

Gryphon™ I GD4500

QUICK REFERENCE GUIDE



General Purpose Corded
Handheld Area Imager Bar Code Reader

 **DATALOGIC**

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

GRYPHON I GD4500

ABOUT THE SCANNER

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 GD45XX reader has enhanced Megapixel 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, light industrial environments and healthcare.

OMNI-DIRECTIONAL OPERATING

To read a symbol or capture an image, simply aim the reader and pull the trigger. The Gryphon™ I GD45XX 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 positioning the product into the stand, the magnetic coupling will make the scanner automatically detect a bar code inside the field of view, and switch the reading system from trigger mode to auto-sense mode.

DECODING

The Gryphon™ I GD45XX 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.

IMAGING

The Gryphon™ I GD45XX reader can also function as a camera by capturing entire images or image portions of labels, signatures, and other items. See the Datalogic Aladdin configuration tool for information and options for this feature.

HANDS FREE STAND/HOLDER

An accessory is available which holds the reader (except those with integrated stand) at a convenient angle, allowing hands free scanning of items. It can also be used as a holder. The holder “cup” can be positioned in any of the three angles shown in the figure below. The reader automatically recognizes the insertion and changes its Scan Mode to allow the user to operate in hands-free mode.

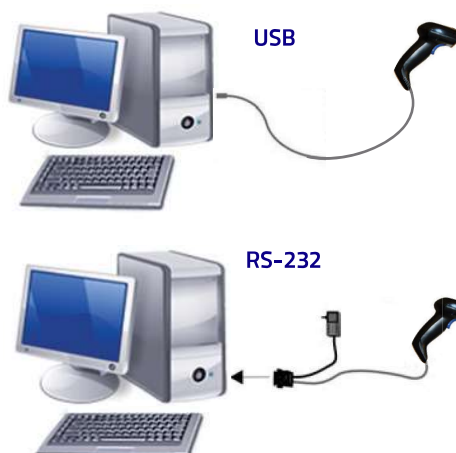


SETTING UP THE READER

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

1. Connect the Cable to the reader and the Host as shown below.
2. Configure the Interface ([see page 8](#)).
3. Program the Reader starting on page [15](#) (optional, as needed).

Connecting to the Host Interface

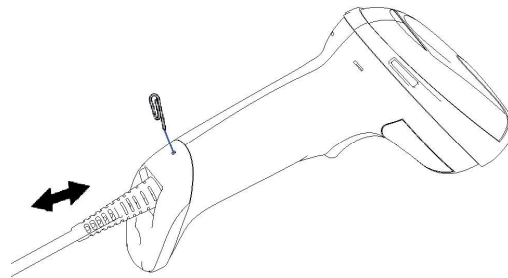


NOTE: Refer to PRG or Aladdin for the Wedge interface. Please note the Wedge interface is supported by products manufactured until June 2023.

Disconnecting the Cable

To remove the interface cable from the reader, first locate the hole on the back of the handle. Next, take a paper clip and modify it as shown in the figure below. Insert the end of the paper clip into the hole and press it to push on the clip that holds the connector. As you apply pressure, pull out the cable.

When reinserting the cable, make sure the connector clip is on the same side as the reader release hole. Insert the cable, it should click when it is fully inserted.



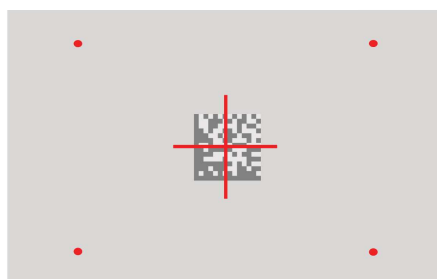
USING THE GRYPHON™ I GD4500

The Gryphon™ I GD45XX 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:

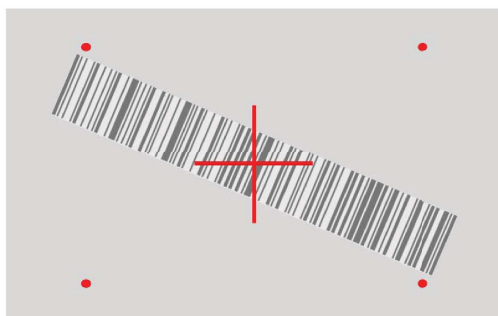
Aiming System



Relative Size and Location of Aiming System Pattern



2D Matrix Symbol



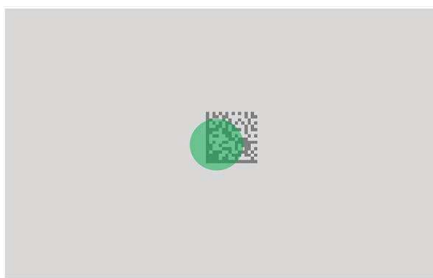
Linear Bar

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. Symbolologies with smaller bars or elements (mil size) should be read closer to the unit. Symbolologies with larger bars or elements (mil size) should be read farther from the unit.

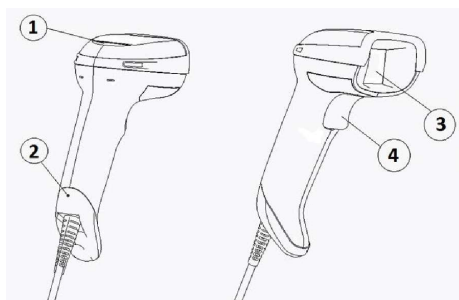
If the aiming system is centered and the entire bar code is within the aiming field, you will get a good read. Successful reading is signaled by an audible tone plus a good-read green spot LED indicator.

Refer to the Gryphon I GD4500 Product Reference Guide (PRG) for more information about this feature and other programmable settings.

Relative Size and Location of Green Spot



PARTS OF THE READER



- | | |
|-----------------------|----------------|
| 1. LED | 3. Scan Window |
| 2. Cable Release Hole | 4. Trigger |

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 supported by the reader and scan the appropriate bar code to select your system's correct interface type, according to your application.

For interfaces other than those listed in this manual, see the Gryphon™ I GD4500 Product Reference Guide (PRG), available online at www.datalogic.com.

Interface Selection

The reader will support all the following host interfaces:

- RS-232 STD
- RS-232 WN
- IBM46XX port 9b (a specific cable's required)
- USB HID POS
- USB Toshiba TEC
- USB (Keyboard, COM, OEM)
- USB Composite (Keyboard + COM)
- USB for Magellan Scanners

Selecting the Interface Type

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™ I GD4500 PRG.

Configuring the Interface

Scan the appropriate programming bar code to select the interface type for your system.



NOTE: 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
 Select RS232-STD RS-232 standard interface
 Select RS232-WN RS-232 Wincor-Nixdorf
 Select RS-232 OP0S RS-232 for use with OP0S/UP0S/JavaPOS
 Select USB-COM-STD^a USB Com to simulate RS-232 standard interface

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

USB-OEM
Refer to the PRG or Aladdin for USB-OEM (can be used for OP0S/UP0S/JavaPOS)
USB-COMPOSITE
 Select USB-Composite USB-Composite (Keyboard + COM)
IBM46XX
 Select IBM46xx Port 9b
USB FOR TERMINALS
 Select USB HID POS
 Select USB Toshiba TEC
USB FOR MAGELLAN SCANNERS
 Select USB for Magellan Scanners

Keyboard Interface

Use the programming bar codes to select options for USB-Keyboard Interface.

KEYBOARD
 ★ Select USB Keyboard (USB Keyboard with standard key encoding)
 Select USB Alternate Keyboard (USB Keyboard with alternate key encoding)

★ = default value

Scancode Tables

Refer to Gryphon I GD4500 PRG for information about control character emulation for keyboard interfaces.

Country Mode

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

- USB Keyboard with alternate key encoding
- USB Keyboard with standard key encoding

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

COUNTRY MODE
 ENTER/EXIT PROGRAMMING MODE
 ★ Country Mode = U.S.
 Country Mode = Belgium
 Country Mode = Croatia*
 Country Mode = Czech Republic*
 Country Mode = Denmark*
 Country Mode = France

COUNTRY MODE (CONTINUED)
 Country Mode = French Canadian*
 Country Mode = Germany
 Country Mode = Hungary*
 Country Mode = Italy
 Country Mode = Japanese 106-key*
 Country Mode = Lithuanian*
 Country Mode = Norway*

COUNTRY MODE (CONTINUED)
 Country Mode = Poland*
 Country Mode = Portugal*
 Country Mode = Romania*
 Country Mode = Slovakia*
 Country Mode = Spain
 Country Mode = Sweden
 Country Mode = Switzerland*

COUNTRY MODE (CONTINUED)

Country Mode = United Kingdom

★ = default value

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

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 Gryphon™ I GD4500 PRG. Check the corresponding features section for your interface, and also the Data Editing and Symbologies chapters of the PRG.

Using Programming Bar Codes

This manual contains bar codes which allow you to reconfigure your reader. Some programming bar code labels, like the "Reset Default Settings" on [page 16](#), 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 customization of programming features. If your installation requires different programming than the standard factory default settings, refer to the PRG.

Resetting Product Defaults

If you are not sure what programming options have been set in your reader, or you have changed some options and want your custom factory settings restored, scan the bar code below to reset the reader to its initial configuration. Refer to

Programming

the PRG for other options, and a listing of standard factory settings.



NOTE: Factory defaults are based on the interface type. Be sure your reader is configured for the correct interface before scanning this label. See "Selecting the Interface Type" on page 7 for more information.



Reset Default Settings



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<https://www.bsr.at>

sales@bsr.at

READING PARAMETERS

Move the reader toward the target and center the aiming pattern and illumination system to capture and decode the image. See ["" on page 4](#) for more information.

The aiming system will briefly switch off after 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 Gryphon™ I GD4500 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 that follow to specify the duration of the good read pointer beam after a good read.

GOOD READ GREEN SPOT DURATION	
	ENTER/EXIT PROGRAMMING MODE
	Disable
	★ Short (300 ms)
	Medium (500 ms)
	Long (800 ms)

★ = default value

OPERATING MODES

Scan Mode

The reader can be set to operate in one of several scanning modes. See the PRG for more information and settings for any of the following options:

Trigger Single (Default) This mode is associated with the typical handheld reader operation. When the trigger is pulled, illumination is turned on and the scanner attempts to read a label.

Scanning is activated until one of the following occurs:

- the programmable Scanning Active Time¹ expires
- a label has been read
- the trigger is released

Trigger Hold Multiple – When the trigger is pulled, scanning starts and the product scans until the trigger is released or Scanning Active Time¹ expires. Reading a label does not disable scanning. Double Read Timeout¹ prevents undesired multiple reads while in this mode.

Trigger Pulse Multiple – Scanning begins when the trigger is pulled and continues after the trigger is released, until the trigger is pulled again or until the programmable Scanning Active Time¹ expires. Reading a label does not disable scanning. Double Read Timeout¹ prevents undesired multiple reads while in this mode.

Flashing – The reader illuminator flashes on and off regardless of the trigger status. Code reading takes place only during the Flash On Time². Double Read Timeout¹ prevents undesired multiple reads.

Always On – The illuminator is always ON and the reader is always ready for code reading. Double Read Timeout¹ prevents undesired multiple reads.

Object Detection – The scanner looks for changes within its field-of-view. The Aiming Pattern is always on to show the optimum reading area. If a predefined amount of movement is detected, the red illumination switches on. Scanning continues until a label is read or Scanning Active Time¹ expires.

-
1. See the Product Reference Guide (PRG) for these and other programmable features.
 2. See the Product Reference Guide (PRG) for these and other programmable features.

SCAN MODE
 ENTER/EXIT PROGRAMMING MODE
 ★ Trigger Single
 Trigger Hold Multiple
 Trigger Pulse Multiple

★ = default value

SCAN MODE (CONTINUED)	
	Scan Mode Flashing ^a
	Scan Mode Always ON
	Stand Mode

a. Controlled by Flash On Time and Flash Off Time. See the PRG to program these parameters.

PICK MODE

This option specifies the ability of the reader to decode labels only when they are close to the center of the aiming pattern, which is the area indicated by the red cross. 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.



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

PICK MODE
ENTER/EXIT PROGRAMMING MODE
★ Pick Mode = Disable
Pick Mode = Enable

★ = default value

MULTIPLE LABEL READING

The reader offers a number of options for multiple label reading. See the PRG or software configuration tool for descriptions of these features and programming labels.

TECHNICAL SPECIFICATIONS

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

PHYSICAL CHARACTERISTICS	
Color	Black White
Dimensions	Height 16.6 cm (6.5") Length 10.9 cm (4.3") Width 6.8 cm (2.7")
Weight	GD4500 approx. 161 g (5.7 oz.) GD4500 with integrated stand approx. 374 g (13.2 oz.)
ELECTRICAL CHARACTERISTICS	
Power Supply (without cable)	GD4500 approx. 161 g (5.7 oz.) GD4500 with integrated stand approx. 374 g (13.2 oz.)
Consumption	Operating (Typical): <400 mA @ 5V <200 mA @ 12V Standby/Idle (Typical): <90 mA @ 5V <50 mA @ 12V
Max. Scan Rate	50 frames/sec
Reading Indicators	Top and rear illumination, Good Read Spot, Beep, Vibrator
ENVIRONMENTAL CHARACTERISTICS	
Operating Temperature	0 °C to + 50 °C (+32 ° F to +122 ° F)
Storage Temperature	-40 °C to + 70 °C (-40 ° F to +158 ° F)
Humidity	95% non condensing
Drop Resistance	IEC 68-2-32 Tested 1.8 m (6 ft)
ESD Protection	16 KV
Protection Class	IP52
Cable Length	Refer to www.datalogic.com
OPTICAL CHARACTERISTICS	
Optical Format	1/4"
Active Imager Size	3896 µm (H) x 2453 µm (V)
Active Pixels	1280 H x 800 V
Illumination System	LED source Warm White Emission (wavelength = 350 - 770 nm) Hyper Red Emission (wavelength = 660 nm, DGM model only) IEC 62471 Exempt Risk Group

Technical Specifications

Aiming System	RED laser source IEC 60825-1 Class 2 Radiation 1 mW Avg., Emitted wavelength 650 nm, 10ms pulse
Ambient Light	Up to 100,000 lux
Tilt Tolerance	0° - 360°
Pitch Tolerance	± 65°
Skew Tolerance	± 65°
Field of View	36° H x 23° V
PCS (Datalogic Test Chart)	minimum 15%

DOF - DEPTH OF FIELD (TYPICAL) ^A		
Symbology	SR	HD
Code 39	5 mil: 7.0 - 38.0 cm (2.7" - 14.9") 10 mil: 2.2 - 58.0 cm (0.8" - 22.8") 20 mil: FOV lim. - 110 cm (up to 43.3")	3 mil: 5.0 - 15.0 cm (2.0" - 5.9") 5 mil: 0.5 - 25.0 cm (0.2" - 9.8") 10 mil: 0.5 - 45.0 cm (0.2" - 17.7")
EAN 13	7.5 mil: 9.0 - 30.0 cm (3.5" - 11.8") 13 mil: 1.0 - 71.0 cm (0.4" - 27.9")	7.5 mil: 2.0 - 23.5 cm (0.8" - 9.2") 13 mil: 1.0 - 40.0 cm (0.4" - 15.7")
PDF 417	6.6 mil: 6.5 - 24.0 cm (2.6" - 9.4") 10 mil: 2.5 - 41.0 cm (1.0" - 16.1") 15 mil: 2.3 - 65.0 cm (0.9" - 25.6")	4 mil: 3.0 - 12.0 cm (1.2" - 4.7") 6.6 mil: 0.5 - 23.5 cm (0.2" - 9.2") 10 mil: 0.5 - 31.0 cm (0.2" - 12.2")
Datamatrix	10 mil: 5.5 - 27.0 cm (2.2" - 10.6") 15 mil: 2.8 - 41.0 cm (1.1" - 16.1")	5 mil: 5.5 - 9.0 cm (2.2" - 3.5") 10 mil: 0.2 - 27.0 cm (0.1" - 10.6")
Resolution (Maximum)	1D Min = 4 mils PDF417 Min = 5 mils Datamatrix Min = 7.5 mils	1D Min = 3 mils PDF417 Min = 3 mils Datamatrix Min = 4 mils

a. 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; Matrix 2 of 5; IATA 2of5 Air cargo code; Code 11; Codabar; Codabar (NW7); ABC Codabar; EAN 128; Code 93 ; MSI; PZN; Plessey; Anker Plessey; GS1 DataBar Omnidirectional; GS1 DataBar Limited; GS1 DataBar Expanded; GS1 DataBar Truncated; DATABAR Expanded Coupon.

2D / Stacked Codes

The Gryphon I GBT/GM4500 scanner is capable of decoding the following symbologies using multiple frames (i.e. Multi-Frame Decoding):

Data Matrix; Inverse Data Matrix; Data Matrix 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 Barcode (IMB); Sweden Post; Portugal Post); LaPoste A/R 39; PDF-417; MacroPDF; Micro PDF417; GS1 Composites (1 - 12); French CIP13^a; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; GS1 DataBar Expanded Stacked; GS1 Databar Composites; Chinese Sensible Code; Inverted 2D codes^b.

- It is acceptable to handle this with ULE
- The SW can apply the Normal/Reverse Decoding Control to the following symbologies: Data Matrix, QR, Micro QR, Aztec and Chinese Sensible Code.

REGULATORY

See Regulatory Addendum

LED AND BEEPER INDICATIONS

The imager's beeper sounds and its illumination flashes or changes color 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. Reference the PRG for a more detailed list.

INDICATION	LED	BEEPER
Power-up	Upper 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	Upper green LED comes on for programmed time (default). LED behavior for this indication is configurable using Aladdin utility.	One beep at current frequency, volume, mono/bi-tonal setting upon a successful label scan. It is also possible to upload custom jingles with Aladdin.
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 SOLUTION
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 bar code is not decoded.	Imager not programmed for correct bar code type.	Ensure reader is programmed to read the type of bar code scanned. Refer to the PRG for more information.
	Bar code label is unreadable.	Check the label to ensure it is not defaced. Try to scan another bar code type.
	Distance between reader and bar code is incorrect.	Move imager closer to or further from the bar code.
Bar code is decoded but not transmitted to the host.	Imager not programmed for the correct host type.	Scan the appropriate host type bar code. Refer to the PRG for more information.



NOTE: For detailed troubleshooting, refer to the PRG (Product Reference Guide).

WARRANTY

Datalogic warrants that the Products shall be free from defects in materials and workmanship under normal and proper use during the Warranty Period. 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. The Warranty Period shall be **five years** from the date of shipment by Datalogic, unless otherwise agreed in an applicable writing by Datalogic.

Datalogic will not be liable under the warranty if the Product has been exposed or subjected to any: (1) maintenance, repair, installation, handling, packaging, transportation, storage, operation or use that is improper or otherwise not in compliance with Datalogic's instruction; (2) Product alteration, modification or repair by anyone other than Datalogic or those specifically authorized by Datalogic; (3) accident, contamination, foreign object damage, abuse, neglect or negligence after shipment to Buyer; (4) damage caused by failure of a Datalogic-supplied product not under warranty or by any hardware or software not supplied by Datalogic; (5) any device on which the warranty void seal has been altered, tampered with, or is missing; (6) 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; (7) use of counterfeit or replacement parts that are neither manufactured nor approved by Datalogic for use in Datalogic-manufactured Products; (8) any damage or malfunctioning caused by non-restoring action as for example firmware or software upgrades, software or hardware reconfigurations etc.; (9) loss of data; (10) any consumable or equivalent (e.g. cables, power supply, batteries, etc.); or (11) any device on which the serial number is missing or not recognizable.

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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.

TECHNICAL SUPPORT

Support Through the Website

Datalogic provides several services as well as technical support through its website. Log on to (www.datalogic.com).

For quick access, from the home page click on the search icon , and type in the name of the product you're looking for. This allows you access to download Data Sheets, Manuals, Software & Utilities, and Drawings.

Hover over the Support & Service menu for access to Services and Technical Support.

Reseller Technical Support

An excellent source for technical assistance and information is an authorized Datalogic reseller. A reseller is acquainted with specific types of businesses, application

software, and computer systems and can provide individualized assistance.

CLEANING PROCEDURE

Cleaning plastic surfaces

Exterior surfaces and scan windows exposed to spills, smudges or debris accumulation require periodic cleaning to ensure best performance during scanning operations. Follow the procedures described in this instruction sheet to keep your Gryphon device in good operating condition.



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



CAUTION: DO NOT use abrasive pads or cleaning agents.

Common Cleaning Solutions

The cleaners and disinfectants listed below are recommended for use on Datalogic Disinfectant-Ready Enclosures:

CLEANERS	DISINFECTANTS
Formula 409® Glass and Surface Cleaner	CaviWipes™
Isopropyl alcohol	Clorox® Bleach
Dish soap and water	Hepacide Quat® II
Windex® Original Blue	Sani-Cloth®
	Virex® 256



NOTE: Disinfectants may be harsh on metal. They are recommended for use only on enclosures.



CAUTION: DO NOT spray or pour cleaner directly onto the unit.
DO NOT use solutions in their concentrated form.
DO NOT use aerosols, solvents or abrasives.
DO NOT use paper towels or rough cloths to clean windows.

Cleaning enclosure and window surfaces

1. Moisten a soft cloth with a recommended cleaning solution. Be sure to apply the solution to your cloth first. Wring excessive liquid from the cloth.
2. Use the cloth to wipe down the surface of the unit. Use cotton swabs, lightly moistened, to reach in corners and crevices.
3. Use another clean dry cloth to remove any residue of the cleaning agent and ensure the unit is dry.



Cleaning Procedure

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