

 **DATALOGIC**

Gryphon™ I GM44XX

General Purpose Handheld
Area Imager Bar Code Reader
with Datalogic's STAR Cordless System™



Quick Reference Guide

Datalogic USA Inc.

959 Terry Street
Eugene, OR 97402
U.S.A.
Telephone: (541) 683-5700
Fax: (541) 345-7140

©2011-2017 Datalogic S.p.A. and/or its affiliates

An Unpublished Work - All rights reserved.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 USA Inc. or its subsidiaries or affiliates ('Datalogic' or 'Datalogic USA').

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. and the E.U.

Gryphon is a trademark of Datalogic S.p.A. and/or its affiliates registered in the U.S..

All other brand and product names may be trademarks of their respective owners.

Patents

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

See the Regulatory Addendum included with your product for additional regulatory, safety and legal information.



Table of Contents

END USER SOFTWARE LICENSE AGREEMENT (EULA)	iii
Software Product Policy	vi
Description	1
Setting Up the Reader	2
Positioning the Base Station	3
Connecting the Base Station	6
Securing the DC Power Cord (Optional)	6
System and Network Layouts	9
Stand Alone Layouts	9
Using the BC40xx™ Radio Base	10
Radio Base LEDs	10
Cleaning Procedure	11
Cleaning plastic surfaces	11
Cleaning electrical contact surfaces	12
Cleaning cradle contacts	13
Charging the Batteries	15
Battery Safety	15
Replacing the Batteries	18
Using the Gryphon™ I GM44XX	20
Linking the Reader	21
Link Datalogic RF Devices to Base	21
Power Off	21
Selecting the Interface Type	22
Interface Selection	22
Configuring the Interface	22
Keyboard Interface.....	25
Scancode Tables.....	27
Country Mode	27
Caps Lock State.....	32
Numlock.....	33
Programming	34
Using Programming Bar Codes	34
Configure Other Settings	34
Resetting Standard Product Defaults	34
Reading Parameters	35
Aiming System	35
Good Read Green Spot Duration	36
Scan Modes	37
Pick Mode	39
Multiple Labels in a Volume	39
Technical Specifications	40

LED and Beeper Indications	45
Base Station Indications	48
Datalogic Limited Factory Warranty	49
Warranty Coverage	49
Warranty Claims Process	50
Warranty Exclusions.....	50
No Assignment.....	51
Risk of Loss	51
Ergonomic Recommendations	52
Support Through the Website	53

DATALOGIC IP TECH S.R.L.

END USER SOFTWARE LICENSE AGREEMENT (EULA)

FOR THE GRYPHON™ I GM44XX PRODUCT SERIES

Notice to End User: There are two types of software covered by this END USER LICENSE AGREEMENT ("EULA"): (1) The Datalogic Product you have acquired contains embedded software ("Embedded Software") which is integral to the Product's operation; and (2) Optional Application Software provided to you on an optional basis ("Application Software"). Embedded Software and Application Software are collectively referred to as "Software" and are subject to the terms and conditions contained in this EULA. Software is provided only for use with, and for authorized end users of, the Datalogic Gryphon™ GD44XX. Portions of the Embedded Software include or operate with Open Source software or libraries ("Open Source"). Use of Open Source is subject to the Open Source licenses available at the following website: <http://www.datalogic.com/oss>.

This EULA (End User Software License Agreement) ("EULA" or "Agreement") is a legally binding agreement governing the licensing of the Software and Documentation by Datalogic IP Tech S.r.l. and its subsidiaries and 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 not Embedded Software or Application Software is software 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 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™ GM44XX 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 personal 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 comprises valuable trade secrets of Datalogic or Datalogic's third party licensors and that the Software is protected by United States copyright law and trade secret law, and by all applicable international intellectual property laws and treaty provisions. 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 non-conformities 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.

To the maximum extent permitted by law, End User agrees to defend, indemnify and hold harmless Datalogic, its affiliates and their respective directors, officers, employees and agents from and against any and all claims, actions, suits or proceedings, as well as any and all losses, liabilities, damages, costs and expenses (including reasonable attorney's fees) arising out of or accruing from (a) the End User's use of Software, (b) any application the End User develops on the Software that infringes any Intellectual Property Rights of any person or defames any person or violates their rights of publicity or privacy, and (c) any non-compliance by the End User of this Agreement.

8. Limitation Of Liability.

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 Datalogic IP Tech S.r.l., Legal & IP Department, Via San Vitalino 13, 40012 Calderara di Reno (Bologna), Italy 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: Both parties agree to the application of the laws of the country in which End User obtained the license to govern, interpret, and enforce all of End User's and Datalogic's respective rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Agreement, without regard to conflict of law principles. The United Nations

Convention on Contracts for the International Sale of Goods does not apply.

All rights, duties, and obligations are subject to the courts of the country in which End User obtained the license. For licenses granted by Licensee who operates in the countries specified below, the following terms applies.

For Americas.

This Agreement is governed by the laws of the State of Oregon. 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. 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.

For Europe, Middle East and Africa

This Agreement is governed by the laws of Italy. This Agreement and the rights of the parties hereunder shall be governed by and construed in accordance with the laws of Italy, without regard to the rules governing conflicts of law. Italian Court of Bologna 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. 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.

For Asia- Pacific Countries

This Agreement is governed by the laws of the State of Hong Kong. This Agreement and the rights of the parties hereunder shall be governed by and construed in accordance with the laws of the State of Hong Kong without regard to the rules governing conflicts of law. The Court of Hong Kong 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. 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.

- 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.

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



Gryphon™ I GM44XX

Description

With rich feature sets and extensive options, the Gryphon™ product series from Datalogic represents the premium level of data collection equipment for general purpose applications. The Gryphon GM44XX readers have enhanced optics with improved motion tolerance allowing codes placed on fast moving objects to be easily and quickly captured, creating the ideal reader for tasks requiring high throughput like those found in retail and light industrial environments.

Omni-Directional Operation	To read a symbol or capture an image, simply aim the reader and pull the trigger. The Gryphon™ I GM44XX is a powerful omni-directional reader, so the orientation of the symbol is not important. Datalogic's exclusive patented 'Green Spot' for good-read feedback helps to improve productivity in noisy environments or in situations where silence is required. When using the product with the cradle at a 45° position, the Green Spot can work as an aiming system to aid in positioning the bar code for quick and intuitive reading.
Decoding	Reliably decodes all standard 1D (linear) and 2D bar codes, including GS1 DataBar™ linear codes, Postal Codes (China Post), Stacked Codes (such as GS1 DataBar Expanded Stacked, GS1 DataBar Stacked, GS1 DataBar, Stacked Omnidirectional). The data stream — acquired from decoding a symbol — is rapidly sent to the host. The reader is immediately available to read another symbol.

Setting Up the Reader

Follow the steps below to connect and get your reader up and communicating with its host.

1. Configure the Base Station starting on this page.
2. Charge the Batteries (see page 15).
3. Link to the Base Station (see page 21).
4. Select the Interface Type (see page 22).
5. Configure the Reader starting on page 34 (optional, depends on settings needed).



According to recent modification of Regulation for shipping Li-Ion based battery packs, the products and their spare battery pack parts are shipped with a very low residual charge (low state of charge). Hence the needs

- that a new product must be fully recharged before starting to use it. and
- that battery packs of the stocked products GBT/GM44 and spare battery pack parts must be periodically recharged: for instance by using a BC40xx cradle powered up with a 12V Datalogic AC/DC adapter (cod.8-0935) for at least 30 minutes each 3 months.

Positioning the Base Station

The base station/charger may be set up in desk application to hold the reader in three different positions, either a horizontal or standing or vertical position, in order to provide the most comfortable use depending on the needs.

Base Station Positions and related clips to be used

Figure 1- Horizontal Position



This position is preferred, unless a different specific positioning is required, for its utmost ease of insertion as well as the minimum effort and attention required to customer when docking the scanner.

Figure 2- Standing Position



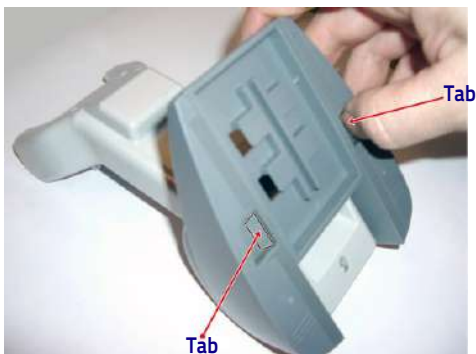
This position is preferred if the scanner is to be used in stand mode and not needed to be often removed from base station.

Figure 3. Vertical Position



This position is preferred when lack of room on the desktop recommends the scanner to be left vertical during recharging.

1. Insert the appropriate parts for the desired base station position.
2. Using your thumbs, push open the plastic tabs on the bottom of the base to free the wing holders.





To ensure best contact and performance, do not intermix the parts of the two different mount sets.

CAUTION

3. The stand can now be repositioned in either horizontal or standing position.



Connecting the Base Station

Figure 4 shows how to connect the Base Station to a terminal, PC or other host device. Turn off the host before connection and consult the manual for that equipment (if necessary) before proceeding. Connect the interface cable before applying power to the Base Station.

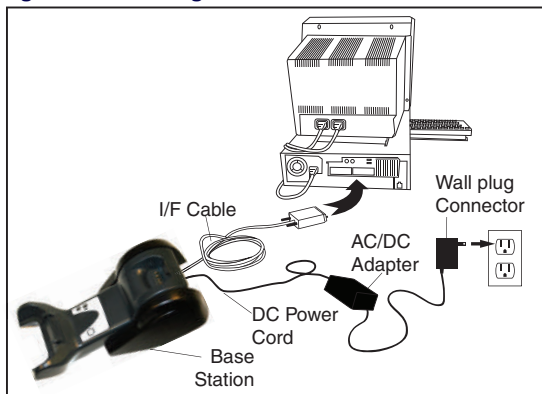


The Gryphon GM44XX can also be Powered by the Terminal. When powered by the Terminal, the battery charger is automatically set as Slow charge.

For some specific interfaces or hosts or lengths of cable, the use of an external power supply may be recommended for full recharging capability (see "Technical Specifications" on page 40 for more details).

Base Station Connection and Routing — Fully insert the Power Cable and Interface (I/F) Cable connectors into their respective ports in the underside of the Base Station. Then connect to an AC Adapter, and plug the AC power cord into the (wall) outlet.

Figure 4. Connecting the Base Station

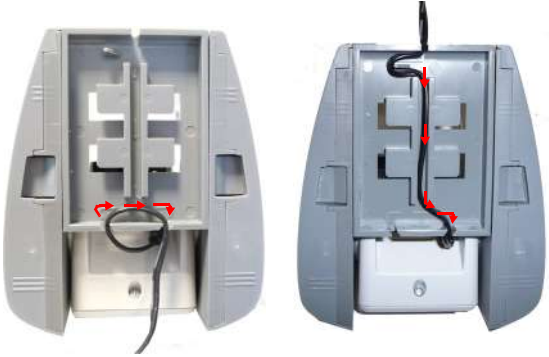


Securing the DC Power Cord (Optional)

The DC power cord for the adapter can be secured to the bottom of the base in order to maximize the mechanical retention of the cable itself. The routing of the power cord can be changed to accommodate base station positioning: horizontal, stand or wall mount. The cables can be looped

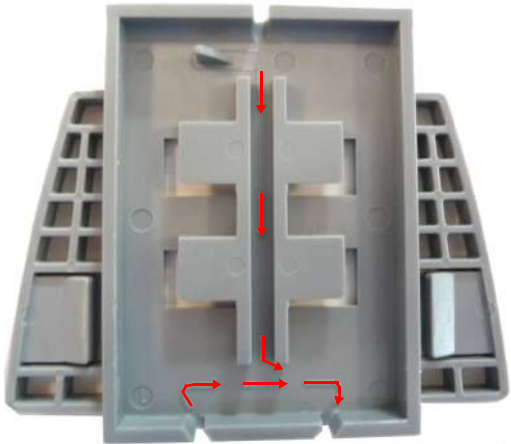
around to the front of the Base Station, or fed directly out the back of the Base Station, as shown in [Figure 5](#).

Figure 5. Options for routing the DC cord



Please refer to the arrows depicted on the bottom of the base when placing the cables, detailed in [Figure 6](#).

Figure 6. Arrows showing routing

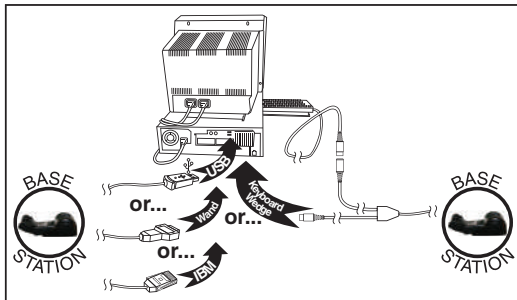


Host Connection — Verify before connection that the reader's cable type is compatible with your host equipment.

Most connections plug directly into the host device as shown in [Figure 7](#). Keyboard Wedge interface cables have a 'Y' connection where its female end mates with the male

end of the cable from the keyboard and the remaining end at the keyboard port on the terminal/PC.

Figure 7. Connecting to the Host



Power Connection — Plug the AC Adapter into an approved AC wall socket with the cable facing downwards (as shown in Figure 4) to prevent undue strain on the socket.

Disconnecting the Cable — To detach the cable, insert a paper clip or similar object into the hole on the base, as shown.

Figure 8. Disconnecting the Cable



System and Network Layouts

Stand Alone Layouts

Figure 9. Single Reader Layout

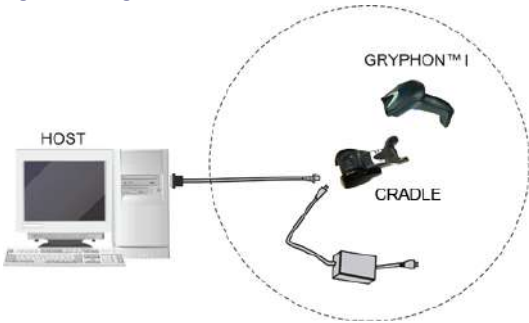
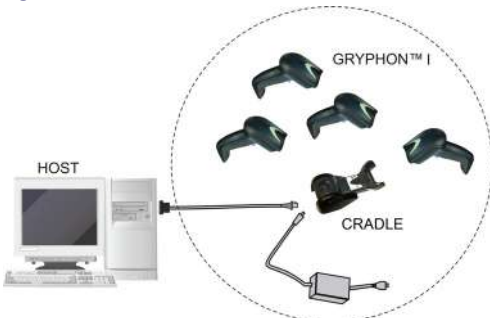
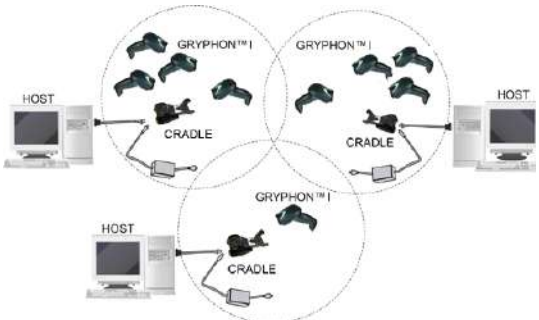


Figure 10. Multiple Reader Layout



In stand alone systems, each cradle is connected to a single Host.

Figure 11. Multiple Stand Alone Layouts



Many stand alone connections can operate in the same physical area without interference, provided all readers and cradles in the system have different addresses.

Using the BC40xx™ Radio Base





Radio Base LEDs

LEDs on the Gryphon Base provide information about the Base as well as battery charging status, as shown in Figure 12.

Figure 12. Gryphon Base LEDs



Table 1. Radio Base LEDs

	LED	STATUS
	Power on / Data	Yellow On = Base is powered Yellow Blinking = Base receives data and commands from the Host or the Reader.
	Charging	Red On = the Battery is charging.
	Charge completed	Green On = the Battery is completely charged.
	Charging + Charge completed	Red and Green LEDs Off = the Reader is not correctly placed onto the Base or charging error.

The button can be used to force device connection via the Datalogic Aladdin Software tool and for paging the scanner when it is activated. Refer to the Gryphon I 44XX Product Reference Guide (PRG) for a more detailed explanation.

Cleaning Procedure

Proper cleaning is needed on the external plastic surfaces, output window and electrical contacts to guarantee reliable scanning and charging of the battery.

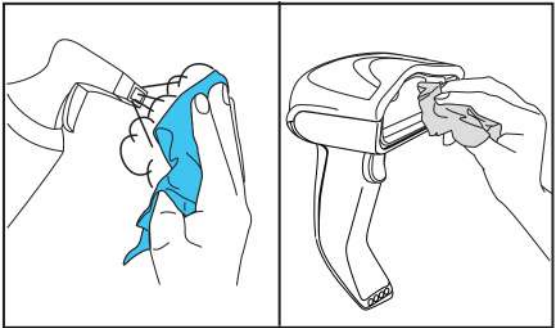
A regular cleaning routine will remove the dust and dirt that may accumulate on the product over time. The maintenance activity may be repeated more frequently depending on the severity of the environment in which the scanner is used.

A periodic deeper cleaning is suggested once per month.

Cleaning plastic surfaces

Exterior plastic 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 the plastic surfaces with a soft cloth moistened with a diluted non-aggressive cleaning solution or isopropyl alcohol (minimum 70%).



Recommended cleaners for standard plastics are:

Formula 409® glass and surface cleaner, dish soap and water, Windex® Original (Blue).

Recommended cleaners for Health care plastics:

CaviWipes™, diluted Clorox® bleach, Hepacide Quat® II, Sani-Cloth®, Virex® II 256.



CAUTION

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

Do not spray or pour liquids directly onto the unit. DO NOT use aerosols nor solvents.

Be sure to turn off power and unplug the device from electrical outlet before cleaning.

Be sure to dry up the device before powering it up.

Cleaner and liquids may be harsh on metal contacts. They are recommended for use only on enclosures.

DO NOT use solutions in their concentrated form.

DO NOT use paper towels or rough cloths to clean windows.

Cleaning electrical contact surfaces

Regular cleaning of electrical contacts is needed to guarantee a correct recharging of the battery. Both scanner and cradle contacts should be cleaned.

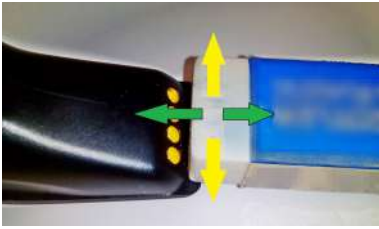
In case spills, smudges or debris accumulate on the cradle and/or the scanner, proper operation could be affected and a periodical cleaning is recommended as follows.

Avoid the use of brushes or any other hard tool to remove grime from electrical contacts, since these may damage or scratch the contact's plating.

Scanner Contacts

- Use a soft dry cloth to clean the contact area and the plastic surface around the contacts.
- Be sure to remove dust, dirt and any cloth residue.
- If the level of grime is significant, it is suggested the use of a soft white or pink pencil eraser to gently rub

the contacts. Motion can be along both the green and yellow directions.



- Be sure to remove the rubber residuals by gently blowing them off with clean compressed air.

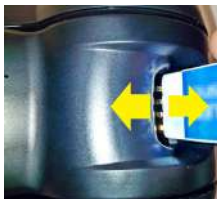


CAUTION

Be careful when using compressed air: protect yourself with goggles and point the nozzle far from eyes and not too close to the scanner surface. Read previously the warning label on the spray can.

Cleaning cradle contacts

- Use a soft dry cloth to clean the contact area and the plastic surface around the contacts .
- Particular attention must be paid to remove dust, dirt and any cloth residue. Do not allow this material to fall again onto the contacts.
- It is suggested the use of a soft white or pink pencil eraser to gently rub the contacts. Cradle contacts should be cleaned with a motion along the yellow direction.



- Be sure to remove the rubber residuals by gently blowing them off with clean compressed air.

Scanner and cradle deep cleaning

In case some hard grime, grease or liquid residual are present on electrical contacts, a deeper cleaning may be needed. If the above procedure is not enough to guarantee proper working of the system, the use of isopropyl alcohol is suggested (minimum 70%).

In this case it is suggested to use a cotton tipped applicator with isopropyl alcohol, gently wiping along the pins of the electrical connection. Be sure that cotton residue is not left on any pin of the electrical contacts.

Remove power before initiating the deep cleaning routine.



NOTE

After completion of the deep cleaning routine allow the system to dry completely before reconnecting to power. Depending on the environmental conditions wait at least 30 minutes or, if possible, leave the system unpowered overnight.

Charging the Batteries

To charge the battery, simply insert the Gryphon into the base. When the scanner is fully seated in the cradle, it will sound a 'chirp' to indicate that the cradle has detected the scanner connection.

The LEDs on the base (shown in [Table 1](#)) will indicate the status of the battery.



Before using the Battery, read "Battery Safety" in the following section. Datalogic recommends annual replacement of rechargeable battery packs to ensure maximum performance.

Battery Safety

To install, charge and/or perform any other action on the battery, follow the instructions in this manual.



WARNING

Do not discharge the battery using any device except for the scanner. When the battery is used in devices other than the designated product, it may damage the battery or reduce its life expectancy. If the device causes an abnormal current to flow, it may cause the battery to become hot, explode or ignite and cause serious injury.

Lithium-ion battery packs may get hot, explode or ignite and cause serious injury if exposed to abusive conditions. Be sure to follow the safety warnings listed on the following page.



WARNING

- Do not place the battery pack in fire or heat.
- Do not connect the positive terminal and negative terminal of the battery pack to each other with any metal object (such as wire).
- Do not carry or store the battery pack together with metal objects.
- Do not pierce the battery pack with nails, strike it with a hammer, step on it or otherwise subject it to strong impacts or shocks.
- Do not solder directly onto the battery pack.
- Do not expose the battery pack to liquids, or allow the battery to get wet.
- Do not apply voltages to the battery pack contacts.



WARNING

In the event the battery pack leaks and the fluid gets into your eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.



CAUTION

Always charge the battery at 32° – 104° F (0° - 40° C) temperature range.

Use only the authorized power supplies, battery pack, chargers, and docks supplied by your Datalogic reseller. The use of any other power supplies can damage the device and void your warranty.

Do not disassemble or modify the battery. The battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode or ignite.



CAUTION

Do not place the battery in or near fire, on stoves or other high temperature locations.

Do not place the battery in direct sunlight, or use or store the battery inside cars in hot weather. Doing so may cause the battery to generate heat, explode or ignite. Using the battery in this manner may also result in a loss of performance and a shortened life expectancy.

**CAUTION**

Do not place the battery in microwave ovens, high-pressure containers or on induction cookware.

Immediately discontinue use of the battery if, while using, charging or storing the battery, the battery emits an unusual smell, feels hot, changes color or shape, or appears abnormal in any other way.

Do not replace the battery pack when the device is turned on.

Do not remove or damage the battery pack's label.

Do not use the battery pack if it is damaged in any part.

Battery pack usage by children should be supervised.

As with other battery types, Lithium-Ion (LI) batteries will lose capacity over time. Capacity deterioration is noticeable after one year of service whether the battery is in use or not. It is difficult to precisely predict the finite life of a LI battery, but cell manufacturers rate them at 500 charge cycles. In other words, the batteries should be expected to take 500 full discharge/charge cycles before needing replacement. This number is higher if partial discharging/recharging is adhered to rather than full/deep discharging.

**CAUTION**

Storage of batteries for long time at fully charged status or at fully discharged status should be avoided.

**CAUTION**

Only in case of long storage, to avoid deep discharge of the battery it is recommended to partially recharge the battery every three months to keep the charge status at a medium level.

As a reference, run a fast recharge for 20 minutes every three months on unused products to avoid any performance deterioration of the cell.

The useful life of LI batteries depends on usage and number of charges, etc., after which they should be removed from service, especially in mission critical applications. Do not continue to use a battery showing excessive loss of

capacity, it should be properly recycled / disposed of and replaced.

Collect and recycle waste batteries separately from the device to comply with European Directive 2006/66/EC, 2011/65/EU, 2002/96/EC and 2012/19/EU and subsequent modifications, US and China regulatory and other laws and regulations about the environment.

Replacing the Batteries



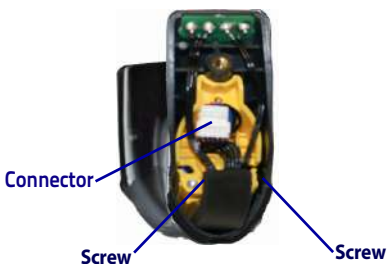
Before proceeding, read **"Battery Safety"** on the preceding pages. Datalogic recommends annual replacement of rechargeable battery packs to ensure maximum performance.

Use the following procedure to change the reader's battery:

1. With a screwdriver, unscrew the battery cover screw.



2. Unplug the white connector, and remove the two screws securing the battery holder.



3. Carefully lift out the gold contacts circuit, and remove the battery holder cap while letting the white con-

nector pass through the hole in the battery holder (as shown below).



4. Remove the old battery from its place (if present), and insert the new battery in the same position.
5. Replace the battery holder cap, plug in the connector and return the contacts circuit to its previous location.



When inserting the new battery into the handle, take care to position the battery and the connector as described above.

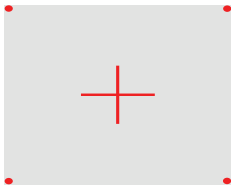
6. Insert the cover in the handle and screw it into place.



Using the Gryphon™ I GM44XX

The Gryphon™ I GM44XX normally functions by capturing and decoding codes. The reader is equipped with an internal Motionix™ motion-sensing function which activates the aiming system on device motion. The intelligent aiming system indicates the field of view which should be positioned over the bar code:

Aiming System



Relative Size and Location of Aiming System Pattern



Linear bar code



2D Matrix symbol

A red beam illuminates the label. The field of view indicated by the aiming system will be smaller when the reader is closer to the bar 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.

If the aiming system is centered and the entire bar code is within the aiming field, you will get a good read. Successful reading is signaled by an audible tone plus a good-read green spot LED indicator.

Reference the Gryphon I 44XX Product Reference Guide (PRG) or Datalogic Aladdin configuration software (both available on the Datalogic website) for more information about this feature and other programmable settings.

Linking the Reader

Link Datalogic RF Devices to Base

For RF devices, before configuring the interface it is necessary to link the handheld with the base.

To link the handheld and the base, either press the trigger to wake it, or simply mount into the base to wake up for operation. If the reader was previously linked to another base, you must first scan the **Unlink** bar code before re-linking to the new base.



Unlink

Power Off

Scan the bar code below to shut off power to the handheld until the next trigger pull.



PowerOff

Selecting the Interface Type

Upon completing the physical connection between the reader and its host, proceed directly to Interface Selection (below) for information and programming for the interface type the reader is connected to (for example: RS-232, Keyboard Wedge, USB, etc.) and scan the appropriate bar code to select your system's correct interface type.

Interface Selection

Each reader version will support one of the following sets of host interfaces:

General Purpose Versions — RS-232, RS-232 OPOS, USB, Keyboard Wedge, Wand.

Retail Point of Sale Versions — RS-232, RS-232 OPOS, USB, IBM 46XX.

Information and programming options for each interface type are provided in this section. For defaults and additional information associated with each interface, proceed to the corresponding chapter in the Gryphon™ 44XX PRG.

Configuring the Interface

Scan the programming bar code which selects the appropriate interface type for the system the reader will be connected to.



Unlike some other programming features and options, interface selections require that you scan only one programming bar code label. DO NOT scan an ENTER/EXIT bar code prior to scanning an interface selection bar code.

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 for 5 seconds. The scanner will change to a state that allows programming with bar codes.

RS-232

RS-232 standard interface



Select RS232-STD

RS-232 Wincor-Nixdorf



Select RS232-WN

RS-232 for use with OPOS/UPOS/JavaPOS



Select RS-232 OPOS

USB COM to simulate RS-232 standard interface

Select USB-COM-STD^aa. Download the correct USB COM driver from www.datalogic.com

IBM

IBM-46xx Port 5B reader interface



Select IBM-P5B

IBM-46xx Port 9B reader interface



Select IBM-P9B

USB-OEM

USB-OEM
(can be used for OPOS/UPOS/JavaPOS)



Select USB-OEM

Keyboard Interface

Use the programming bar codes to select options for USB Keyboard and Wedge Interfaces.

KEYBOARD

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



Select KBD-AT

Keyboard Wedge for IBM AT PS2 with standard key encoding
but without external keyboard



Select KBD-AT-NK

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



Select KBD-AT-ALT

Keyboard Wedge for IBM AT PS2 with alternate key encoding
but without external keyboard



Select KBD-AT-ALT-NK

KEYBOARD (continued)

PC/XT w/Standard Key Encoding



Select KBD-XT

Keyboard Wedge for IBM Terminal 3153



Select KBD-IBM-3153

Keyboard Wedge for IBM Terminals 31xx, 32xx, 34xx, 37xx
make only keyboard



Select KBD-IBM-M

Keyboard Wedge for IBM Terminals 31xx, 32xx, 34xx, 37xx
make break keyboard







Select KBD-IBM-MB

USB Keyboard with alternate key encoding



Select USB Alternate Keyboard

KEYBOARD (continued)
<p>USB Keyboard for Apple computers</p>  <p>Select USB-KBD-APPLE</p>
<p>Keyboard Wedge for DIGITAL Terminals VT2xx, VT3xx, VT4xx</p>  <p>Select KBD-DIG-VT</p>
<p>USB Keyboard with standard key encoding</p>  <p>Select USB Keyboard</p>
WAND EMULATION
<p>Wand Emulation</p>  <p>Select WAND</p>

Scancode Tables




Reference the Gryphon™ PRG for information about control character emulation which applies to keyboard interfaces.

Country Mode

This feature specifies the country/language supported by the keyboard. Only these 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 = Belgium
 Country Mode = Britain

COUNTRY MODE (continued)

Country Mode = Croatia*

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



Country Mode = Denmark*



Country Mode = France



Country Mode = Germany






Country Mode = Hungary*



Country Mode = Italy

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

COUNTRY MODE (continued)
 <p data-bbox="275 433 721 466">Country Mode = Japanese 106-key*</p>
 <p data-bbox="339 698 658 732">Country Mode = Norway*</p>
 <p data-bbox="344 986 653 1019">Country Mode = Poland*</p>
 <p data-bbox="334 1251 664 1285">Country Mode = Portugal*</p>
 <p data-bbox="332 1539 666 1572">Country Mode = Romania*</p>
 <p data-bbox="360 1804 638 1838">Country Mode = Spain</p>
<p data-bbox="83 1871 886 1904">*Supports only the interfaces listed in the Country Mode feature description</p>

COUNTRY MODE (continued)

Country Mode = Sweden



Country Mode = Slovakia*



Country Mode = Switzerland*

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




Caps Lock State

This option specifies the format in which the reader sends character data. This applies to keyboard wedge interfaces. This does not apply when an alternate key encoding keyboard is selected.

 ENTER/EXIT PROGRAMMING MODE
 Caps Lock State = Caps Lock OFF
 Caps Lock State = Caps Lock ON
 Caps Lock State = AUTO Caps Lock Enable

Numlock

This option specifies the setting of the Numbers Lock (Numlock) key while in keyboard wedge interface. This only applies to alternate key encoding interfaces. It does not apply to USB keyboard.

 ENTER/EXIT PROGRAMMING MODE
 Numlock = Numlock key unchanged
 Numlock = Numlock key toggled

Programming

The reader is factory-configured with a set of standard default features. After scanning the interface bar code from the Interfaces section, select other options and customize your reader through use of the programming bar codes available in the Product Reference Guide (PRG). Check the corresponding features section for your interface, and also the Data Editing and Symbologies chapters.

Using Programming Bar Codes

This manual contains bar codes which allow you to reconfigure your reader. Some programming bar code labels, like the "Standard Product Default Settings" on page 35, require only the scan of that single label to enact the change.

Other bar codes require the reader to be placed in Programming Mode prior to scanning them. Scan an ENTER/EXIT bar code once to enter Programming Mode; scan the desired parameter settings; scan the ENTER/EXIT bar code again to accept your changes, which exits Programming Mode and returns the reader to normal operation.

Configure Other Settings

Additional programming bar codes are available in the PRG to allow for customizing programming features. If your installation requires different programming than the standard factory default settings, refer to the PRG.

Resetting Standard Product Defaults

Reference the PRG for a listing of standard factory settings. If you aren't sure what programming options are in your reader, or you've changed some options and want the factory settings restored, scan the **Standard Product Default Settings** bar code below to copy the factory configuration for the currently active interface to the current configuration.



Factory defaults are based on the interface type. Configure the reader for the correct interface before scanning this label.



Standard Product Default Settings

Reading Parameters

Point the reader at the target and pull the trigger to enable the aiming system and the illuminator (red beam) to capture and decode the image. The aiming system will briefly switch off during the acquisition time and if no code is decoded will switch on again before the next acquisition. The illuminator will remain on until the symbol is decoded.

As you read code symbols, adjust the distance at which you are holding the reader.

Aiming System

A number of options for customizing control of the Aiming System are available. See the PRG for more information and programming bar codes.

Good Read Green Spot Duration

Successful reading can be signaled by a good read green spot.

Use the bar codes below to specify the duration of the good read pointer beam after a good read.



ENTER/EXIT PROGRAMMING MODE



Green Spot Duration = Disable (Green Spot is Off)



◆ Green Spot Duration = Short (300 msec)



Green Spot Duration = Medium (500 msec)



Green Spot Duration = Long (800 msec)

Scan 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.

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 Timeout¹ 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 Timeout¹ prevents undesired multiple reads while in this mode.

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








Always On — No trigger pull is required to read a bar code. Scanning is continually on. If the trigger is pulled, the reader acts as if it is in Trigger Single Mode. Double Read Timeout¹ prevents undesired multiple reads while in this mode.

Stand Mode — 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 Single Read mode. Double Read Timeout¹ prevents undesired multiple reads while in this mode.



Reference the PRG for more information.

1. See the Product Reference Guide (PRG) for more information

SCAN MODE
 ENTER/EXIT PROGRAMMING MODE
 ◆ Scan Mode = Trigger Single
 Scan Mode = Trigger Hold Multiple
 Scan Mode = Trigger Pulse Multiple
 Scan Mode = Flashing
 Scan Mode = Always On
 Scan Mode = Stand Mode

Pick Mode

Pick Mode is a Decoding and Transmission process where bar codes that are not within the configurable distance from the center of the aiming pattern are not acknowledged or transmitted to the host. It is active only while the scanner is in Trigger Single mode. If the scanner switches to a different Read Mode, Pick Mode is automatically disabled.



This feature is not compatible with Multiple Labels Reading in a Volume. See the PRG for more information.



ENTER/EXIT PROGRAMMING MODE



◆ Pick Mode = Disable



Pick Mode = Enable

Multiple Labels in a Volume

Enables/disables the ability of scanner to decode multiple labels in the same image. Several programming options are available for this feature, see the PRG for more information.

Technical Specifications

The following table contains Physical and Performance Characteristics, User Environment and Regulatory information.

Physical Characteristics	
Color	White/Gray Black/Gray
Dimensions	Height 7.1"/181 mm Length 3.9"/100 mm Width 2.8"/71 mm
Weight (without cable)	Approximately 8.7 ounces/246 g (reader with display) 8.7 ounces/246 g (base charger)
Electrical Characteristics	
Battery Type	Li-Ion battery pack
Typical charge time for full charge from full discharge	4 hours with 12V external power supply adapter ^a
	Max 22 hours with Host power (in this case no supply adapter is needed) ^a
Operating autonomy (continuous reading)	60,000 reads (typical)
Cradle consumption and DC input supply range	Volt 4.75-14 VDC; Power <8W ^b ; I _{max} 500mA when in host/bus powered mode ^b .
Performance Characteristics	
Light Source	LEDs
Roll (Tilt) Angle ^c	Up to ± 180°

Pitch Angle ^c	± 40°
Skew (Yaw) Angle ^c	± 40°
Field of View	40° H x 26° V

- Charge Times are much lower when battery is within daily typical operating condition.
- Typical input current measured under factory default configuration.
- Based on ISO 15423 specifications

Depth of Field (Typical)^a	
Symbology	SR:
Code 39	5mil: 1.6" - 7.5" (4.0 - 19cm) 10mil: 0.4" - 11.8" (1.0 - 30cm) 20mil: up to 17.7" (up to 45cm)
EAN	7.5mil: 0.5" - 10.6" (2.0 - 27cm) 13mil: 0.6" - 15.7" (1.5 - 40cm)
PDF-417	6.6mil: 1.0" - 5.9" (2.5 - 15cm) 10mil: 0.2" - 8.6" (0.5 - 22cm) 15mil: 0.6" - 13.4" (1.5 - 34cm)
DataMatrix	10mil: 0.8" to 6.3" (2.0 - 16cm) 15mil: 0" to 9.3" (0 - 23.6cm)
QR Code	10mil: 1.2" to 4.9" (3.0 - 12.5cm) 15mil: 0.4" to 7.5" (1.0 - 19cm)
Minimum Element Width	Standard Range: 1D Min. Resolution = 4 mil PDF-417 Min. Resolution = 5 mil Datamatrix Min. Resolution = 7 mil
Print Contrast Minimum	25% minimum reflectance

- 13 mils DOF based on EAN. All other 1D codes are Code 39. All labels grade A, typical environmental light, 20°C, label inclination 10°

Decode Capability

1D Bar Codes

UPC/EAN/JAN (A, E, 13, 8); UPC/EAN/JAN (including P2 /P5); UPC/EAN/JAN (including; ISBN / Bookland & ISSN); UPC/EAN Coupons; Code 39 (including full ASCII); Code 39 Trioptic; Code39 CIP (French Pharmaceutical); LOGMARS (Code 39 w/ standard check digit enabled); Danish PPT; Code 32 (Italian Pharmacode 39); Code 128; Code 128 ISBT; Interleaved 2 of 5; Standard 2 of 5; Interleaved 2 of 5 CIP (HR); Industrial 2 of 5; Discrete 2 of 5; Datalogic 2 of 5 (China Post Code/Chinese 2 of 5); IATA 2of5 Air cargo code; Code 11; Codabar; Codabar (NW7); ABC Codabar; Code 93; MSI; PZN; Plessey; Anker Plessey; Follet 2 of 5; GS1 DataBar Omnidirectional; GS1 DataBar Limited; GS1 DataBar Expanded; GS1 DataBar Truncated; DATABAR Expanded Coupon.

2D / Stacked Codes

The Gryphon I GM44XX0 scanner is capable of decoding the following symbologies using multiple frames (i.e. Multi-Frame Decoding):

PDF-417; QR Code; Aztec; Datamatrix; Inverse Datamatrix; Datamatrix is configurable for the following parameters; Normal or Inverted; Square or Rectangular Style; Data length (1 - 3600 characters); Maxicode; QR Codes (QR, Micro QR and Multiple QR Codes); Aztec; Postal Codes; Australian Post; Japanese Post; KIX Post; Planet Code; Postnet; Royal Mail Code (RM45CC); Intelligent Mail Bar Code (IMB); Sweden Post; Portugal Post; LaPoste A/R 39; 4-State Canada; PDF-417; MacroPDF; Micro PDF417; GS1 Composites (1 - 12); Codablock F; French CIP13^a; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; GS1 DataBar Expanded Stacked; GSI Databar Composites; Chinese Sensible Code; Inverted 2D codes.

Note: The reader can apply the Normal/Reverse Decoding Control to the following symbologies: Datamatrix, QR, Micro QR, Aztec and Chinese Sensible Code.

Interfaces Supported^b

RS-232 Std, RS-232 Wincor-Nixdorf, RS-232 OPOS, IBM 46xx (ports5B 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	
Operating Temperature	32° to 122° F (0° to 50° C)
Charging Temperature ^c	32° to 104° F (0° to 40° C)
Storage Temperature	-4° to 158° F (-20° to 70° C)
Humidity	Operating: 5% to 90% relative humidity, non-condensing

- a. It is acceptable to handle this with ULE
- b. See "Interface Selection" on page 22 for a listing of available interface sets by version type.
- c. Close to the limits of the working temperature range battery charge performance might have some slight degradation.

User Environment (continued)	
Drop Specifications	Scanner withstands 18 drops from 1.8 meters (5.9 feet) to concrete
Ambient Light Immunity	Up to 100,000 Lux
Contaminants Spray/rain Dust/particulates	IEC 529-IP52 (scanner only)
ESD Level	16 KV

Regulatory	
See the Regulatory Addendum.	

Radio Features		
Frequency working center	910MHz	433MHz
Range (in open air)	30 m	
Max number of devices per base station	16	

LED and Beeper Indications

The reader's beeper sounds and its LED illuminates to indicate various functions or errors on the reader. An optional 'Green Spot' also performs useful functions. The following tables list these indications. One exception to the behaviors listed in the tables is that the reader's functions are programmable, and so may or may not be turned on. For example, certain indications such as the power-up beep can be disabled using programming bar code labels.

Indication	Description	LED	Beeper
Power-up Beep	The reader is in the process of powering-up.	N/A	Reader beeps four times at highest frequency and volume upon power-up.
Good Read Beep	A label has been successfully scanned by the reader.	LED behavior for this indication is configurable via the feature 'Good Read: When to Indicate' (see the PRG for information.)	The reader will beep once at current frequency, volume, mono/bi-tonal setting and duration upon a successful label scan.
ROM Failure	There is an error in the reader's software/programming	Flashes	Reader sounds one error beep at highest volume.
Limited Scanning Label Read	Indicates that a host connection is not established when the IBM or USB interface is enabled.	N/A	Reader 'chirps' six times at the highest frequency and current volume.
Reader Active Mode	The reader is active and ready to scan.	The LED is lit steadily ^a	N/A

Indication	Description	LED	Beeper
Reader Disabled	The reader has been disabled by the host.	The LED blinks continuously	N/A
Green Spot ^a flashes momentarily	Upon successful read of a label, the software shall turn the green spot on for the time specified by the configured value.	N/A	N/A
Image Capture	When ready to capture image	Blue light flashes 2 times when updating	N/A

a Except when in sleep mode or when a Good Read LED Duration other than 00 is selected

Programming Mode - The following indications ONLY occur when the reader is in Programming Mode.

INDICATION	DESCRIPTION	LED	BEEPER
Label Programming Mode Entry	A valid programming label has been scanned.	LED blinks continuously	Reader sounds four low frequency beeps.
Label Programming Mode Rejection of Label	A label has been rejected.	N/A	Reader sounds three times at lowest frequency and current volume.
Label Programming Mode Acceptance of Partial Label	In cases where multiple labels must be scanned to program one feature, this indication acknowledges each portion as it is successfully scanned.	N/A	Reader sounds one short beep at highest frequency and current volume.
Label Programming Mode Acceptance of Programming	Configuration option(s) have been successfully programmed via labels and the reader has exited Programming Mode.	N/A	Reader sounds one high frequency beep and 4 low frequency beeps followed by reset beeps.
Label Programming Mode Cancel Item Entry	Cancel label has been scanned.	N/A	Reader sounds two times at low frequency and current volume.

Base Station Indications

Indication	LEDS
Power-up Complete	Yellow LED on
Reader Disabled by the HOST or the communication with HOST is not established	Yellow LED blinking ~1Hz
Data/labels are transmitted to the HOST	Yellow LEDs turned off for 100mSec
Programming Mode	Yellow LED blinks quickly
Battery charger in progress	Red LED on
Battery charger complete	Green LED on
Battery charger error	Red and Green LEDs off
No HH is placed on the cradle	Red and Green LEDs off

Datalogic Limited Factory Warranty

Warranty Coverage

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 INDIRECT, 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.

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 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 frequently used objects 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.

Support Through the Website

Datalogic provides several services as well as technical support through its website.

Log on to www.datalogic.com and click on the **SUPPORT > GENERAL DUTY HANDHELD SCANNERS** category link.

From this page you can select your product model from the dropdown list which gives you access to:

Downloads including Data Sheets, Manuals, Software & Utilities, and Drawings;

Repair Program for On-Line Return Material Authorizations (RMAs) plus Repair Center contact information;

Service Program containing details about Maintenance Agreements;

Technical Support through email or phone.

NOTES

NOTES



www.datalogic.com

©2011-2017 Datalogic S.p.A. and/or its affiliates. All rights reserved. Datalogic and the Datalogic logo are registered trademarks of Datalogic S.p.A. in many countries, including the U.S. and the E.U.

Datalogic USA Inc.

959 Terry Street | Eugene, OR 97402 | U.S.A. |

Telephone: (541) 683-5700 |

Fax: (541) 345-7140



820091214

Rev. K

July 2017