features. You can download the latest version of the PRG and any other available publications for the imager from the website listed on the back cover of this manual.

Resetting the Standard Product Defaults

If you aren't sure what programming options are in your imager, or you've changed some options and want the factory settings restored, scan the Factory Default Settings barcode below. This will copy the factory configuration for the currently active interface to the current configuration.



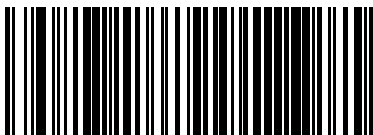
Factory Default Settings



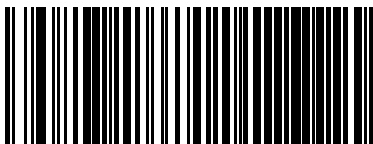
Some interfaces require the scanner to start in the disabled state when powered up. If additional scanner configuration is desired while in this state, pull the trigger and hold it for five seconds. The scanner will change to a state that allows programming with barcodes.

RS-232 Interface

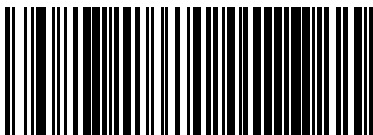
To use an RS-232 interface, scan the barcode for the desired RS-232 host type.



Select RS-232 Standard

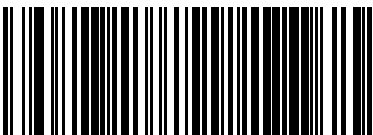


Select RS-232 Wincor Nixdorf

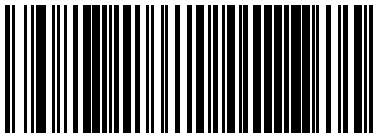


Select RS-232 OPOS (for use with OPOS/UPOS/JavaPOS)

IBM Interface



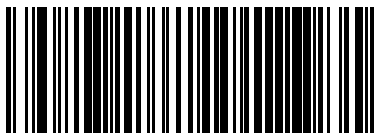
Select IBM Port 5B



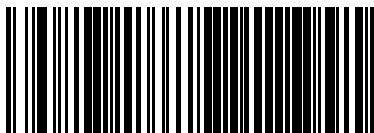
Select IBM Port 9B

USB Interface

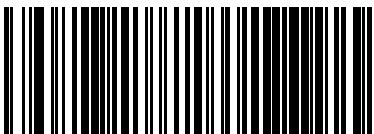
The imager attaches directly to a USB host, or a powered USB hub, and is powered by it. No additional power supply is required. When using a USB interface, the imager auto-detects the USB cable and defaults to either the USB keyboard interface (GD4130) or USB-OEM interface (GD4110).



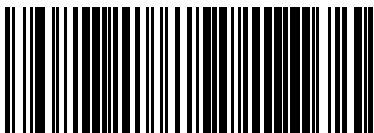
Select USB Keyboard (with standard key encoding)



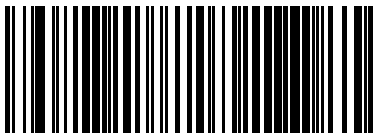
Select USB-COM-STD¹ (simulates RS-232 standard interface)



Select USB Alternate Keyboard (with alternate key encoding)



Select USB OEM

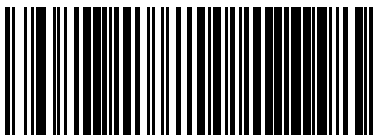


Select USB-KBD-APPLE (for Apple computers)

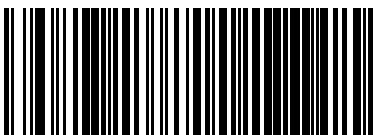
1. Download the correct USB Com driver from www.datalogic.com.

Keyboard Wedge Interface

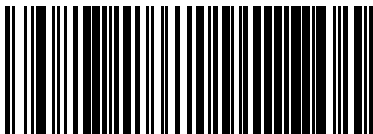
To use a Keyboard Wedge interface, scan the barcode for the desired keyboard type.



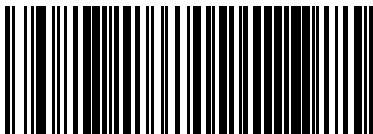
Select KBD-AT
(AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95
w/Standard Key Encoding)



Select KBD-AT-NK
(IBM AT PS2 with standard key encoding but without external kbd.)

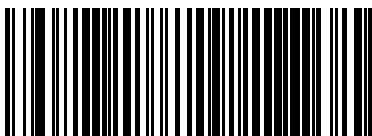


Select KBD-AT-ALT
(AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95
w/Alternate Key)

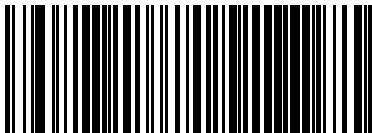


Select KBD-AT-ALT-NK (for IBM AT PS2 with alternate key
encoding but without external keyboard)

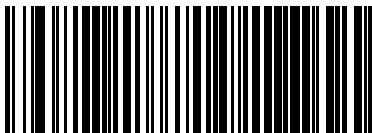
Keyboard Wedge Interface (continued))



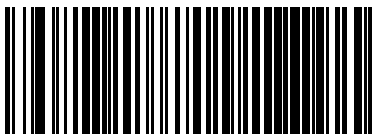
Select KBD-XT (PC/XT w/Standard Key Encoding)



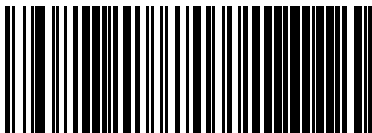
Select KBD-IBM-3153 (for IBM Terminal 3153)



Select KBD-IBM-M
(for IBM Terminals 31xx, 32xx, 34xx, 37xx make only keyboard)



Select KBD-IBM-MB
(for IBM Terminals 31xx, 32xx, 34xx, 37xx make break keyboard)



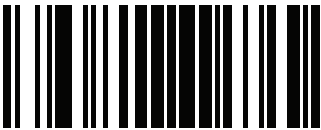

Select KBD-DIG-VT
(for DIGITAL Terminals VT2xx, VT3xx, VT4xx)

Country Mode

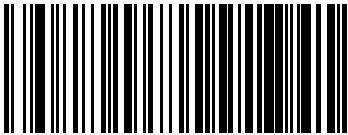
This feature specifies the country/language supported by the keyboard. Only the following interfaces support ALL Country Modes.

- USB Keyboard (without alternate key encoding)
- AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95 w/Std Key Encoding
- Keyboard Wedge for IBM AT PS2 with standard key encoding but without external keyboard
- AT, PS/2 25-286, 30-286, 50, 50Z, 60, 70, 80, 90 & 95 without Alternate Key
- Keyboard Wedge for IBM AT PS2 without alternate key encoding but without external keyboard

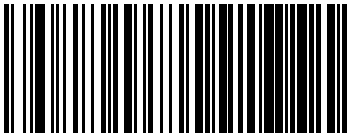
All other interfaces support ONLY the following Country Modes: U.S., Belgium, Britain, France, Germany, Italy, Spain, Sweden.

COUNTRY MODE
 ENTER/EXIT PROGRAMMING MODE
 Country Mode = U.S.

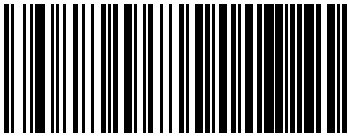
COUNTRY MODE (continued)



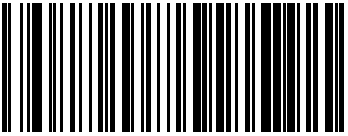
Country Mode = Belgium



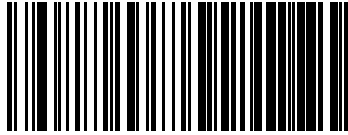
Country Mode = Britain



Country Mode = Croatia*

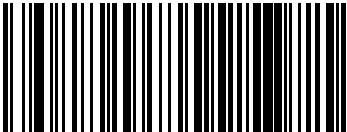
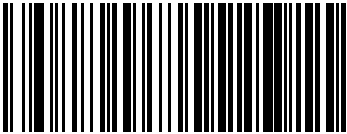
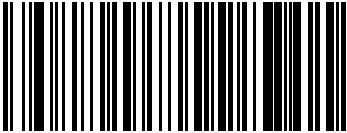


Country Mode = Czech Republic*

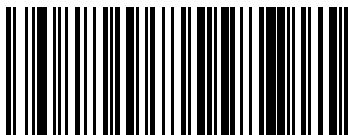


Country Mode = Denmark*

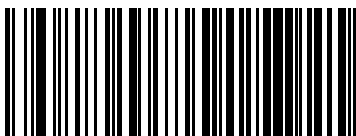
*Supports only the interfaces listed in the Country Mode feature description

COUNTRY MODE (continued)
<div><p>Country Mode = France</p></div>
<div><p>Country Mode = French Canadian</p></div>
<div><p>Country Mode = Germany</p></div>
<div><p>Country Mode = Hungary*</p></div>
<div><p>Country Mode = Italy</p></div>

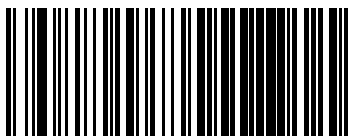
*Supports only the interfaces listed in the Country Mode feature description

COUNTRY MODE (continued)

Country Mode = Japanese 106-key*



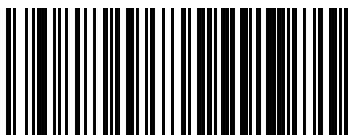
Country Mode = Lithuanian



Country Mode = Norway*

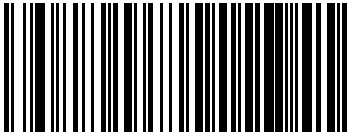
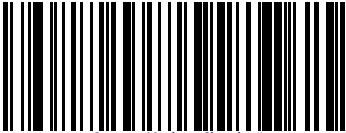
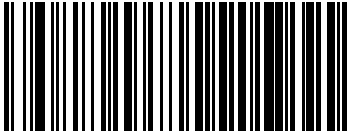
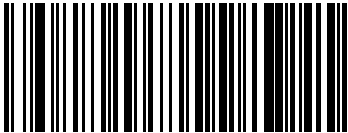
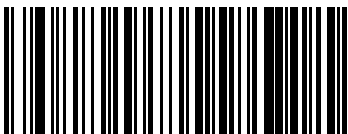


Country Mode = Poland*



Country Mode = Portugal*

*Supports only the interfaces listed in the Country Mode feature description

COUNTRY MODE (continued)
<div><p>Country Mode = Romania*</p></div>
<div><p>Country Mode = Slovakia*</p></div>
<div><p>Country Mode = Spain</p></div>
<div><p>Country Mode = Sweden</p></div>
<div><p>Country Mode = Switzerland*</p></div>

*Supports only the interfaces listed in the Country Mode feature description

Technical Features

Item	Description
Physical Characteristics	
Color	White/Grey Black/Grey
Dimensions	Height 7.1" / 181mm Length 3.9" / 100mm Width 2.8" / 71mm
Weight (without cable)	Approximately 6.0 ounces/169 g
Electrical Characteristics	
Voltage & Current	GD4130 model: Input current at 5V = 360 mA (max) 2.5 mA (RS-232 sleep mode) 2.5 mA (USB suspend) Input Power = 1.9W max in the 5V±5% range GD4110 model: Input current at 5V = 340 mA (max) 2.5 mA (RS-232 sleep mode) 2.5 mA (USB suspend) Input Power = 1.8W max in the 4.5÷14V range
Performance Characteristics	
Light Source	Dual LEDs
Tilt (Roll) Tolerance	± 35° from normal
Pitch (Yaw) Tolerance	± 65°
Skew Tolerance	± 65°
Field of View	10.0" (25.4cm) wide at 12.5" (31.8cm) from the reader
Depth of Field (Typical)	3 mil – 2.9" to 4.7" (7.5cm to 12cm) 13 mil* – 1.2" to 23.6" (3cm to 60cm) 20 mil – 1.2" to 31.5" (3cm to 80cm)
Minimum Element Width	3 mil
Print Contrast Minimum	15% minimum reflectance
Decode Capability	UPC/EAN/JAN, P2 /P5 add-ons; Code 39; Code 32; Code 128; Code 128 ISBT; Code 128 add-ons; Interleaved 2 of 5; Standard 2 of 5; Code 11; Codabar; EAN 128; GS1 DataBar™ Omnidirectional, GS1 DataBar™ Limited, GS1 DataBar™ Expanded, Code 4, Code 5, Follett 2 of 5.

Technical Features

Item	Description
Interfaces Supported	RS-232 Std., RS-232 Wincor-Nixdorf, RS-232 OPOS, IBM 46xx (ports 5B and 9B), USB Com Std., USB Keyboard, USB Alternate Keyboard, USB OEM, Keyboard Wedge (AT with or w/o Alternate Key, IBM AT PS2 with or w/o Alternate Key, PC-XT, IBM 3153, IBM Terminals 31xx, 32xx, 34xx, 37xx make only and make break keyboard, Digital Terminals VT2x, VT3xx, VT4xx, and Apple) and Wand Emulation.
User Environment	
Operative Temperature	32° to 131° F (0° to 55° C)
Storage Temperature	-4° to 158° F (-20° to 70° C)
Humidity	Operating: 5% to 90% relative humidity, non condensing
Drop specifications	18 drops from 1.8 meters (5.9 feet) to concrete
Ambient Light immunity	Up to 100,000 Lux
Contaminants	IP52
ESD Level	16 KV
Regulatory	
Electrical Safety	IEC 60950-1 , CAN/CSA-C22.2 No. 60950-1-03; UL 60950-1
Led class Safety	IEC Class 1
EMI/RFI	North America (FCC) : Part 15 Class B, Canada (IC) : ICES-003 Class B, European Union EMC Directive, Australian (SMA) , Taiwan EMC (BSMI) , Russia (Gost), VCCI-Japan

* (13 mils DOF based on EAN. All others are Code 39. All labels grade A, typical environmental light, 20°C, label inclination 10°)

LED and Beeper Indications

The imager's beeper sounds and its LED illuminates to indicate various functions or errors on the reader. A "Green Spot" also lights to indicate a good read. The tables below list these indications. One exception to the behaviors listed in the tables is that the reader's functions are programmable, and may or may not be turned on. For example, certain indications, such as the power-up beep can be disabled using programming barcode labels. Reference the PRG for a more detailed list.

Indication	LED	Beeper
Power-up	LED flashes/blinks on power-up, however, this may be too rapid to view. With a USB interface, the LED blinks until enumeration with the host is completed.	Imager beeps four times at highest frequency and volume upon power-up.
Good Read	LED behavior for this indication is configurable using the PRG.	One beep at current frequency, volume, mono/bi-tonal setting upon a successful label scan.
ROM Failure	200ms on / 200ms off	Imager sounds one error beep at highest volume for 200 mS.
Limited Scanning Label Read	N/A	Imager 'chirps' six times at the highest frequency and current volume.
Imager Disabled	The LED blinks continuously 100mS on / 900 mS off	N/A

Troubleshooting

Problem	Possible Cause	Possible Solutions
Nothing happens when the scan button is pulled.	No power to the imager.	Check system power. Ensure power supply is connected.
	Interface or power cables are loose.	Ensure all cable connections are secure.
LED comes on, but barcode does not decode.	Imager not programmed for correct barcode type.	Ensure imager is programmed to read the type of barcode scanned. Refer to the Product Reference Guide (PRG) for more information.
	Barcode label is unreadable.	Check the label to ensure it is not defaced. Try scanning another barcode type.
	Distance between imager and barcode is incorrect.	Move imager closer to or further from the barcode.
Barcode is decoded but not transmitted to the host.	Imager not programmed for the correct host type.	Scan the appropriate host type barcode. Refer to the Product Reference Guide (PRG) for more information.



For detailed troubleshooting, refer to the Product Reference Guide.

Ergonomic Recommendations



CAUTION

In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

Regulatory Information

All models are designed to be compliant with rules and regulations in locations they are sold and will be labeled as required. Any changes or modifications to equipment, not expressly approved by Datalogic could void the user's authority to operate the equipment.

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 UL Listed/CSA Certified Power Unit marked "Class 2" or LPS power source rated 4.5-14 minimum 600mA for GD4110 or rated 5.2V minimum 600mA for GD4130, which supplies power directly to the reader via the power connector of the cable.

Argentina Power Statement



Atención

Características de la fuente de alimentación eléctrica.

Entrada:

100 - 240 Vca
min 400 mA 50/60 Hz

Salida:

12VDC, máx1500mA
(-)Negativo al centro

Utilice en su red solo fuentes certificadas en Argentina.

El uso de fuentes de alimentación no compatibles puede resultar en riesgo de incendio o de choque eléctrico para el usuario.

China RoHS Table of Restricted Elements

DATALOGIC™		China RoHS					
PART	部件名称	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
		铅	汞	镉	有毒有害物质或元素	多溴联苯	多溴二苯醚
Printed Circuit Board Assembly	电路板组件	X	O	O	O	O	O
Assy. Optics Block	光学组件	X	O	O	O	O	O
Assy. Module	光学组件	X	O	O	O	O	O
O: 代表此种部件的所有均质材料中所含的该种有毒有害物质的量均低于中华人民共和国信息产业部所颁布的《电子信息产品中有毒有害物质的限量要求》(SJ/T 11363-2006) 规定的限量。							
X: 代表此种部件所用的均质材料中, 至少有一类材料其所含的有毒有害物质的量高于中华人民共和国信息产业部所颁布的《电子信息产品中有毒有害物质的限量要求》(SJ/T 11363-2006) 规定的限量							

Radio Frequency Interference Requirements



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 instruction manual, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If the 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:

- Re-orient 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.



CAUTION

The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Radio Frequency Interference Requirements - Canada

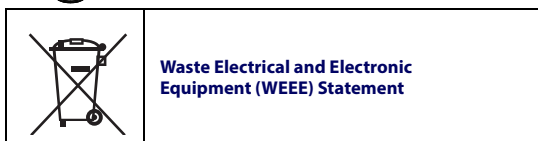
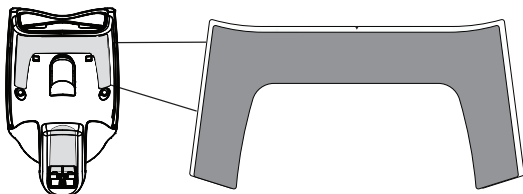
This Class B digital apparatus complies with Canadian IC-ES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Imager Labeling

Labels are shown here to illustrate their location only. Please view the labels on your product for actual details.

Regulatory & Serial Number



English

For information about the disposal of Waste Electrical and Electronic Equipment (WEEE), please refer to the website at www.datalogic.com.

Italian

Per informazioni sullo smaltimento delle apparecchiature elettriche ed elettroniche consultare il sito Web www.datalogic.com.

French

Pour toute information relative à l'élimination des déchets électroniques (WEEE), veuillez consulter le site internet www.datalogic.com.

German

Informationen zur Entsorgung von Elektro- und Elektronik- Altgeräten (WEEE) erhalten Sie auf der Webseite www.datalogic.com.

Spanish

Si desea información acerca de los procedimientos para el desecho de los residuos del equipo eléctrico y electrónico (WEEE), visite la página Web www.datalogic.com.

Portuguese

Para informações sobre a disposição de Sucatagem de Equipamentos Elétricos e Eletrônicos (WEEE -Waste Electrical and Electronic Equipment), consultar o site web www.datalogic.com.

Chinese

有关处理废弃电气电子设备 (WEEE) 的信息, 请参考 Datalogic 公司的网站: <http://www.datalogic.com/>。

Japanese

廃電気電子機器 (W E E E) の処理についての関連事項は Datalogic のサイト www.datalogic.com をご参照下さい。

Datalogic ADC Limited Factory Warranty

Warranty Coverage

Datalogic warrants to Customer that Datalogic's products will be free from defects in materials and workmanship for a period of 5 years from product shipment. Datalogic ADC ("Datalogic") hardware products are warranted against defects in material and workmanship under normal and proper use. The liability of Datalogic under this warranty is limited to furnishing the labor and parts necessary to remedy any defect covered by this warranty and restore the product to its normal operating condition. Repair or replacement of product during the warranty does not extend the original warranty term. Products are sold on the basis of specifications applicable at the time of manufacture and Datalogic has no obligation to modify or update products once sold.

If Datalogic determines that a product has defects in material or workmanship, Datalogic shall, at its sole option repair or replace the product without additional charge for parts and labor, or credit or refund the defective products duly returned to Datalogic. To perform repairs, Datalogic may use new or reconditioned parts, components, subassemblies or products that have been tested as meeting applicable specifications for equivalent new material and products. Customer will allow Datalogic to scrap all parts removed from the repaired product. The warranty period shall extend from the date of shipment from Datalogic for the duration published by Datalogic for the product at the time of purchase (Warranty period).

Datalogic warrants repaired hardware devices against defects in workmanship and materials on the repaired assembly for a 90 day period starting from the date of shipment of the repaired product from Datalogic or until the expiration of the original warranty period, whichever is longer. Datalogic does not guarantee, and it is not responsible for, the maintenance of, damage to, or loss of configurations, data, and applications on the repaired units and at its sole discretion can return the units in the "factory default" configuration or with any software or firmware update available at the time of the repair (other than the firmware or software installed during the manufacture of the product). Customer accepts responsibility to maintain a back up copy of its software and data.

Warranty Claims Process

In order to obtain service under the Factory Warranty, Customer must notify Datalogic of the claimed defect before the expiration of the applicable Warranty period and obtain from Datalogic a return authorization number (RMA) for return of the product to a designated Datalogic service center. If Datalogic determines Customer's claim is valid, Datalogic will repair or replace product without additional charge for parts and labor. Customer shall be responsible for packaging and shipping the product to the designated Datalogic service center, with shipping charges prepaid. Datalogic shall pay for the return of the product to Customer if the shipment is to a location within the country in which the Datalogic service center is located. Customer shall be responsible for paying all shipping charges, duties, taxes, and any other charges for products returned to any other locations. Failure to follow the applicable RMA policy, may result in a processing fee. Customer shall be responsible for return shipment expenses for products which Datalogic, at its sole discretion, determines are not defective or eligible for warranty repair.

Warranty Exclusions

The Datalogic Factory Warranty shall not apply to:

- (i) any product which has been damaged, modified, altered, repaired or upgraded by other than Datalogic service personnel or its authorized representatives;

- (ii) any claimed defect, failure or damage which Datalogic determines was caused by faulty operations, improper use, abuse, misuse, wear and tear, negligence, improper storage or use of parts or accessories not approved or supplied by Datalogic;
- (iii) any claimed defect or damage caused by the use of product with any other instrument, equipment or apparatus;
- (iv) any claimed defect or damage caused by the failure to provide proper maintenance, including but not limited to cleaning the upper window in accordance with product manual;
- (v) any defect or damage caused by natural or man-made disaster such as but not limited to fire, water damage, floods, other natural disasters, vandalism or abusive events that would cause internal and external component damage or destruction of the whole unit, consumable items;
- (vi) any damage or malfunctioning caused by non-restoring action as for example firmware or software upgrades, software or hardware reconfigurations etc.;
- (vii) the replacement of upper window/cartridge due to scratching, stains or other degradation and/or
- (viii) any consumable or equivalent (e.g., cables, power supply, batteries, keypads, touch screen, triggers etc.).

No Assignment

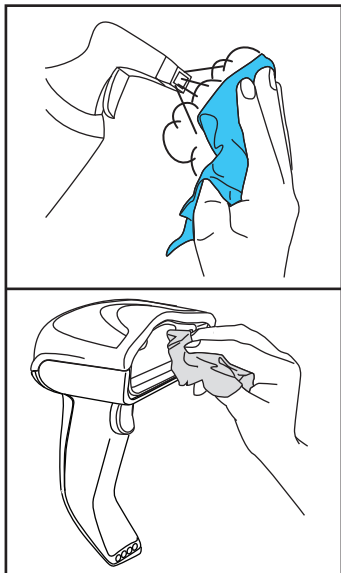
Customer may not assign or otherwise transfer its rights or obligations under this warranty except to a purchaser or transferee of product. No attempted assignment or transfer in violation of this provision shall be valid or binding upon Datalogic. DATALOGIC'S LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ORAL OR WRITTEN, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. DATALOGIC SHALL NOT BE LIABLE FOR ANY DAMAGES SUSTAINED BY CUSTOMER ARISING FROM DELAYS IN THE REPLACEMENT OR REPAIR OF PRODUCTS UNDER THE ABOVE. THE REMEDY SET FORTH IN THIS WARRANTY STATEMENT IS THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR WARRANTY CLAIMS. UNDER NO CIRCUMSTANCES WILL DATALOGIC BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR ANY LOST PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL IN-DIRECT, SPECIAL OR CONTINGENT DAMAGES REGARDLESS OF WHETHER DATALOGIC HAD ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

Risk of Loss

Customer shall bear risk of loss or damage for product in transit to Datalogic. Datalogic shall assume risk of loss or damage for product in Datalogic's possession. In the absence of specific written instructions for the return of product to Customer, Datalogic will select the carrier, but Datalogic shall not thereby assume any liability in connection with the return shipment.

Cleaning

Exterior surfaces and scan windows exposed to spills, smudges or debris require periodic cleaning to ensure best performance during scanning.



Use a soft, dry cloth to clean the product. If the product is very soiled, clean it with a soft cloth moistened with a diluted non-aggressive cleaning solution or diluted ethyl alcohol.



CAUTION

Do not use abrasive or aggressive cleansing agents or abrasive pads to clean scan windows or plastics.

Do not spray or pour liquids directly onto the unit.

NOTES

NOTES



DECLARATION OF CONFORMITY



**Datalogic ADC Srl, Via S. Vitalino, 13
Lippo di Calderara di Reno (BO) 40012 Italy**

EC-053
REV.: 4
PAG.: 1 DI 1

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva di Datalogic ADC Srl per:

This Declaration of Conformity is issued under the sole responsibility of Datalogic ADC Srl for:

Cette déclaration de conformité est établie sous la seule responsabilité de Datalogic Srl pour:

Diese Konformitätserklärung wird unter der alleinigen Verantwortung des Datalogic ADC Srl erteilt für:

Esta declaración de conformidad se expide bajo la exclusiva responsabilidad de Datalogic ADC Srl para:

Gryphon D41xx Black and Gryphon D41xx White

*e tutti i suoi modelli
and all its models
et tous ses modèles
und seine Modelle
y todos sus modelos*

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 Europäischen Rats:

cumple con los requisitos de las Directivas del Consejo Europeo, según la lista siguiente:

2004/108/EC - EMC Directive

2011/65/EU - RoHS Directive

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

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

Basado en la aproximación de las leyes 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 las siguientes normas:

EN 55022 (CLASS B ITE), SEPTEMBER 2006:
AMENDMENT A1 (CLASS B ITE), OCTOBER
2007:

*LIMITS AND METHODS OF MEASUREMENTS OF RADIO
DISTURBANCE CHARACTERISTICS OF INFORMATION TECH-
NOLOGY EQUIPMENT*

EN 55024, SEPTEMBER 1998; AMENDMENT
A1:2001+A2:2003:

*INFORMATION TECHNOLOGY EQUIPMENT
IMMUNITY CHARACTERISTICS
LIMITS AND METHODS OF MEASUREMENT*

EN 50581, SEPTEMBER 2012:

*TECHNICAL DOCUMENTATION FOR THE ASSESSMENT OF
ELECTRICAL AND ELECTRONIC PRODUCTS WITH RESPECT
TO THE RESTRICTION OF HAZARDOUS SUBSTANCES*

LIPPO DI CALDERARA, MARCH 29TH, 2013

RUGGERO CACIOPPO
QUALITY ASSURANCE MANAGER

Ruggero Cacioppo



www.datalogic.com

©2009-2014 Datalogic ADC, Inc. ■ All rights reserved.
Datalogic and the Datalogic logo are registered trademarks of
Datalogic S.p.A. in many countries, including the U.S.A. and the E.U.

Datalogic ADC, Inc.

959 Terry Street | Eugene | OR 97402 | USA
Telephone: (1) 541-683-5700 | Fax: (1) 541-345-7140



820051214

(Rev K)

September 2014