# QuickScan™ QBT/QM2500

## QUICK REFERENCE GUIDE



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

# **COLOUATACO**

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# QUICKSCAN™ QBT/QM2500

## **ABOUT THE SCANNER**

The QuickScan<sup>™</sup> 2500 series represents the entry level 2D scanners by Datalogic for general purpose applications. It has been specifically created for small to medium size Retailers, such as groceries and convenience stores, operating in both food and non-food sectors. Providing the quickest response to the operator for its class of products, the 2500 scanner is able to capture whatever barcode, hard-to-read, poorly printed or damaged. It easily scans from mobile devices and through plexiglass barriers. Lightweight and easy to handle, it is a reliable and seamless companion throughout the whole shift.

The QuickScan 2500 scanner features a precise aiming system developed with the unique intent to reduce visual stress of the operator during the daily scanning activities.

This sophisticated, extreme precision aimer, consists of two blue LED triangles pointing at the targeted barcode.

The Green Spot confirms the good read, being perfectly centered on the barcode and between the two triangles.

Very responsive at the pull of the trigger, the QuickScan 2500 provides a superior robustness for its class of products, thanks to an accurate design and quality of parts, right there where the product is mostly stressed.

Perfect for manual reading, the QuickScan 2500 uses Datalogic's Motionix<sup>™</sup> motion detection technology that detects the operator's natural actions to automatically switch the scanner into "ready to read" scan mode.

The QuickScan<sup>™</sup> 2500 Cordless models include:

QBT2500 - Bluetooth® wireless technology models

QM2500 - Datalogic's STAR Cordless SystemTM models The QuickScan QM2500 Star radio models ensure interference-free communication with low sensitivity to obstacles, avoiding delays and increasing productivity, particularly in busy environments with Bluetooth and Wi-Fi. At the same time, Datalogic confirms its commitment on Bluetooth models – the QuickScan QBT2500 – that provide maximum flexibility and solves most end user applications, by increasing both the autonomy and the radio range.

The QuickScan 2500 Series features the distinctive design and family feeling of the Datalogic general purpose offerings of handheld scanners, providing the latest USB-C connectivity. This offer includes a variety of stands, holders, and accessories to provide associates the best fit in their working environment.

## 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 10).
- 3. Link to the Base Station (see page 13).
- 4. Select the Interface Type (see page 15).
- Configure the Reader starting on page 16 (optional, depends on settings needed)



NOTE: According to recent modification of Regulation for shipping Li-lon 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

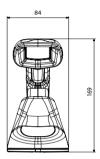
 that battery packs of the stocked products QBT/QM2500 and spare battery pack parts must be periodically recharged. For instance, by using a BC2090 cradle powered up with a 12V Datalogic AC/DC adapter (cod.8-0935) for at least 30 minutes each 3 months or connecting the reader to an USB Type-C cable for the same time.

### **Positioning the Base Station**

The base station/charger may be set up in desk application standalone or with the additional tilting platform, which allows to adjust the inclination of the scanner to provide the most comfortable use depending on the needs.

#### Figure 1 - Presentation Position

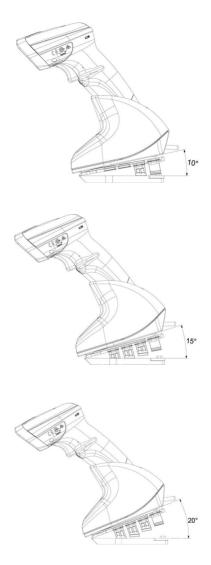




This position is preferred, if the scanner is to be used in stand mode and not needed to be often removed from base station.

#### Figure 2 - Tilting Platform Position





This optional tilting platform allows to adjust the scanner inclination to different angle positions.

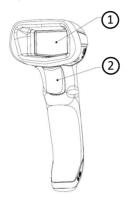
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### Reader, Cradle and LEDs Description

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

#### Figure 3 - QuickScan Reader and Cradle Features

### Description

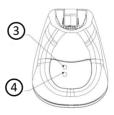


- 1. Scan Window
- 2. Trigger

- 3. Battery & Recharge LED
- 4. USB Port



- 1. Communication Port
- 2. Service Button



- 3. Battery Charging Status LED
- 4. Power LED

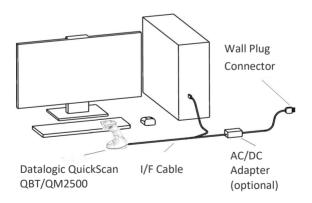
### **Connecting the Base Station**

This section 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.

NOTE: The QuickScan<sup>™</sup> QBT/QM2500 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 28 for more details).

**Base Station Connection and Routing** — Fully insert the Interface (I/F) Cable connector into the port in the underside of the Base Station. Then optionally connect an AC/DC adapter to the proper external power cable to charge the device faster.

#### Figure 4 - Connecting the Base Station



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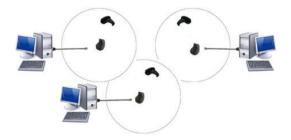
## SYSTEM AND NETWORK LAYOUTS

### **Stand Alone Layouts**

#### Figure 5 - Single Reader Layout



#### Figure 6 - 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.

## **OJOJATACO**

## **USING THE QBT/QM2500 SCANNER**

#### Scanner LEDs

Specific LEDs on the QBT/QM2500 Scanner provide information about: good reading result, battery status and charging status (with USB Type-C 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
Blinking color (1s ON - 1s OFF)	Green (charge = 50% - 99%) Red (charge less than 1%) <b>NOTE:</b> Scanner is unusable until 1% is reached	Charge in Progress through USB Type-C
Solid Green (charge = 100%)	It goes <b>OFF</b> when Scanner's unplugged	Charge Complete through USB Type-C
Solid color (3s time-out)	Green (charge = 50% - 100%) Amber (charge = 2% - 50%) Red blinking (charge less than 2%)	Battery Status

## THE BC2090 RADIO BASE

### Radio Base LEDs

LEDs on the QuickScan Base provide information about the Base as well as battery charging status, as shown in Table 2.

#### Figure 7 - QuickScan 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 blinking = battery level 51 to 99% Amber blinking = battery level 1 to 50% Red blinking = 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 QuickScan<sup>™</sup> QBT/QM2500 Product Reference Guide (PRG) for a more detailed explanation.

## **CHARGING THE BATTERIES**

The battery can be charged by connecting the reader directly to a host through the USB Type-C connector available in the bottom of the handle, as shown.



Alternatively, simply insert the QuickScan into the base. When the scanner is fully seated in the cradle, it will make a sound to indicate that the cradle has detected the scanner connection.

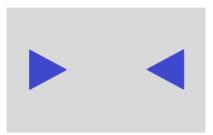
The LEDs on the base (shown in Table 2) will indicate the status of the battery.



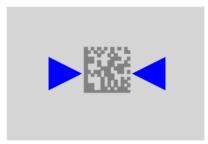
NOTE: Before using the battery, read "Replacing the Battery Pack" on page 38. Datalogic recommends annual replacement of rechargeable battery packs to ensure maximum performance.

## USING THE QUICKSCAN™ QBT/ QM2500

The QuickScan<sup>™</sup> QBT/QM2500 normally functions by capturing and decoding codes. The reader is equipped with an internal Motionix<sup>™</sup> 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 on 2D Matrix Symbol





### Relative Size and Location of Aiming System Pattern on Linear bar code

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.

Refer to the QuickScan<sup>™</sup> QBT/QM2500 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, you must first scan the **Unlink** bar code before re-linking it to the new base.



## 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).

- If using a Bluetooth adapter on the host device, install any driver provided with the adapter.
- Scan the Link to Host in SPP mode label below to make the scanner visible to the host device.
- Use the Bluetooth manager of the host device to "Discover new devices" and select "QBT2500...".
  If you receive an error message, it may be necessary to change the security settings on either the host device or the scanner.
- 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

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### Link Scanner as HID device to a Bluetooth host

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

- 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.
- Use the Bluetooth manager of the host device to "Discover new devices" and select "QBT2500 ...". 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 QuickScan QBT2500 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 handheld until the next trigger pull.



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## 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 QuickScan QBT/QM2500 Product Reference Guide (PRG), available online at www.datalogic.com.

### Interface Selection

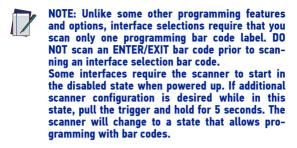
The reader will support all the following host interfaces:

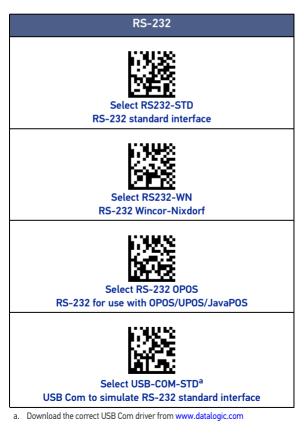
- RS-232 STD
- RS-232 WN
- IBM46XX port 9b (a specific cable is required)
- USB HID POS
- USB Toshiba TEC
- USB (Keyboard, COM, OEM)
- USB Composite (Keyboard + COM)

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 QuickScan<sup>™</sup> QBT/QM2500 PRG.

## CONFIGURING THE INTERFACE

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









## **Keyboard Interface**

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



★ = default value

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

#### Scancode Tables

Refer to QuickScan QBT/QM2500 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 (CONTINUED)



Country Mode = French Canadian\*



Country Mode = Germany



Country Mode = Hungary\*



Country Mode = Italy



Country Mode = Japanese 106-key\*



Country Mode = Lithuanian\*



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### 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 QuickScan<sup>™</sup> QBT/QM2500 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 23, 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 15 for more information.



## 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 QuickScan™ QBT/QM2500" on page 11 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.

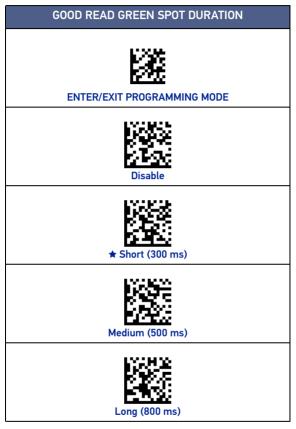
As you read code symbols, adjust the distance at which you are holding the reader.

### **Aiming System**

A number of options for customizing control of the Aiming System are available. See the QuickScan™ QBT/QM2500 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.



★ = default value

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## **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<sup>1</sup> 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<sup>1</sup> expires. Reading a label does not disable scanning. Double Read Timeout<sup>1</sup> 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<sup>1</sup> expires. Reading a label does not disable scanning. Double Read Timeout<sup>1</sup> 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<sup>2</sup>. Double Read Timeout<sup>1</sup> prevents undesired multiple reads.

Always On – The illuminator is always ON and the reader is always ready for code reading. Double Read Timeout<sup>1</sup> 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 Time<sup>1</sup> expires.

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

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

### SCAN MODE



#### ENTER/EXIT PROGRAMMING MODE





**Trigger Hold Multiple** 



Trigger Pulse Multiple



Scan Mode Flashing<sup>a</sup>



Stand Mode

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

★ = default value

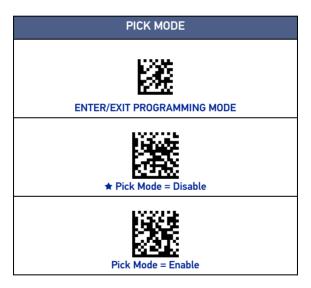


### PICK MODE

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 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.



★ = 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	
Dimensions	Gun only (lhp): 68 x 159 x 107mm (6.25" x 4.2" x "2.7") Cradle only (lhp): 84 x 83 x 119mm (4.7" x 3.3" x 3.3") Gun on Cradle (lhp): 84 x 170 x 144mm (6.7" x 5.7" x 3.3")	
Weight	QBT/QM2500 and battery pack included is approx. 206.5g (7.3 oz.). Battery Pack is approx. 71g (2.50 oz.) BC2090 is approx. 148.5g (5.2 oz.)	
ELECTRICAL CHARACTERISTICS		
Power Supply	Gun TypeC Port: 5V +/- 5% Cradle Port: 4.5V to 14V	
Consumption (Typical)	Cradle Only: 45mA @5V (Operating) Cradle with gun during recharge: 500mA (5V USB Host Power Supply) 1100mA (5V Type-C Host Power Supply) 500mA (12V External Power Supply) Gun charging through Type-C port: 500mA (USB Type-A Host port, no Scan) 1040mA (Wall Adapter, no Scan) 1040mA (USB Type-C Host port, no Scan)	
Battery Capacity	Li-lon 3.6V, 3250mAh (11.7 W/h)	
Recharge Time (Typical)	Gun Only: - USB Type-A Host to Type-C connector: 5h 30m - USB Wall Adapter to Type-C connector: 3h -USB Type-C Host to Type-C connector: 3h Gun on Cradle: - USB Type-A Host: 8h - External 12V Power Supply: 4h - USB Type-C Host: 4h	
Max. Scan Rate	60 frames/sec	
Reading Indicators	Top illumination, Good Read Spot, Beep	

ENVIRONMENTAL CHARACTERISTICS		
Operating Tempera- ture	0 °C to + 50 °C (+32° F to +122 °F)	
Storage Temperature	-40 °C to + 70 °C (-40 ° F to +158 °F)	
Humidity	0 - 95% non condensing	
Drop Resistance	IEC 60068-2-31 Tested 1,5 m (4,9 ft)	
ESD Protection	16 KV	
Protection Class	IP52	
Cable Length	Refer to www.datalogic.com	
OPT	ICAL CHARACTERISTICS	
Optical Format	1/4"	
Active Imager Size	3896 um (H) x 2453 um (V)	
Active Pixels	1280 H x 800 V	
Illumination System	LED source Red Emission (wavelength - 617 nm)	
Aiming System	LED source Blue Emission (wavelength - 468nm)	
Ambient Light	Up to 110,000 lux	
Tilt Tolerance	0° - 360°	
Pitch Tolerance	± 65°	
Skew Tolerance	± 65°	
Field of View	35° x 22°	
PCS (Datalogic Test Chart)	minimum 15%	

DUF - DEPTH OF FIELD (TTPICAL)		
Symbology	DOF Range	
Code 39	5 mil: 0.5 - 25.0 cm (0.19" - 9.8") 10 mil: 0.5 - 38 cm (0.19" - 14.9")	
EAN13	13 mil: 0.5 - 51.0 cm (0.19" - 20.1")	
PDF417	6.7 mil: 0.5 - 21.0 cm (0.19" - 8.3")	
Datamatrix	10 mil: 0.5- 21.5 cm (0.19" - 8.5")	
Code 128	5 mil: 2 - 21.5 cm (0.8" - 8.5")	
QR Code	20 mil: 0- 37 cm (0" - 14.6")	

Datamatrix Min = 5 mil

a. All labels grade A, typical environmental light, 20°C, label inclination 10°

1D Min = 3 mil

PDF417 Min = 3 mil

Max Resolution

(

E

#### 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 (IP (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 QuickScan™ QBT2500 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<sup>a</sup>; CS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; GS1 DataBar Expanded Stacked; GSI DataBar Composites; Chinese Sensible Code; Inverted 2D codes<sup>b</sup>.

- 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 (Line Of Sight)	30 m	30 m	50 m
Max number of devices per base station	1 1		

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### 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 inter- face, 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 indi- cation is configurable using Aladdin utility.	One beep at current fre- quency, volume, mono/ bi-tonal setting upon a successful label scan.
ROM Failure	200ms on / 200ms off	Imager sounds one error beep at highest volume for 200 ms.
Limited Scanning Label Read	N/A	Imager 'chirps' six times at the highest frequency and current volume.
Imager Disabled	The LED blinks continu- ously 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	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 is not decoded.	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.

THE DATALOGIC WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, DATA-LOGIC SHALL NOT BE LIABLE FOR ANY DAMAGES SUSTAINED BY BUYER ARISING FROM DELAYS IN THE REPLACEMENT OR REPAIR OF PRODUCTS UNDER THE ABOVE. THE REMEDY SET FORTH IN THE WARRANTY STATE-MENT IS THE BUYER'S SOLE AND EXCLUSIVE REMEDY FOR WARRANTY CLAIMS. NO EXTENSION OF THIS WARRANTY WILL BE BINDING UPON DAT-ALOGIC UNLESS SET FORTH IN WRITING AND SIGNED BY DATALOGIC'S AUTHORIZED REPRESENTATIVE. DATALOGIC'S LIABILITY FOR DAMAGES ON ACCOUNT OF A CLAIMED DEFECT IN ANY PRODUCT DELIVERED BY DATA-LOGIC SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PRODUCT ON WHICH THE CLAIM IS BASED. DATALOGIC SHALL NOT BE LIABLE FOR DAMAGES RELATING TO ANY INSTRUMENT, EQUIPMENT, OR APPARATUS WITH WHICH THE PRODUCT SOLD UNDER THIS AGREEMENT IS USED. Further details on warranty coverage, rights and conditions are addressed under and regulated by the Terms and Conditions of Sales of Datalogic available at https://www.datalogic.com/terms\_conditions\_sales.

### 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  $\mbox{Q}$ , 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**

A periodic deeper cleaning is suggested once per month.

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 QuickScan 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's Quickscan QBT/QM2500 Enclosures:

CLEANERS	DISINFECTANTS
Formula 409® Glass and Surface Cleaner	Clorox® Bleach (diluted 10:1)
70% Isopropyl Alcohol	Hydrogen Peroxide 3%
Windex <sup>®</sup> Multi-Surface	
100% Gentle dish soap and water	





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

- 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.
- Use the cloth to wipe down the surface of the unit. Use cotton swabs, lightly moistened, to reach in corners and crevices.
- Use another clean dry cloth to remove any residue of the cleaning agent and ensure the unit is dry.





### **Cleaning electrical contact surfaces**

Refer to the QuickScan<sup>™</sup> QBT/QM2500 Product Reference Guide (PRG) for details on this topic.

## **REPLACING THE BATTERY PACK**

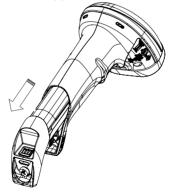
#### NOTE: Before using the battery, read "Replacing the Battery Pack" on page 38. Datalogic recommends annual replacement of rechargeable battery packs to ensure maximum performance.

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

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



2. Extract the battery pack from its slot.



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3. Insert the new battery pack in the same position.



4. Screw it into place.



### **Battery Safety**

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

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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.



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