GRYPHON™ GBT/GM4600 READERS, WLC4690 BASE CHARGER

QUICK REFERENCE GUIDE

General Purpose Handheld
Area Imager Bar Code Reader
with Bluetooth® Wireless Technology or
Datalogic's STAR Cordless System™

DATALOGIC

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Patents

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

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

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GRYPHON™ GBT/GM4600

ABOUT THE SCANNER

The Gryphon 4600 series is a premium line of high-performance handheld scanners designed for advanced applications in Retail, Healthcare, Manufacturing and Transportation & Logistics.

The Gryphon 4600 scanners, designed with sustainability, usability, and advanced technology at their core, are the first in their category to incorporate an eco-design approach, featuring low power consumption, recycled materials, and eco-friendly packaging to help reduce carbon footprint.

EASY TO USE

The Gryphon 4600 scanner delivers an unbeatable scanning experience thanks to the highly visible green central cross LED aimer for easier targeted scanning. Datalogic's 'Green Spot' technology and exclusive 3GL™ (3 Green Lights) provide superior good-read feedback. The dual-color LED illumination technology, featuring warm white and red light user-selectable, allows to adapt to any application need on the fly. Decoding The Gryphon 4600 scanner delivers snappy reading performance on all common 1D and 2D codes, including GS1 Digital Link and Digital Watermarking, as well as smaller, high density, high resolution condensed codes and it also excels at reading barcodes from mobile devices. A powerful combination of a high-speed dual-core processor, AI (Artificial Intelligence) algorithms, and advanced decoding enhancements delivers a significant increase in scanning speed. The data stream - acquired from decoding a symbol - is rapidly sent to the host. The reader is immediately available to read another symbol.

OMNI-DIRECTIONAL OPERATING

To read a symbol or capture an image, simply aim the reader and pull the trigger. The Gryphon™ I GBT-GM4600 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.

IMAGING

The Gryphon™ I GBT-GM4600 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.

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 16).
3. Link to the Base Station (see page 21).
4. Select the Interface Type (see page 23).
5. Configure the Reader starting on page 24 (optional, depends on settings needed)

NOTE: According to recent modification of Regulation for shipping Li-Ion based battery packs, the products and their spare battery packs 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/GM4600 and spare battery pack parts must be periodically recharged. For instance, by using a WLC4690 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 two different positions, either a horizontal or vertical position, in order to provide the most comfortable use depending on the needs.

Figure 1 - Horizontal Position

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

Figure 2 - Presentation 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.

The presentation mode requires the use of the optional accessory PA-WLC4690-BK or PA-WLC4690-HC, which is an attachable accessory for the Gryphon 4600 WLC4690 base station.

Figure 3 - Vertical Position

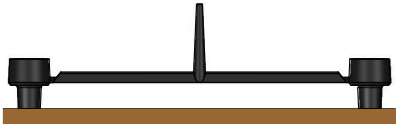
This position is preferred when lack of room on the desk-top recommends the scanner to be left vertical during recharging.

Insert the appropriate parts for the desired base station position.

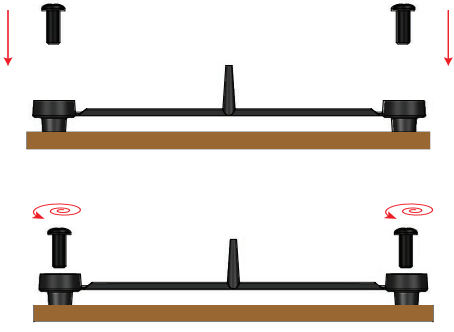
How to secure the base station

It is possible to secure the cradle, to either a vertical or horizontal surface, with a fixing bush:

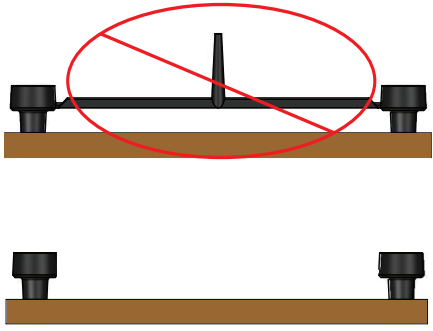
1. Position the fixing bush on the desired surface.



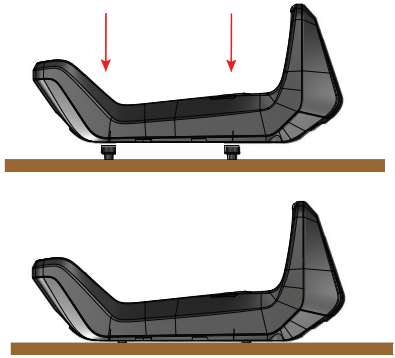
2. Insert and tighten the screws into their respective holes until fully secured.



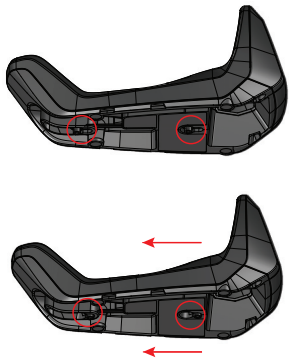
3. Once the screws are into place, detach the connecting plastic parts.



4. Insert the cradle into the two fixing bushes.



5. Slide the cradle to properly lock it into the screws.



Instructions for Wall or Desk Magnet Configuration change

The base station features an integrated desk/wall selector that allows users to choose between standard retention (desk) or increased retention (wall). It's easy to use and provides stronger scanner hold in wall mode, making it ideal for applications like medical carts, self-checkout systems, and wall-mounted setups.

Desk Configuration

NOTE: The desk configuration is the default option.

Wall Configuration

To position the cradle for the Wall Configuration follow the steps below:

1. Remove the Magnet Group by leveraging with a flat end screwdriver.

2. Rotate the Magnet Group by bringing the “W” symbol upward.

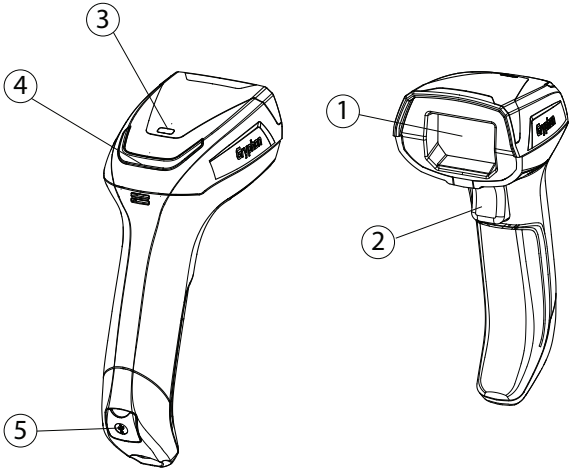
3. Insert again the Magnet Group in the slot on the cradle.

NOTE: If you want to restore the desk position, follow the procedure in the reverse order.

READER, CRADLE AND LEDS DESCRIPTION

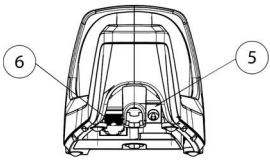
LEDs on the gun provide information about the battery charging status as well as data transmission.

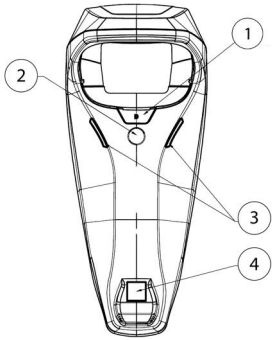
Figure 4 - Gryphon Base LEDs



1. Scan Window
2. Trigger
3. Battery & Recharge LED
4. Good Read LED
5. Communication Port

NOTE: The recharge LED is only active when charging via a USB cable directly connected to the gun; it is not active when charging on the cradle.





1. Desk/Wall selector
2. Service button
3. Power and charger LED
4. Radio-Link Label
5. Aux Power Port
6. Communication Port

NOTE: The base charging station, if wall mounted, must be installed at a maximum height of 2 m.

NOTE: See Wall Configuration, starting on page 8 for details on the Desk/Wall Selector instructions.

CONNECTING THE BASE STATION

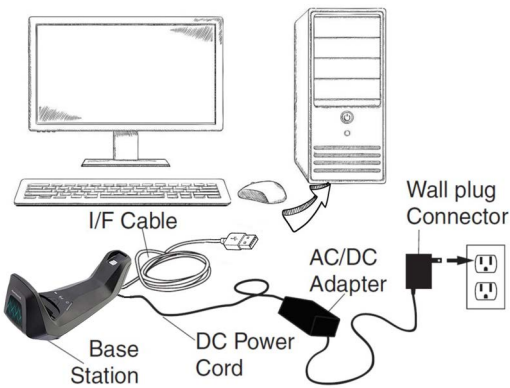
Figure 5 shows how to connect the Base Station to a terminal, PC or other host device. Turn off the host before connection and consult the manual for that equipment (if necessary) before proceeding. Connect the interface cable before applying power to the Base Station.

NOTE: The Gryphon GBT/GM4600 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 is recommended for full recharging capability (see "Technical Specifications" on page 39 for more details).

Base Station Connection and Routing —

1. First insert the Interface (I/F) Cable connector into the port in the underside of the Base Station.
2. Insert the Power Cable into the Base Station, connect it to the AC Adapter, then plug the AC power cord into the wall outlet.

Figure 5 - 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, as shown in :

Figure 6 - Options for routing the DC cord to the front

or fed directly out the back of the Base Station, as shown below:

Figure 7 - Options for routing the DC cord to the bottom

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 8.

Figure 8 - Connecting to the Host

Power Connection —

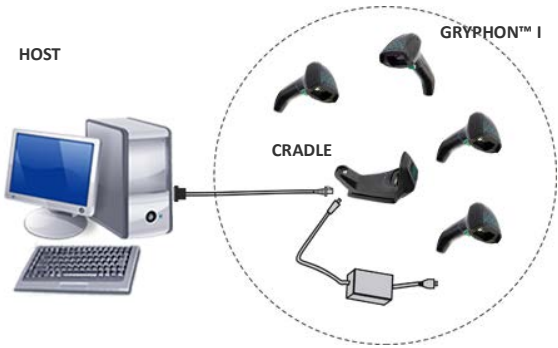
1. First plug the cable into the interface port.
2. Then plug the AC Adapter into an approved AC wall socket with the cable facing downwards (as shown in Figure 5) to prevent undue strain on the socket.

SYSTEM AND NETWORK LAYOUTS

Stand Alone Layouts

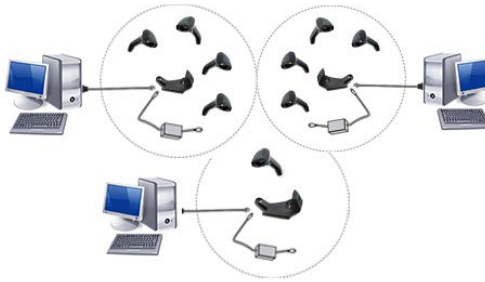
Figure 9 - Single Reader Layout

Figure 10 - Multiple Reader Layout



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

Figure 11 - Multiple Stand Alone Layout



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

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 on page 17) will indicate the status of the battery.

NOTE: The Gryphon GBT/GM4600 may get warm during charging: this is normal and does not mean a malfunction.

NOTE: Before using the battery, read "Battery Safety" on page 50. Datalogic recommends annual replacement of rechargeable battery packs to ensure maximum performance.

NOTE: After first battery insertion or after long time of scanner inactivity it could be necessary a recharge cycle to re-activate the scanner.

THE GBT/GM4600 SCANNER

Scanner LEDs

Specific LEDs on the Gryphon Scanner provide information about: good reading result (3GL), battery status and charging status (with micro USB only). The Battery Status information can be easily retrieved by double-tapping with your fingers on top of the head of the scanner. The following table explains the main colors' combinations provided by the Battery Status LED.

Table 1 - Battery LED

COLOR		BATTERY STATUS
Cradle blinking color (1s ON - 1s OFF)	Green (charge = 50% - 99%) Amber (charge = 2% - 49%)	Charge in Progress
Cradle blinking color (100ms ON - 1900ms OFF)	Amber (charge less than 1%) NOTE: scanner unusable	Charge in Progress
Cradle solid Green (charge = 100%)	It goes **OFF** when Scanner is unplugged	Charge Complete
Gun double tap behaviour solid color (3s time-out)	Green (charge = 50% - 100%) Amber (charge = 2% - 50%) Red blinking (it activates automatically below the 2%)	Battery Status
Gun Red Blinking	(1s ON 9s OFF)	Battery Status

THE WLC4090 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 2 - Radio Base LEDs

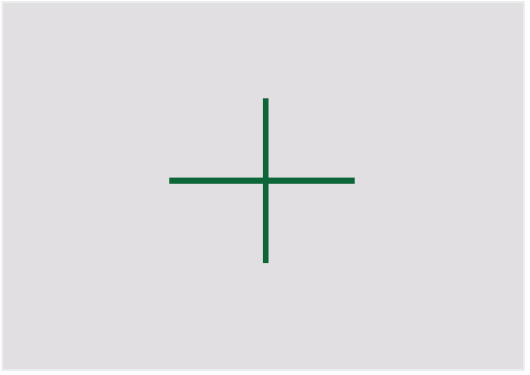
LED		STATUS
1	Power ON / Data	Green On = Base is powered Green Blinking = Base receives data and commands from the Host or the Reader.
2	Charging	Green On = the battery is completely charged Green fading = battery level 51 to 99% Amber fading = battery level 1 to 50% Red fading = pre-charge

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 GD/GM/GBT 4600 Product Reference Guide (PRG) for a more detailed explanation.

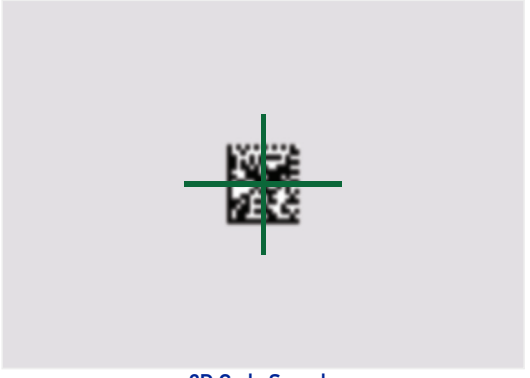
USING THE GRYPHON™ I GBT/GM4600

The Gryphon™ I GBT/GM4600 reader normally works by capturing and decoding codes. It is equipped with an internal Motionix™ motion-sensing function which activates the aiming system on device motion.

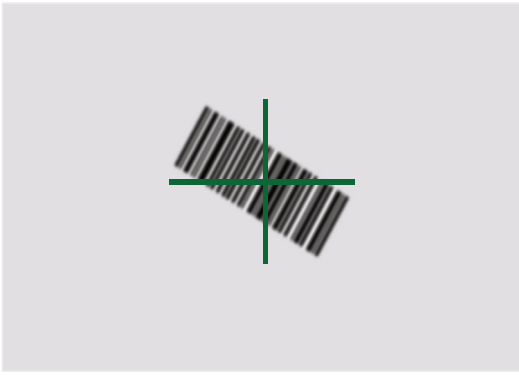
Aiming System



Relative Size and Location of Aiming System Pattern



2D Code Sample

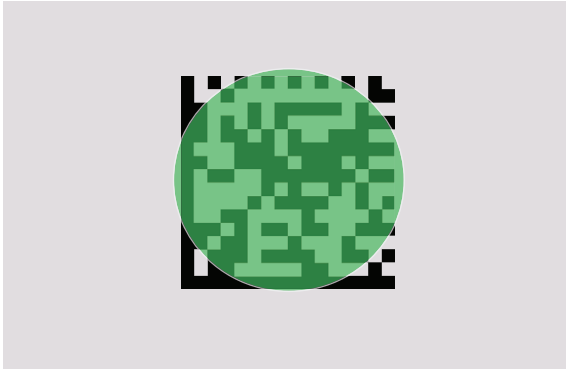


1D Linear Barcode Sample

Symbologies with smaller bars or elements (mil size) should be read closer to the unit. Symbologies with larger bars or elements (mil size) can be read farther from the unit. If the aiming system is centered and the entire bar code is centered on the cross, you will get a good read. Successful reading is signaled by an audible tone plus a good-read green spot feedback projected on the code read.

Refer to the Gryphon I GD/GM/GBT 4600 Product Reference Guide (PRG) for more information about this feature and other programmable settings.

Relative Size and Location of Green Spot



LINKING THE READER

Link Datalogic Devices to Base

Before configuring the interface, it is necessary to link the handheld with the base.

To link the handheld and the base, simply put it into the base.

If the reader was previously linked to another base:

1. you must first scan the **Unlink** bar code before re-linking it to the new base.

Unlink

2. Or scan the label on the base station.

Link Scanner as Serial Device to a Bluetooth Host

Use this procedure to let the scanner communicate with a Bluetooth host using the Bluetooth Serial Port Profile (SPP).

1. If using a Bluetooth adapter on the host device, install any driver provided with the adapter.

2. Scan the **Link to Host in SPP mode** label below to make the scanner visible to the host device.

3. Use the Bluetooth manager of the host device to “Discover new devices” and select "GBT4600...". If you receive an error message, it may be necessary to change the security settings on either the host device or the scanner.

4. Use an RS-232 terminal program to see incoming data on the port designated by the Bluetooth manager of the host device.

Link to Host in SPP Mode

Link Scanner as HID device to a Bluetooth host

Use this procedure to send data to a Bluetooth host using the Bluetooth HID profile.

1. If using a Bluetooth adapter on the host device, install any driver provided with the adapter.

2. Scan the **Link to Host in HID mode** label below to make the scanner visible to the host device.

3. Use the Bluetooth manager of the host device to "Discover new devices" and select "GBT4600 ...". If you receive an error message, it may be necessary to change the security settings on either the host device or the scanner.

4. On the host device, open the program that is meant to receive the incoming data.

The data transmitted by the scanner will appear in the program as if it was typed using the keyboard of the host device.

Link to Host in HID mode

NOTE: The Gryphon I GBT4600 can be set up to authenticate the remote system when connecting, by entering a Bluetooth passkey or a PIN code. If you want to set the security level and authentication options suitable for your application, or when adding new equipment to a system that requires authentication or uses a custom security PIN, please see the PRG for information.

POWER OFF

Scan the bar code below to shut off power to the hand-held until the next trigger pull.

Power Off

NOTE: After long time of scanner inactivity it could be necessary a recharge cycle to re-activate the scanner.

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 GD/GM/GBT 4600 Product Reference Guide (PRG), available online at www.datalogic.com.

Interface Selection

The reader will support all the following host interfaces:

- USB Composite (Keyboard + COM)
- USB HID POS
- USB Toshiba TEC
- USB (Keyboard, COM, OEM)
- RS-232 STD[1]
- RS-232 WN[1]

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 GD/GBT/GM4600 PRG.

1. GD4690 models only (USB and RS-232 Multi-interface)

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.

USB-COMPOSITE

★ Select USB-Composite
★ USB-Composite (Keyboard + COM)

USB-OEM

Refer to the PRG or Aladdin for USB-OEM
(can be used for OPOS/UPOS/JavaPOS)

USB-COM[a]

Select USB-COM
USB-Com to simulate RS-232 standard interface

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

★ = default value

USB FOR TERMINALS

Select USB HID POS

Select USB Toshiba TEC

USB FOR MAGELLAN SCANNERS

Select USB for Magellan Scanners

RS-232

Select RS232-STD
RS-232 standard interface

Select RS232-WN
RS-232 Wincor-Nixdorf

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

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)

Scancode Tables

Refer to Gryphon I GD/GBT/GM4600 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 GD/GBT/GM4600 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 31, 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 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 23 for more information.

Reset Default Settings

READING PARAMETERS

Move the reader toward the target and center the aiming pattern and illumination system to capture and decode the image. See "Using the Gryphon™ I GBT/GM4600" on page 19 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 GD/GBT/GM4600 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

Set the Illuminator Color

The dual-color LED illumination system, offering user-selectable warm white or red light, allows seamless adaptation to any application on the fly.

White illumination improves decoding of colored barcodes, enhances image capture, and is ideal for customer-facing tasks.

Red illumination delivers superior performance in most applications and fully supports Digimarc®.

SET THE ILLUMINATOR COLOR
 **Red**
 **White**

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 Time[1] 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 Time[1] expires. Reading a label does not disable scanning. Double Read Timeout[1] 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 Time[1] expires. Reading a label does not disable scanning. Double Read Timeout[1] 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 Time[2]. Double Read Timeout[1] prevents undesired multiple reads.

Always On - The illuminator is always ON and the reader is always ready for code reading. Double Read Timeout[1] 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. Scanning continues until a label is read or Scanning Active Time[1] 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

Scan Mode Flashing[a]

Scan Mode Always ON

Object Detection

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

★ = default value

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 green 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.

CONFIGURATION FOR BEDSIDE POINT OF CARE (BPOC) APPLICATIONS

BEDSIDE POINT OF CARE (BPOC) configurations apply a predefined set of hospital-specific barcodes and enable several related features, such as the low-volume setting.

CONFIGURATION FOR BESIDE POINT OF CARE
 BPOC

TECHNICAL SPECIFICATIONS

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

PHYSICAL CHARACTERISTICS	
Color	Black White
Dimensions	Gun only (LxWxH): 180 x 79 x 65 mm (7.09" x 3.11" x 2.56") Cradle only (LxWxH): 203 x 91 x 84 mm (7.99" x 3.58" x 3.31")
Weight	Approx. 218 g (7.7 oz.) GBT4600 and battery pack included Battery Pack is approx. 65 g (2.29 oz.) LiCap 41 g (1.4 oz.)
ELECTRICAL CHARACTERISTICS	
Power Supply (WLC4690)	5V to 14V +/-5% in the Communication Port 5V to 14V +/-5% in the Aux Power Port[a]
Consumption (Typical)	Gun Only: 330 mA @ 3,7V(Operative) Cradle Only: 100mA @5V - 55mA @12V Cradle with Gun in Charge (Scan while Charging): 475 mA (PC host USB) 1000 mA (5V on Aux Power Port) 700 mA (12V on Aux Power Port) Gun Charging via micro USB: 500 mA (PC host port, no Scan)
Power Pack	Battery Pack: Li 3.6V, 3250 mAh (11.7W/h) Super Cap Pack: 3,4V 1000F
Recharge Time (Typical)	BATTERY PACK - Values refers to a fully depleted pack. Using USB 5V port: From empty to full: approx. 11h (no Scan) From 10% to 80%: approx. 8,0h (no Scan) Using Aux Power Port 12V: From empty to full: approx. 3,5h From 10% to 80%: approx. 2,0h SUPERCAP PACK - Values refers to a fully depleted pack. Using USB 5V port: From empty to full: approx. 50minutes (no Scan) From 10% to 80%: approx. 35 minutes (no Scan) Using Aux Power Port 12V: From empty to full: approx. 15minutes (no Scan) From 10% to 80%: approx. 7 minutes (no Scan)
Max. Scan Rate	60 frames/sec
Reading Indicators	Beeper (adjustable tone); Good-read feedback: Datalogic 'Green Spot' on the Code; Good-read LED; Vibration feedback

a. Aux Power Port is recommended when long cables are connected to Communication Port

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)
Tumble Specification	Designed to withstand 2,000 1.5 ft./0.5 m tumbles
Trigger Resistance	Withstands 10 Mhits
ESD Protection	16 KV
Protection Class	IP52
Cable Length	Refer to www.datalogic.com
OPTICAL CHARACTERISTICS	
Imager Sensors	High Performance models (HP, dual sensor): 1.5 Megapixel (1360 x 1120 pixels) + VGA (640 x 600 pixels)
Illumination System	Illumination: dual color Warm White or Hyper Red LED (user selectable) IEC 62471 Exempt Risk Group
Aiming System	LED Green central cross IEC 62471 Exempt Risk Group
Ambient Light	Up to 110,000 lux
Tilt Tolerance[a]	0° - 360°
Pitch Tolerance[a]	± 65°
Skew Tolerance[a]	± 65°
Field of View[a]	HP: dual sensor (47° x 40° and 22° x 20°)
PCS (Datalogic Test Chart)	minimum 15%

a. Based on ISO 15423 specifications.

DOF - DEPTH OF FIELD (TYPICAL)[a]	
Symbology	**HP models (High Performance)**
Code 39	3 mils: 2.5 - 20 cm (1.0" - 7.9") 5 mils: 0.5 - 35 cm (0.2" - 13.8") 10 mils: 0[b]- 60 cm (0.0" - 23.6") 20 mils: 0[b] - 125 cm (0.0[b]" 49.2")
Code 128	3 mils: 3.5 - 14.5 cm (1.3" - 5.7") 5 mils: 1.5 - 30 cm (0.5" - 11.8") 7.5 mils: 0[b] - 46 cm (0.0" - 18.1") 15 mils: 0[b] - 90 cm (0.0" - 35.4")

EAN 13	13 mils: 0[b] - 100 cm (0.4" - 39.3")
PDF 417	5 mils: 2.5 - 17 cm (0.9" - 6.6") 6.7 mils: 1 - 24.5 cm (0.3" - 9.6") 10 mils: 0.5[b] - 38.5 cm (0.2"-15.1")
Data Matrix	5 mils: 3.5 - 10 cm (1.3" - 3.9") 7.5 mils: 2 - 20 cm (0.7" - 7.8") 10 mils: 0.5[b] - 29.5 cm (0.2"-11.6") 15 mils: 0.5[b] - 44 cm (0.2" - 17.3")
QR	10 mils: 0.5[b] - 25 cm (0.2" - 9.8") 20 mils: 0.5[b] - 51 cm (0.2" - 20")
Resolution (Maximum)	1D Linear: 0.077 mm / 3 mils PDF417: 0.077 mm / 3 mils Data Matrix: 0.102 mm / 4 mils

a. Label size, printing resolution, contrast, and ambient light dependent. All labels grade A. 13 mils DOF based on EAN. Typical environmental light, 20°C.
b. Minimum distance determined by symbol length and scan angle.

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/GM4600 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; GSI Databar Composites; Chinese Sensible Code; Inverted 2D codes[b].

a. It is acceptable to handle this with ULE
b. 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

RADIO CHARACTERISTICS			
Wireless Technology	Star™ 910 MHz	Star™ 433 MHz	Bluetooth
Range (in open air)	50 m	50 m	100 m
Max number of devices per base station	16		7

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).

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

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 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 GM/GBT4600 HC (white) models:

PRODUCT	CHEMICAL CONTENT
Sani-Cloth® HB, Sani-Cloth® Plus, Super Sani-Cloth®	Quaternary Ammonium Chloride solution
Hepacide Quat II	Virucidal disinfectant cleaner
Alcohol Wipes	70% Isopropyl Alcohol
CaviWipes™	Isopropanol 10-20%; Ethylene Glycol Monobutyl Ether 1-5%

PRODUCT	CHEMICAL CONTENT
Virex® 256	n-Alkyl Dimethyl Benzyl Ammonium Chloride; Didecyl Dimethyl Ammonium Chloride
Formula 409® Glass and Surface Cleaner	n-Alkyl Dimethyl Benzyl Ammonium Chloride; n-Propoxypropanol
Windex® Blue	Isopropyl Alcohol
Clorox® Bleach; Clorox Healthcare Bleach Germicidal Cleaner	Sodium Hypochlorite; Sodium Hydroxide
Hydrogen Peroxide	3%
ProSpray™ Wipes (Disinfectant towelettes)	0.647% o-phenylphenol; 0.070% o-benzyl-p-chlorophenol
100% Gentle dish soap and water	

The cleaners and disinfectants listed below are recommended for use on Datalogic GM/GBT4600 HC (black) models:

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.

REPLACING THE BATTERY PACK

NOTE: Before proceeding, read "Battery Safety" on page 50. Datalogic recommends replacing rechargeable battery packs after few years of use to ensure optimal performance.

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

1. With a narrow metallic object (i.e. a coin) or a screwdriver, unscrew the battery cover screw.

2. Extract the battery pack from its slot.

3. Insert the new battery in the same position.

4. Replace the battery holder cap, plug in the connector and return the contacts circuit to its previous location.

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

NOTE: After first battery insertion or after long time of scanner inactivity it could be necessary a recharge cycle to re-activate the scanner.

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

6. If the gun doesn't turn on, place it on the cradle.

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.

WARNING: Fire or explosion hazard if battery is replaced with an incorrect model.

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.

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 **three 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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WLC4690 CART CLIP

General Features

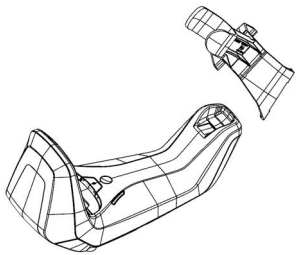
The WLC4690 Cart Clip is an attachable accessory for the Gryphon 4600 WLC4690 base station. It provides a secure mechanical hold for the reader, offering enhanced retention that makes it ideal for medical carts, self-checkout systems, and other wall-mounted setups..

Video Tutorial

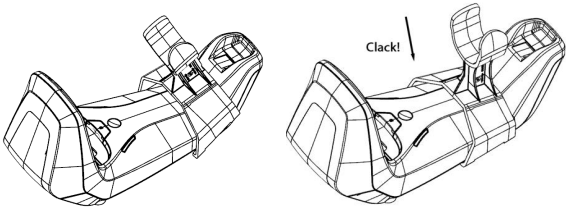
Mounting Instructions

Mounting Option 1

1. Insert the cart clip into the base station as shown below.

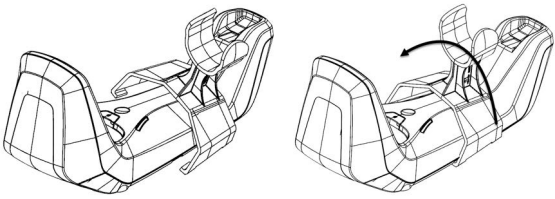


2. Slide the cart clip into the matching slots on the base station.

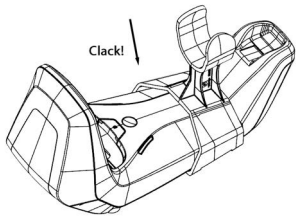


Mounting Option 2

1. Directly attach the cart clip to the base station.



2. Secure the cart clip into the matching slots on the base station.



WLC4690 BRACKET ADAPTER (COMPATIBLE WITH WLC4190 MOUNTING SYSTEM)

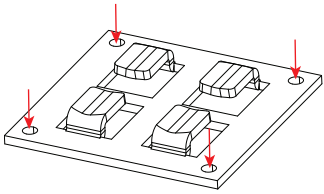
General Features

The WLC4690 Bracket Adapter is an attachable accessory for the Gryphon 4600 WLC4690 base station. It enables the use of the same mounting system (with a metal plate) as the previous generation of Gryphon base stations..

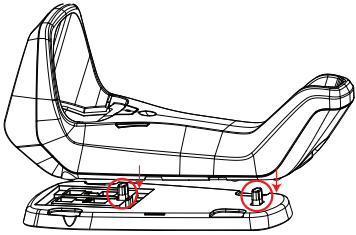
Video Tutorial

Mounting Instructions

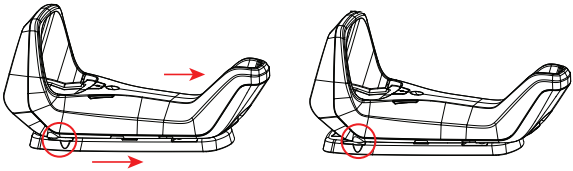
1. Secure the metal bracket in the desired position using 4 screws.



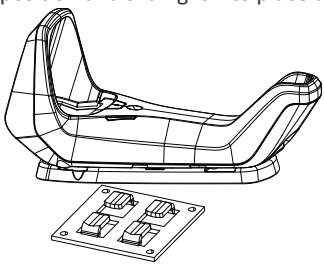
2. Secure the cradle into the two hooks of the accessory.



3. Slide the cradle on the accessory until you hear a click and can see that they are properly aligned, as shown in the circle below.



4. Attach the WLC4690 base station, together with the accessory, to the metal bracket by aligning it in the correct position and sliding it into place until it locks.



WLC4690 PRESENTATION MODE ENABLER AND BRACKET ADAPTER

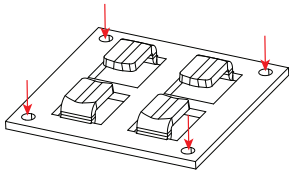
General Features

The WLC4690 Presentation Mode Enabler and Bracket Adapter is an attachable accessory for the Gryphon 4600 WLC4690 base station. It enables compatibility with the same metal-plate mounting system used in previous generations of Gryphon base stations. In addition, it allows barcode reading while the scanner is docked, offering four selectable positions through its dedicated adjustment mechanism.

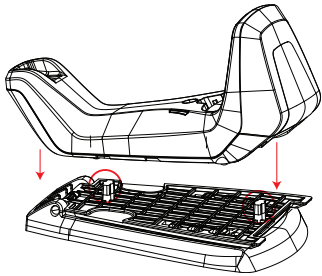
Video Tutorial

Mounting Instructions

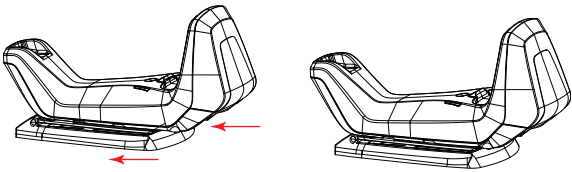
1. Secure the metal bracket in the desired position using 4 screws.



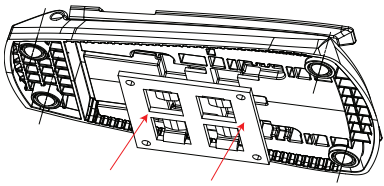
2. Secure the cradle on the 2 hooks of the accessory.



3. Slide the cradle on the accessory until you hear a click and can see that they are properly aligned, as shown in the circle below



4. Fix the WLC4690 base station, together with the accessory, to the metal bracket by aligning it in the correct position and sliding it into place until it locks



Standing Positions

Lower the position selector mechanism and lock it in the preferred hooks

Fig. 1 and 2

Fig. 3 and 4

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