

 DATALOGIC

# Magellan™ 9800i

Scanner and Scanner-Scale with Imaging Technology



Quick Reference Guide

**Datalogic ADC, Inc.**

959 Terry Street

Eugene, OR 97402

USA

Telephone: (541) 683-5700

Fax: (541) 345-7140

©2012 - 2015 Datalogic, Inc.

An Unpublished Work - All rights reserved. No part of the contents of this documentation or the procedures described therein may be reproduced or transmitted in any form or by any means without prior written permission of Datalogic ADC, Inc. or its subsidiaries or affiliates ("Datalogic" or 'Datalogic ADC'). Owners of Datalogic products are hereby granted a non-exclusive, revocable license to reproduce and transmit this documentation for the purchaser's own internal business purposes. Purchaser shall not remove or alter any proprietary notices, including copyright notices, contained in this documentation and shall ensure that all notices appear on any reproductions of the documentation.

Should future revisions of this manual be published, you can acquire printed versions by contacting your Datalogic representative. Electronic versions may either be downloadable from the Datalogic website ([www.datalogic.com](http://www.datalogic.com)) or provided on appropriate media. If you visit our website and would like to make comments or suggestions about this or other Datalogic publications, please let us know via the "Contact Datalogic" page.

**Disclaimer**

Datalogic has taken reasonable measures to provide information in this manual that is complete and accurate, however, Datalogic reserves the right to change any specification at any time without prior notice.

Datalogic and the Datalogic logo are registered trademarks of Datalogic S.p.A. in many countries, including the U.S.A. and the E.U. All other brand and product names may be trademarks of their respective owners.

Magellan is a registered trademark of Datalogic ADC, Inc. in many countries, including the U.S.A. and All-Weighs, First-Strike, SmartSentry and SurroundScan are registered trademarks of Datalogic ADC, Inc. in the U.S.A. OmegaTek, Produce Rail, Productivity Index Reporting, and ScaleSentry are all trademarks of Datalogic ADC, Inc.

**Patents**

See [www.patents.datalogic.com](http://www.patents.datalogic.com) for patent list.

This product is covered by one or more of the following patents:

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

## Introduction

The Magellan™ 9800i is a multi-plane imaging bar code scanner with an optional integrated scale, designed to serve in supermarket peripheral lanes. This manual describes its basic operation. For more detailed information about setup, installation and programming, see the Product Reference Guide for this product. These manuals are provided in Portable Document Format (PDF) for viewing and printing from the website listed on the back cover of this manual. Additionally, printed manuals can be ordered from your dealer/distributor.

## Operation

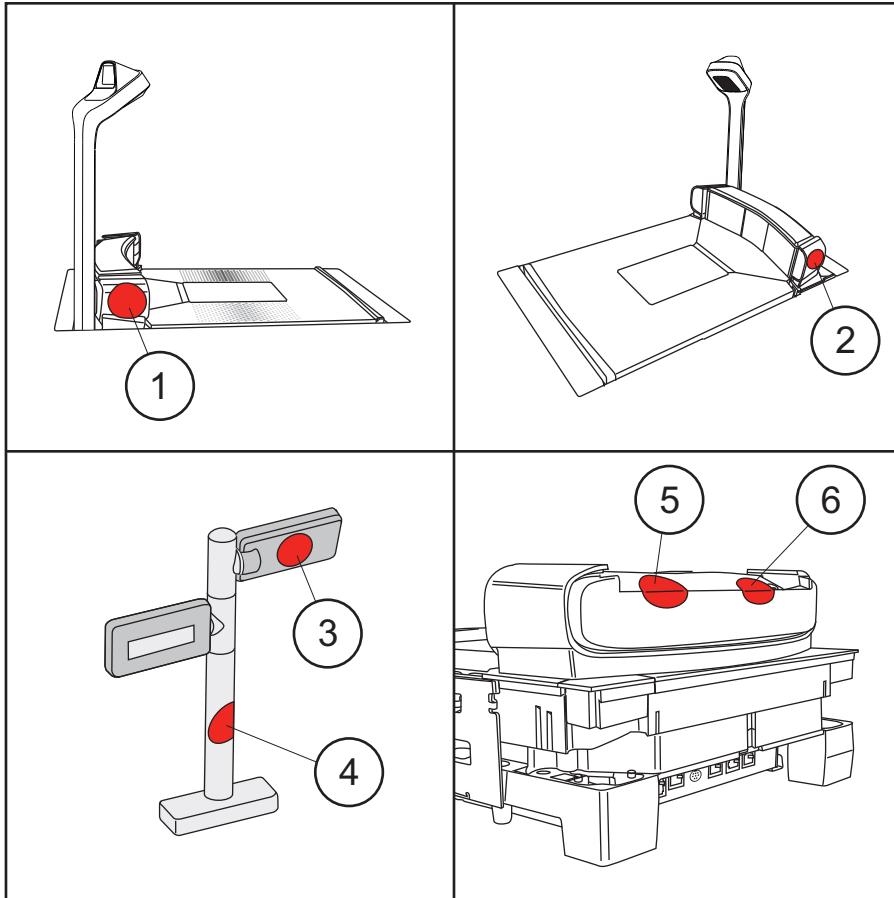


If applicable, apply power to the EAS Controller box before powering on the scanner.

## Certification Label

At the time the local scale regulatory authority certifies the scanner/scale for use, a certification label is affixed to the unit. Depending upon the size and shape of the label, placement can be made in one of the locations shown in [Figure 1](#).

**Figure 1. Affixing the Scale Certification Label**

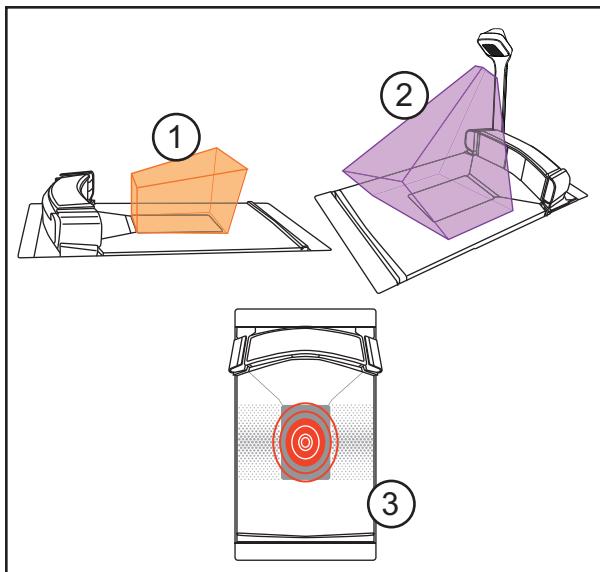


1	Left end of scanner bonnet	4	Remote Display Post
2	Right end of scanner bonnet	5	
3	Back of Remote Display Head	6	Atop the Bonnet underneath the Platter

## Scanning Items

Slide or push items through the SurroundScan™ scan zone in a right-to-left or left-to-right movement. The scanner is equally efficient at scanning items in either direction. It is unnecessary to shift the position of the bar code, as the scanner can 'read' it from the bottom, top, left, right, front and back side of an item, as long as it is fully within the scan zone.

**Figure 2. Scan Zones**



1	Scan Zone for Main Scanner
2	Optional Top Down Reader (TDR) Scan Zone
3	Slide items over the center of the horizontal window for best scan coverage.

For best scanning results...

- Keep items in their natural orientation. Don't favor any of the scan windows.
- Push or slide items instead of lifting them. Avoid unnecessary hand and wrist movements such as rotation, gripping or twisting, as this can cause repetitive motion injuries. This helpful technique can also allay the possibility of lifting thousands of pounds per day



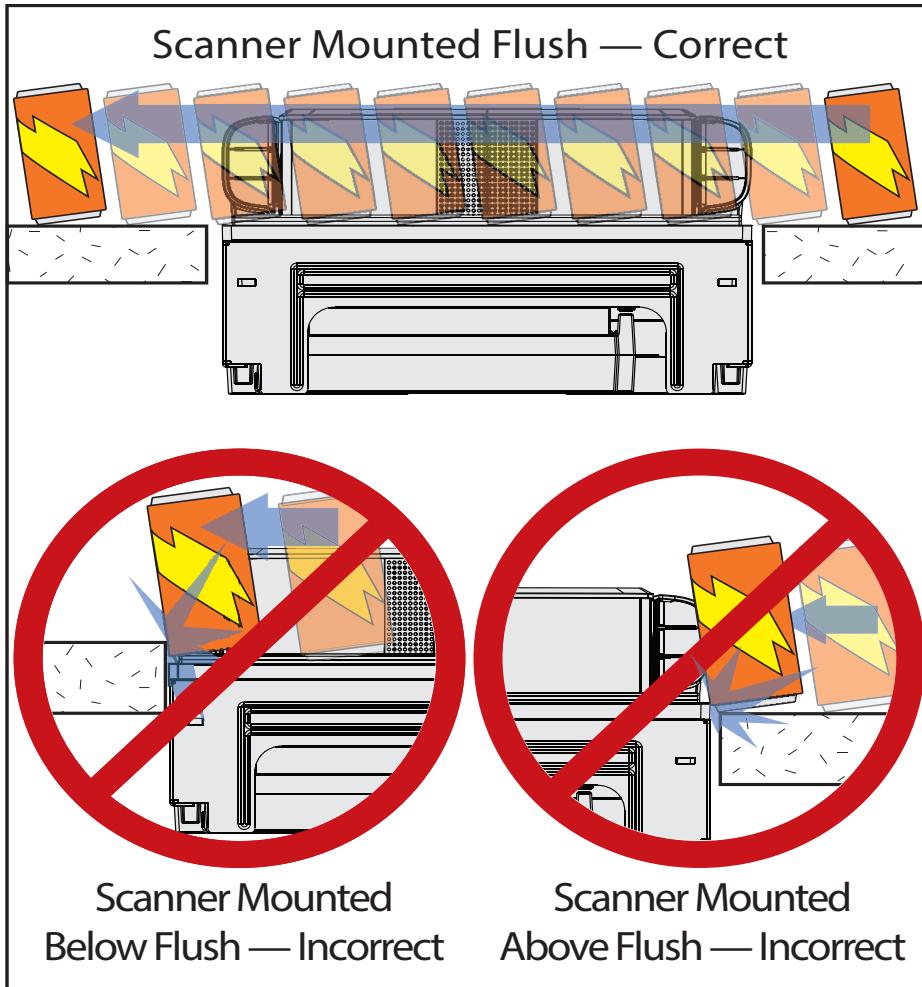
If a POS terminal holds the scanner in a disabled state, the scanner enters limited scanning mode which allows reading of programming labels but 'chirps' other labels.

## Scan Motion

The SurroundScan™ scan pattern and advanced FirstStrike™ decoding software ensures the scanner will read most hard-to-read codes quickly and without a need to particularly reorient items.

It is important to verify that the platter has been installed flush with the countertop to enhance slide-through scanning (see Figure 1). If the platter is not flush with the counter, contact the installer or your technical support team for assistance.

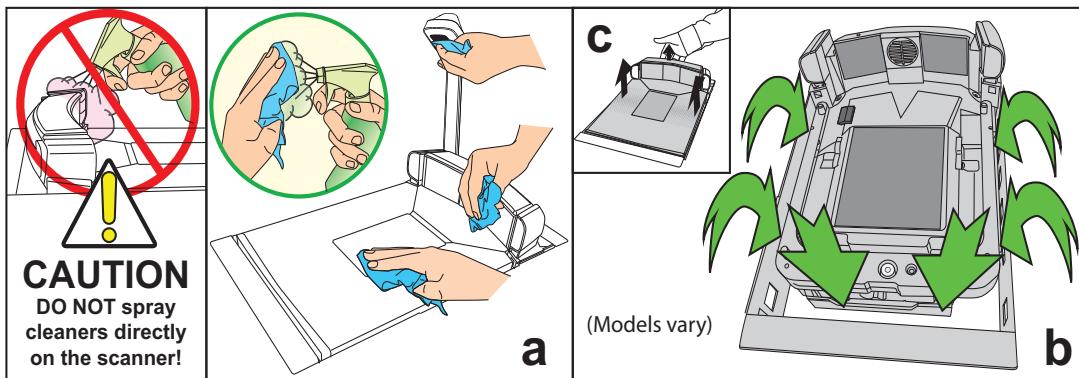
**Figure 3. Verify Flush Installation**



# Cleaning

Exterior surfaces and scan windows exposed to spills, smudges or debris accumulation require periodic cleaning to assure best performance during scanning and weighing operations. Use a clean, lint-free cloth or paper towel dampened with a nonabrasive, mild, water-based window cleaner to wipe away stains, smudges, fingerprints, spills, etc. from the scan window and exterior surfaces (Figure 4a).

**Figure 4. Cleaning the Scanner**



**DO NOT use abrasive cleaning agents or abrasive pads to clean this product. Harsh chemicals, disinfectants, and cleansers can cause damage which will adversely affect scanning and weighing performance.**

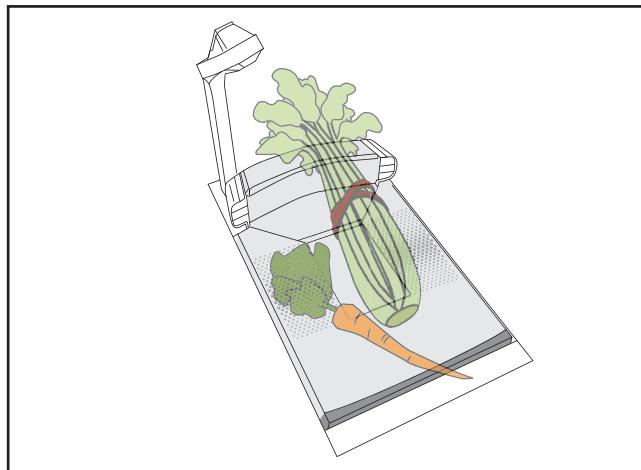
Daily, clean the debris chutes between the platter and the outer housing (Figure 4b). Most items can be cleared from the debris chutes by carefully running a thin, stiff object like a credit card along all sides of the weighing surface. If necessary, remove the platter (Figure 4c) to clean the debris chutes and drip rail.

## Weighing Items (Scale Models)

The unique platter design allows you to place items anywhere on its surface, including leaning atop its vertical section, to be weighed accurately. In addition, the Produce Rail™ allows items to rest above the counter and other non-weighing surfaces. See [Figure 5](#).

Once weighed items have been positioned, enter PLU (price Look-Up) data as described in your POS system instructions. Item weight is displayed on the Remote Display and/or the host display.

**Figure 5. Weighing Items**



## Scale Sentry™ Option

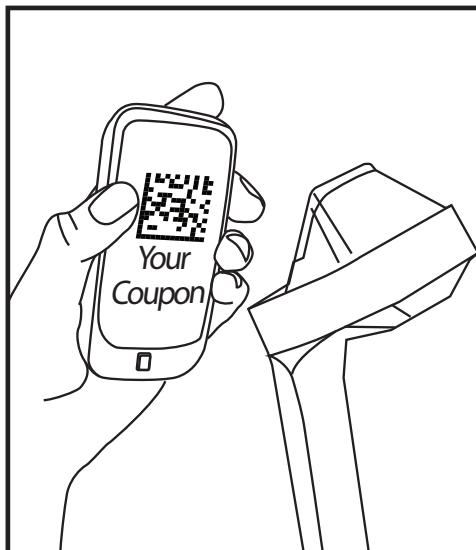
The optional ScaleSentry feature monitors items placed on the platter to detect and indicate if they are overhanging non-weighing surfaces. If the system's infrared (IR) beams sense items encroaching past the sides of the weigh platter, the speaker will sound a unique tone and/or the ScaleSentry LED indicator will illuminate to indicate a ScaleSentry error condition. A scale transaction cannot be completed until the item(s) are repositioned to rest fully on the platter (move them towards the center), clearing the condition. Reference the PRG for more ScaleSentry options and details.

## Top Down Reader (TDR) Option

The scanner's exclusive Top Down Reader (TDR) is an optional feature of the scanner, and is available in two different heights in order to provide flexibility for installations. The TDR can perform multiple functions:

- The TDR contributes significantly to the overall bar code read zone by scanning items from a unique top-down angle.
- The eCommerce option allows customers to use the TDR to conveniently scan coupons and other bar codes presented ...even those displayed on their cell phone. Depending upon the way this feature is programmed into the scanner, coupons are either simply presented to the customer-facing E-commerce scanner as shown in [Figure 6](#), or the sales associate must push the E-commerce button to read a coupon as it is presented to that screen.
- The TDR also has an optional ability to take pictures. The scanner must be configured for TDR image capture and a microSD card must be installed in the card slot provided for it. Position the photo subject within the field of view of the downward-facing TDR imager, then use the Camera button located on the Control Panel to take the picture. The scanner's speaker will sound a 'shutter click' sound and/or the Camera indicator LED will light to indicate image capture. Photos are stored on the microSD card and automatically numbered from image000 to image999.

**Figure 6. Scanning a Bar Code from a Cell Phone**



## Electronic Article Surveillance (EAS) Deactivation Options

Deactivation of Sensormatic® or Checkpoint® EAS tags is an optional function. The scanner must be expressly enabled to perform in either capacity.

### Sensormatic Coupled Mode

When the scanner is configured to use Coupled EAS Deactivation Mode, deactivation of a given item happens automatically following its bar code being successfully read.

### Sensormatic Decoupled Mode

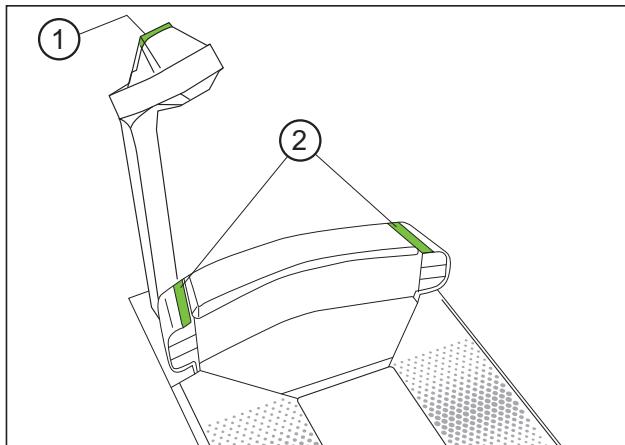
When in Decoupled Mode, the sales associate must press the Manual EAS Deactivation button in order to deactivate an item. In this mode, deactivation is independent of the scanning function.

## Controls and Indicators

The scanner features two prominent LED indicator bars on top of its vertical "bonnet" (item #2 in [Figure 7](#)) as well as (optionally) another highly visible LED indicator for indicating E-commerce reading activities atop the Top Down Reader (if a TDR is present) which is item #1 in [Figure 7](#).

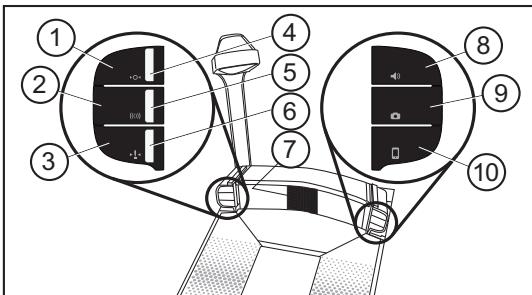
As [Figure 8](#) illustrates, two panels on either side of the vertical scan windows contain control buttons and more LED indicators. Additionally, a configurable speaker is used to sound scanning, weighing and EAS deactivation indications. See the LED and Beeper Indications section for more details.

**Figure 7. Top Side LED Indicators**



1	E-commerce LED Indicator located on TDR (optional feature)
2	LED Indicator 'Bars'

**Figure 8. Control Buttons and Indicator LEDs**



1 ▶○◀	<b>Scale Zero Button</b> With all weight removed from the scale, push this button to set the scale to zero.	6 █	<b>ScaleSentry Indicator LED (Red)</b> This LED indicates the current ScaleSentry condition. See the LED and Beeper Indications section for more information.
2 ((o))	<b>Manual EAS Deactivation Button</b> When in EAS Manual Deactivation Mode, push this button to deactivate an item.	7 Speaker	Sounds <sup>a</sup> beeps, error tones and other audible signals to indicate good read, ScaleSentry alert, system error and other conditions.
3 ►!◀	<b>ScaleSentryOverride Button</b> When configured to do so, a push of this button will override a detected scale overhang condition.	8 Speaker	-If the scanner is 'asleep', press this button to wake it up. -Press this button momentarily to enter beeper volume change state. Select one of five volume settings. -Press this button between 1 and 4 seconds to enter beeper tone change state. -Press this button between 5 and 9 seconds to enter Scanner Diagnostics Mode. -Press this button for 10 seconds to initiate a soft reset.
4 █	<b>Scale Indicator LED (Yellow)</b> This LED indicates scale functions. See the Indicator Table for more information.	9 Camera	<b>Camera Button</b> This button is used to take pictures with the Top Down Reader (TDR) when images are captured to a microSD card. See the PRG for details about this option.
5 █▀█	<b>EAS Indicator LED (Red/Green/Orange)</b> This LED indicates EAS functions with red, green OR orange color. See the Indicator Table for more information.	10 Smartphone	<b>eCommerce Button</b> If an optional TDR is configured so, press this button to place the scanner in eCommerce state. Bar code(s) can be read by the E-commerce Reader while in this state.

- a. Some audible indications are configurable to be on or off, as well as offer their own programmable options for pitch, volume, etc.

# NOTES

## LED and Beeper Indications

The scanner's beeper sounds and its lamps and indicator LEDs illuminate to indicate various functions or errors. The tables in this section list some of these indications. Reference the PRG for a more complete listing. One exception to the behaviors listed in the tables is that some functions are programmable, and may or may not be turned on. For example, certain indications such as the power-up beep can be disabled using programming bar code labels.

INDICATION	Scanner LED	BEEPER				COMMENT
		Count	Frequency	Volume	Duration	
Pre-operating Mode	OFF	OFF				
Power-up Beep	N/A	Unique WAV file sound.				Default sound is a synthesized chord ending with two light bells.
Good Read Beep	Bright flash	1	Current	Current	Current	Frequency, volume and duration are configurable.
ROM Failure	200ms ON 200 ms OFF	1	Error	Highest	200ms ON 200ms OFF	Indicates either Boot or Program ROM failure.
Scanner Active Mode	On steady and dim	N/A				The scanner is ready for operation. Scanning is immediately available.
Scanner Disabled	Continuous blink 100ms ON / 900ms OFF	N/A				The Host has disabled scanning.
Sleep Mode	10ms ON 1990ms OFF	N/A				The scanner has been inactive for a period and is in a power-saving mode.
Chirp Indications (see comment)	N/A	6	Highest	Current	20ms ON 20ms OFF	A 'Chirp' is used to indicate the following: -Reading labels while in limited scanning mode. -Label rejection during label programming. -A label with no data. -Labels rejected through the auxiliary port when in Scanner Diagnostics Mode.

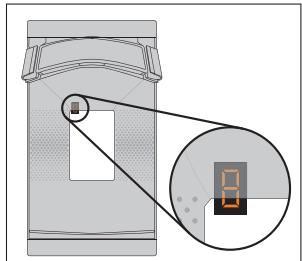
  

INDICATION	Scale LED	BEEPER				COMMENT
Scale at Zero	On steady	N/A				The scale is at rest and reads zero weight. The scale is ready to weigh.
Scale Error Reporting	Coded sequence	N/A				When the scanner is in Scale Diagnostics Mode, the Remote Scale Display and the Scale LED indicator can communicate specific scale failures. See the PRG for more details.

## Error Codes

Upon startup, if the scanner sounds a long error tone followed by alternating flashing of the green and yellow LED indicators, and an error code is displayed on the Health & Status Indicator, this means the scanner has not passed its automatic Selftest and has entered FRU (Field Replaceable Unit) isolation mode. The scanner remains in this mode, until any button is pushed.

After a button is pushed, the scanner flashes the green LED a set number of times to indicate the error code. After one cycle of flashing has passed, another button push resets the scanner. The PRG describes the LED flash codes associated with an error found. If your scanner indicates any of these errors, note the code number, then contact Helpdesk for assistance.



Health & Status Indicator

## Label Programming Mode Indications

These indications occur only when the scanner is in Programming Mode or when placing the scanner in that mode.

INDICATION	LED	BEEP(S)
Label Programming Mode Entry	Continuous blink 1 sec. ON / 1 sec. OFF	Same as good read indication
Acceptance of Partial Labels	N/A	1
Partial Label Reading Cancel	N/A	6
Acceptance of Complete Labels	N/A	3

## Sensormatic® EAS Indications

If the scanner is equipped with the optional Sensormatic EAS option, various deactivation and validation indications will be enabled.

INDICATION	EAS LED	BEEPER				COMMENT
		Count	Frequency	Volume	Duration	
Entering EAS Coupled Mode	Green ON	N/A				
Upon sensing an inactive to active transition	Red ON Green OFF	N/A				While in EAS Coupled Mode.
Upon sensing an active to inactive transition	Red OFF Green ON	N/A				While in EAS Coupled Mode.
Upon receiving validation of EAS tag deactivation	Orange ON until EAS beeper turns OFF	1	~ 1500 Hz	Current	Configurable	While in EAS Coupled Mode.
EAS Bad Beep	N/A	Same as FRU error tone				While in EAS Coupled Mode.

# **Warranty**

Datalogic warrants to Customer that this product will be free from defects in materials and workmanship for a period of 1 year from product shipment.

## **Datalogic ADC Limited Factory Warranty**

### **Warranty Coverage**

Datalogic ADC ('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, key-pads, 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.

DATLOGIC'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. DATLOGIC 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 DATLOGIC BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR ANY LOST PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL INDIRECT, SPECIAL OR CONTINGENT DAMAGES REGARDLESS OF WHETHER DATLOGIC 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.





[www.datalogic.com](http://www.datalogic.com)

© 2012-2015 Datalogic ADC, Inc. • All rights reserved. ■  
Datalogic and the Datalogic logo are registered trademarks of  
Datalogic S.p.A. in many countries, including the U.S.A. and the E.U.

**Datalogic ADC, Inc.**  
959 Terry Street | Eugene | OR 97402 | USA  
Telephone: (1) 541-683-5700 | Fax: (1) 541-345-7140



820067814 (Rev. E)

March 2015