⊕DATALOGIC

QuickScan™ QD2430

General Purpose Corded
Handheld Area Imager
Bar Code Reader

Quick Reference Guide

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

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NOTES

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QuickScan™ QD2430

Description

The QuickScan™ QD2400 2D imager has been specifically created to meet the market demand for omni-directional reading performance on virtually all codes at an affordable price. Elegant design details are incorporated into a smaller, balanced lightweight enclosure without sacrificing Datalogic's well-known durability.

Ideally suited for applications at the point-of-sale (POS), the QuickScan QD2400 imager features a new illumination and aiming system developed with the unique intent to reduce visual stress of the operator during the daily scanning activities. It consists of a soft, dark red illumination combined with two blue LED triangles pointing at the targeted bar code. The result is a precise aiming system which contributes to low eye fatigue, yet still allows top operator efficiency.

Constructed with a combination of design and performance-based ideals such as bar code reading snappiness, motion tolerance, perfect ergonomics and an attractive price, this 2D imager is the ideal solution for the customer who is looking to replace their linear only reading scanners with image-based technology.

Omni-Directional Operating	To read a symbol simply aim the reader and pull the trigger. The QuickScan™ QD24XX imager is a powerful omni-directional reader, so the orientation of the symbol is not important. Datalogic's exclusive patented 'Green Spot' for good-read feedback helps to improve productivity in noisy environments or in situations where silence is required. When using the product with the cradle at a 45° position, the aiming pattern can work as an aiming system to aid in positioning the bar code for quick and intuitive reading.
Decoding	Reliably decodes all standard 1D (linear) and 2D bar codes, including GS1 DataBar™ linear codes, Postal Codes (China Post), Stacked Codes (such as GS1 DataBar Expanded Stacked, GS1 DataBar Stacked, GS1 DataBar, Stacked Omnidirectional). The data stream — acquired from decoding a symbol — is rapidly sent to the host. The reader is immediately available to read another symbol.

Setting Up the Reader

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

1. Connect the Cable to the reader and the Host.
2. Configure the Interface (see page 5).
3. Configure the Reader starting on page 13 (optional, depends on settings needed).

Connect/Disconnect Cable to Reader

Figure 1. Connecting to the Reader
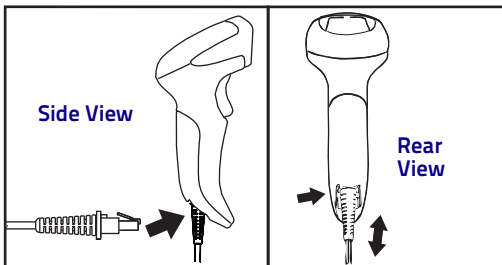
Host Connection — The QuickScan plugs directly into the host device as shown in Figure 2. The power can also be supplied through an external power supply via the Interface Cable supplied with a power jack.

Figure 2. Connecting to the Host

Using the Quickscan™ QD24XX

The Quickscan™ QD24XX normally functions by capturing and decoding codes. The aiming system is activated on trigger pull and indicates the center of the field of view which should be positioned over the bar code:
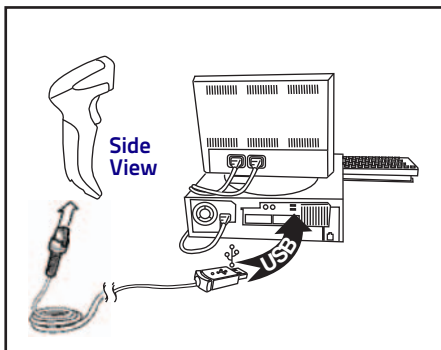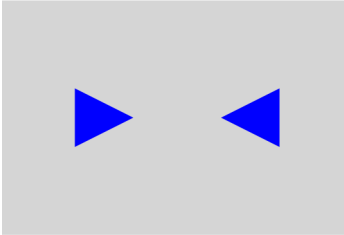
Aiming System

Relative Size and Location of Aiming System Pattern
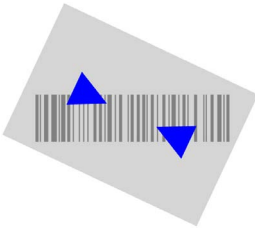
Linear bar
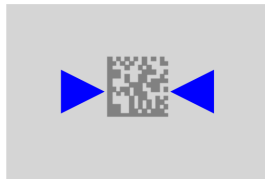
2D Matrix symbol

A beam illuminates the label. The projected pattern of 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 you will get a good read. Successful reading is signaled by an audible tone plus a good-read green spot LED indicator.

Reference the QuickScan QD24XX Product Reference Guide (PRG) on the Datalogic website for more information about this feature and other programmable settings.

Selecting the Interface Type

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

Interface Selection

The reader model will support one of the following sets of host interfaces:

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

Retail Point of Sale Models — RS-232, RS-232 OPOS, USB. 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 QD2430 PRG.

Configuring the Interface

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

NOTE

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

Some interfaces require the scanner to start in the disabled state when powered up. If additional scanner configuration is desired while in this state, pull the trigger and hold for 5 seconds. The scanner will change to a state that allows programming with bar codes.

RS-232
RS-232 standard interface   Select RS232-STD
RS-232 Wincor-Nixdorf   Select RS232-WN
RS-232 for use with OPOS/UPOS/JavaPOS   Select RS-232 OPOS

RS-232 (continued)

USB Com to simulate RS-232 standard interface

Select USB-COM-STD[a]

USB-OEM

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

Select USB-OEM

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

Keyboard Interface

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

KEYBOARD

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

Select KBD-AT

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

Select KBD-AT-NK

KEYBOARD (continued)

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

Select KBD-AT-ALT

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

Select KBD-AT-ALT-NK

PC/XT w/Standard Key Encoding

Select KBD-XT

Keyboard Wedge for IBM Terminal 3153

Select KBD-IBM-3153

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

Select KBD-IBM-MB

KEYBOARD (continued)

USB Keyboard with alternate key encoding

Select USB Alternate Keyboard

USB Keyboard for Apple computers

Select USB-KBD-APPLE

Keyboard Wedge for DIGITAL Terminals
VT2xx, VT3xx, VT4xx

Select KBD-DIG-VT

USB Keyboard with standard key encoding

Select USB Keyboard

Scancode Tables

Reference the QuickScan QD2430 PRG for information about control character emulation for keyboard interfaces.

Country Mode

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

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

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

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

COUNTRY MODE (continued)

Country Mode = Croatia*

Country Mode = Czech Republic*

Country Mode = Denmark*

Country Mode = France

Country Mode = French Canadian*

Country Mode = Germany

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

COUNTRY MODE (continued)

Country Mode = Hungary*

Country Mode = Italy

Country Mode = Japanese 106-key*

Country Mode = Lithuanian*

Country Mode = Norway*

Country Mode = Poland*

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

COUNTRY MODE (continued)

Country Mode = Portugal*

Country Mode = Romania*

Country Mode = Spain

Country Mode = Sweden

Country Mode = Slovakia*

Country Mode = Switzerland*

*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 QD24XX 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 13, require only the scan of that single label to enact the change.

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

Configure Other Settings

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

Resetting Product Defaults

If you aren't sure what programming options are in your reader, or you've changed some options and want your custom factory settings restored, scan the bar code below to reset the reader to its initial configuration. Reference 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 4 for more information.

Reset Default Settings

Caps Lock State

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

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

Numlock

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

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

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™ QD24XX on page 3 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 QD24XX 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

Disabled

♦ Short (300 ms)

Medium (500 ms)

Long (800 ms)

Operating Modes

Scan Mode

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

Trigger Single (Default) — This mode is associated with 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 'maximum scan on time"[1] has elapsed
- a label has been read
- the trigger is released

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 'maximum scan on time"[1] has elapsed. Reading a label does not disable scanning. Double Read Timeout[1] prevents undesired multiple reads while in this mode.

Trigger Hold Multiple — When the trigger is pulled, scanning starts and the product scans until the trigger is released or 'maximum scan on time"[1] has elapsed. Reading a label does not disable scanning. Double Read Timeout[1] prevents undesired multiple reads while in this mode.

Always On — The illuminator is always ON and the reader is always ready for code reading. Double Read Timeout[1] prevents undesired multiple reads.

Flashing — The reader illuminator flashes on and off regardless of the trigger status. Code reading takes place only during the Flash On[2] time. 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. If a predefined amount of movement is detected, the red illumination switches on. Scanning continues until a label is read or "maximum scan on time" is reached.

1. See the Product Reference Guide (PRG) for these and other programmable features
2. Controlled by Flash On Time and Flash Off Time. Use the PRG to program these options.

SCAN MODE

♦ Scan Mode = Trigger Single

Scan Mode = Trigger Pulse Multiple

Scan Mode = Trigger Hold Multiple

Scan Mode = Flashing

Scan Mode = Always On

Scan Mode = Object Detection

Pick Mode

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

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

NOTE

PICK MODE
ENTER/EXIT PROGRAMMING MODE
♦ PIck Mode = Disable   Pick Mode = Enable

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.

Item	Description
Physical Characteristics	
Color	Black & white
Dimensions	Height 6.4"/163 mm Length 3.6"/91 mm Width 1.6"/41 mm
Weight (without cable)	Approximately 5.1 ounces/145 g
Electrical Characteristics	
Voltage & Current	Input Voltage: 4.5 - 14.0VDC Operating (typical): 140mA Operating (max): 400mA Idle/standby (typical): 50mA
Performance Characteristics	
Light Source	LEDs
Roll (Tilt) Tolerance	Up to ± 360°
Pitch Tolerance	± 65°
Skew (Yaw) Tolerance	± 60°
Print Contrast Minimum	25% minimum reflectance

Depth of Field (Typical)[a]	
Symbology	
Code 39	5mil: 0.2" - 5.9" (0.5 - 15cm) 10mil: 0" - 8.7" (0 - 22cm) 20mil: up to 16" (40cm)
EAN	7.5mil: 0" - 5.9" (0 - 15cm) 13mil: 0.2" - 13.8" (0.5 - 35cm)
PDF-417	6.6mil: 0.39" - 5.1" (1.0 - 130cm) 10mil: 0" - 8.3" (0 - 21cm) 15mil: 0.2" - 9.5" (0.5 - 24cm)

Symbology	
DataMatrix	10mil: 0.39" - 5.1" (1.0 - 13 cm) 15mil: 0" - 7.1" (0 - 18cm)
QR Code	10mil: 0.2" - 5.1" (0.5 - 13cm) 15mil: 0" - 7.1" (0 - 18cm)
Minimum Element Width	**Standard Range:** 1D Min Resolution = 4 mil PDF-417 Min Resolution = 5 mil Datamatrix Min Resolution = 7.5 mil

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

Decode Capability

1D Bar Codes
UPC/EAN/JAN (A, E, 13, 8); UPC/EAN/JAN (including P2 /P5); UPC/EAN/JAN (including; ISBN / Bookland & ISSN); UPC/EAN Coupons; Code 39 (including full ASCII); Code 39 Trioptic; Code39 CIP (French Pharmaceutical); LOGMARS (Code 39 w/ standard check digit enabled); Danish PPT; Code 32 (Italian Pharmacode 39); Code 128; Code 128 ISBT; Interleaved 2 of 5 ; Standard 2 of 5; Interleaved 2 of 5 CIP (HR); Industrial 2 of 5; Discrete 2 of 5; Matrix 2 of 5; IATA 2of5 Air cargo code; Code 11; Codabar; Codabar (NW7); ABC Codabar; EAN 128; Code 93 ; MSI; PZN; Plessey; Anker Plessey; GS1 DataBar Omnidirectional; GS1 DataBar Limited; GS1 DataBar Expanded; GS1 DataBar Truncated; DATABAR Expanded Coupon.

2D / Stacked Codes
The QuickScan QD24XX scanner is capable of decoding the following symbologies using multiple frames (i.e. Multi-Frame Decoding):

Datamatrix; Inverse Datamatrix; Datamatrix is configurable for the following parameters:; Normal or Inverted; Square or Rectangular Style; Data length (1 - 3600 characters); Maxicode; QR Codes (QR, Micro QR and Multiple QR Codes); Aztec; Postal Codes - (Australian Post; Japanese Post; KIX Post; Planet Code; Postnet; Royal Mail Code (RM45CC); Intelligent Mail 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: Datamatrix, QR, Micro QR, Aztec and Chinese Sensible Code.

Interfaces Supported	RS-232, Keyboard Wedge, USB Com Std., USB Keyboard, USB OEM

User Environment	
Operating Temperature	0° to 50° C (32° to 122° F)
Storage Temperature	-40° to 70 °C (-40° to 158° F)
Humidity	Operating: 0% to 95% relative humidity, non-condensing
Drop Specifications	Scanner withstands 18 drops from 1.5 meters (5.0 feet) to concrete
Ambient Light Immunity	Up to 86,000 Lux
Contaminants Spray/ rain Dust/particulates	IEC 529-IP42 (IP52 QD2430-E model only)
ESD Level	16 KV
Regulatory	SEE REGULATORY ADDENDUM

LED and Beeper Indications

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

Indicator	Description	LED	Beeper
Power-up Beep	The reader is in the process of powering-up.		Reader beeps four times at highest frequency and volume upon power-up.

Indicator	Description	LED	Beeper
Good Read Beep	A label has been successfully scanned by the reader.	LED behavior for this indication is configurable via the feature 'Good Read: When to Indicate' (see the PRG for information.)	The reader will beep once at current frequency, volume, mono/bi-tonal setting and duration upon a successful label scan.
ROM Failure	There is an error in the reader's software/programming	Flashes	Reader sounds one error beep at highest volume.
Limited Scanning Label Read	Indicates that a host connection is not established.	N/A	Reader 'chirps' six times at the highest frequency and current volume.
Reader Active Mode	The reader is active and ready to scan.	The LED is lit steadily[a]	N/A
Reader Disabled	The reader has been disabled by the host.	The LED blinks continuously	N/A
Green Spot[a] flashes momentarily	Upon successful read of a label, the software shall turn the green spot on for the time specified by the configured value.	N/A	N/A

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

Programming Mode

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

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

Error Codes

Upon startup, if the reader sounds a long tone, this means the reader has not passed its automatic Selftest and has entered FRU (Field Replaceable Unit) isolation mode. If the reader is reset, the sequence will be repeated. Press and release the trigger to hear the FRU indication code.

The following table describes the LED flashes/beep codes associated with an error found.

Number of LED Flashes/Beeps	Error	Corrective Action
1	Configuration	Contact Helpdesk for assistance
2	Interface PCB	
6	Digital PCB	
11	Imager	

Cleaning

Exterior surfaces and scan windows exposed to spills, smudges or debris require periodic cleaning to ensure best performance during scanning.
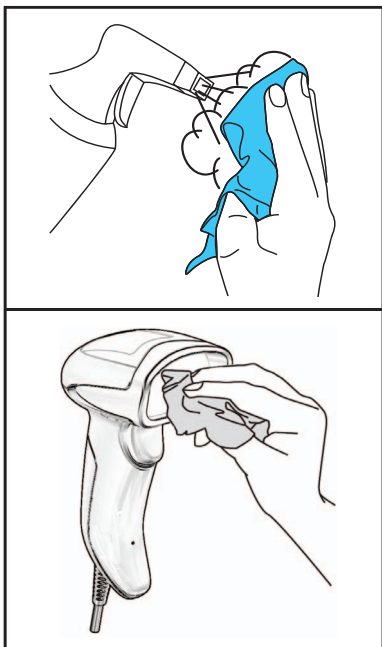
Use a soft, dry cloth to clean the product. If the product is very soiled, clean it with a soft cloth moistened with a diluted non-aggressive cleaning solution or diluted ethyl alcohol.

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

Do not spray or pour liquids directly onto the unit.

Datalogic Limited Factory Warranty

Warranty Coverage

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

If Datalogic determines that a product has defects in material or workmanship, Datalogic shall, at its sole option repair or replace the product without additional charge for parts and labor, or credit or refund the defective products duly returned to Datalogic. To perform repairs, Datalogic may use new or reconditioned parts, components, subassemblies or products that have been tested as meeting applicable specifications for equivalent new material and products. Customer will allow Datalogic to scrap all parts removed from the repaired product. The warranty period shall extend from the date of shipment from Datalogic for the duration published by Datalogic for the product at the time of purchase (Warranty period). Datalogic warrants repaired hardware devices against defects in workmanship and materials on the repaired assembly for a 90 day period starting from the date of shipment of the repaired product from Datalogic or until the expiration of the original warranty period, whichever is longer. Datalogic does not guarantee, and it is not responsible for, the maintenance of, damage to, or loss of configurations, data, and applications on the repaired units and at its sole discretion can return the units in the 'factory default" configuration or with any software or firmware update available at the time of the repair (other than the firmware or software installed during the manufacture of the product). Customer accepts responsibility to maintain a back up copy of its software and data.

Warranty Claims Process

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

Warranty Exclusions

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

No Assignment

Customer may not assign or otherwise transfer its rights or obligations under this warranty except to a purchaser or transferee of product. No attempted assignment or transfer in violation of this provision shall be valid or binding upon Datalogic.

DATALOGIC'S LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ORAL OR WRITTEN, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. DATALOGIC SHALL NOT BE LIABLE FOR ANY DAMAGES SUSTAINED BY CUSTOMER ARISING FROM DELAYS IN THE REPLACEMENT OR REPAIR OF PRODUCTS UNDER THE ABOVE. THE REMEDY SET FORTH IN THIS WARRANTY STATEMENT IS THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY FOR WARRANTY CLAIMS. UNDER NO CIRCUMSTANCES WILL DATALOGIC BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR ANY LOST PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL IN-DIRECT, SPECIAL OR CONTINGENT DAMAGES REGARDLESS OF WHETHER DATALOGIC HAD ADVANCE NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.

Risk of Loss

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

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 $\mathcal{Q}$, 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.

NOTES

ODATALOGIC

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