MAGELLAN™ 3600VSi

PRODUCT REFERENCE GUIDE



Omni-Directional Imaging Scanner

DATALOGIC

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PREFACE

ABOUT THIS MANUAL

A Quick Start Guide (QSG) is provided with your 3600VSi and provides very basic device and regulatory information. This Product Reference Guide (PRG) is provided for users seeking advanced technical information, including mounting, connecting, programming, maintenance and specifications. The first chapter provides quick reference information and should help you get started. Other publications associated with this product can be downloaded free of charge from the website listed on the back cover of this manual.

You'll find it helpful to familiarize yourself with the first section of this manual, since it provides both a general description of the product's features and an overview of the manual's contents and organization. Reference the other sections as required for information about scanner, operation, maintenance and bar code programming.

MANUAL OVERVIEW

Chapter 1, Introduction presents the manual's contents, describes features and specifications, provides regulatory and safety information, and lists the bar code symbologies the scanner will read.

Chapter 2, Getting started supplies physical dimensions for the scanner and its most common accessories, and details counter preparation and installation. Cable routing, connection and testing are also explained in this section.

Chapter 3, Programming details procedures and contains different sections provides custom bar codes for setting programmable scanner features.

Appendix A, Technical Specifications lists the physical, environmental, electrical and other characteristics.

Appendix B, LED/AUDIO Indications and Controls lists the various functions and indications of the scanner's control panel features.

Appendix C, Cable Pinouts outlines wire requirements, connector specifications and pinout details for associated product cabling.

Appendix D, Keypad furnishes bar codes representing the digits and characters required to enter extended programming data needed during certain programming sessions.

Appendix E, Mass storage device and Autorun Commands, contains a partial listing of available host commands that can be used with a compatible host interface.

Appendix F, Host Commands, provides a listing of factory default settings based on the most common interface.

Appendix G, Factory Defaults

Appendix H, Handheld Data Format Requirements, specifies additional references for use when a handheld scanner is connected to the scanner.

Manual Conventions

The following conventions are used in this document:

The symbols listed below are used in the manual to notify the readerMagellan 3600VSi Scanner of key issues or procedures that must be observed when using the camera.

Manual Conventions



NOTE: This symbol draws attention to details or procedures that may be useful in improving, maintaining, or enhancing the performance of the hardware or software being discussed.



CAUTION: This symbol advises you of actions that could damage equipment or property.



WARNING: This symbol advises you of actions that could result in harm or injury to the person performing the task.



HIGH VOLTAGE: This symbol alerts the user they are about to perform an action involving, either a dangerous level of voltage, or to warn against an action that could result in damage to devices or electrical shock.



LASER: This symbol alerts the user they are about to perform an action involving possible exposure to laser light radiation.



GROUNDING: This symbol advises you to pay particular attention to the grounding instructions for correct device functioning.



ESD: This symbol identifies a procedure that requires you take measures to prevent Electrostatic Discharge (ESD) e.g., use an ESD wrist strap. Circuit boards are most at risk. Please follow ESD procedures.

TECHNICAL SUPPORT

Support Through The Website

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

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

Reference Documentation

The documentation related to the Magellan 3600VSi scanner is listed below:

- 3600VSi Quick Start Guide

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.

WARRANTY

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CHAPTER 1
INTRODUCTION

INTRODUCTION

The Magellan™ 3600VSi is a single plane omni-directional imaging scanner that delivers best in class scanning performance on 1D and 2D codes.

Whatever the needs are, it is designed to be installed on counters or for integrated OEM applications. The 3600VSi also offers enhanced capability to reduce shrink by capturing color video for loss prevention applications, and by reading RFID to track items moving through checkouts.

The available Models are:

- 3610VSi Standard Model
- 3650VSi Premium Color Image Capture, Aux Port, USB-C Power Delivery, Optional RFID
- 3670VSi Premium Color Video, Color Image Capture, Aux Port, USB-C Power Delivery, Optional RFID

This Quick Setup section describes the basic operation of your 3600VSi scanner. For more detailed information about setup, installation and programming, see the remaining sections of this Product Reference Guide.



This manual provides details for installation, configuration and operation of the scanner.

NOTE: For the purposes of this manual, any Magellan 3600VSi model may be termed as simply "scanner". Because of differences due to multiple model types and options, the illustrations shown in this manual may vary from the model(s) in use at your location.

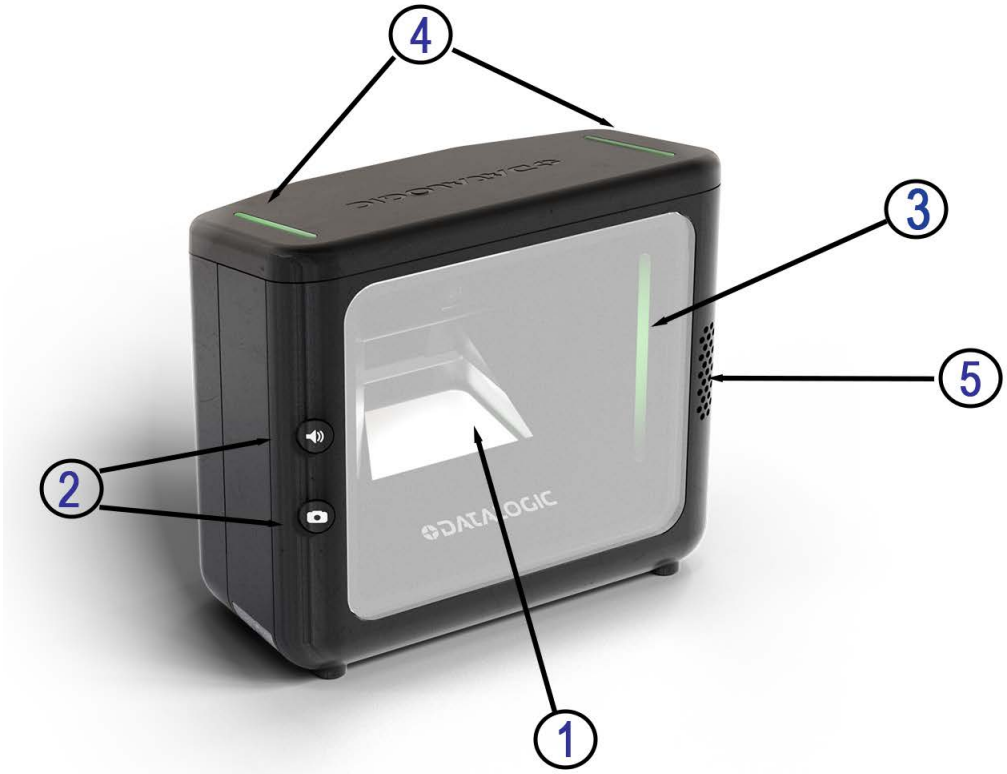
SCANNER OVERVIEW

The Magellan™ 3600VSi On-Counter Vertical Presentation Scanner is designed for small counter retail checkout environments where there is a relatively high number of transactions with a fairly small number of items per transaction. The scanner has a reduced footprint, allowing more room for item merchandising of high margin impulse items clustered around the POS (Point of Sale).

Scanner Features

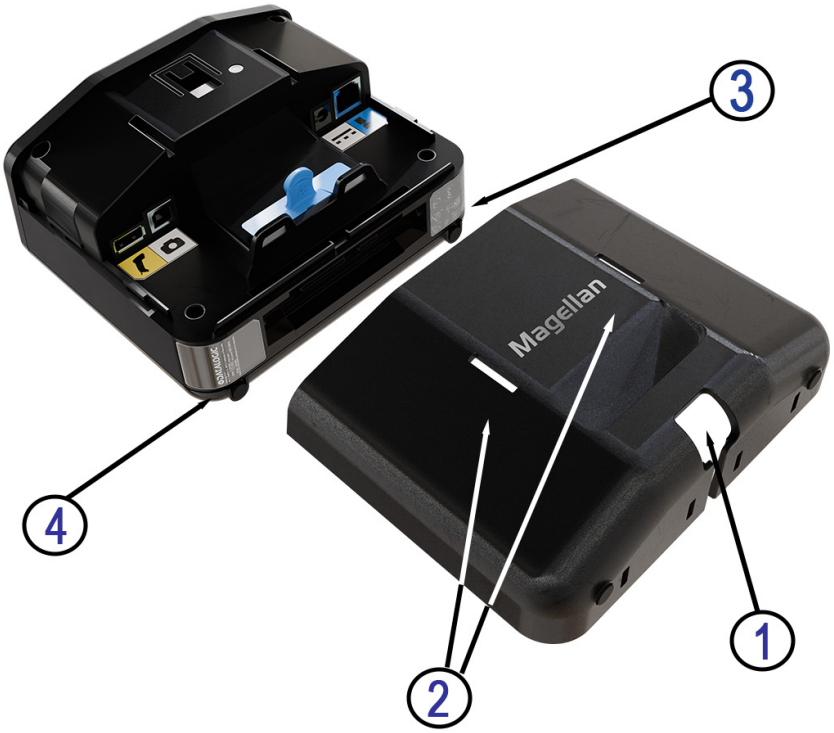
The parts and features of the scanner are shown in Figure 1.

Figure 1. Scanner Features - Front View



1	Scan Window
2	Control Panel
3	Front Good Read Indicator LEDs
4	Top Good Read Indicator LEDs
5	Speaker

Figure 2. Scanner Features - Back View



1	Cable Routing Area
2	Wall Mount Fixing Holes
3	Regulatory Label
4	Serial Number Label

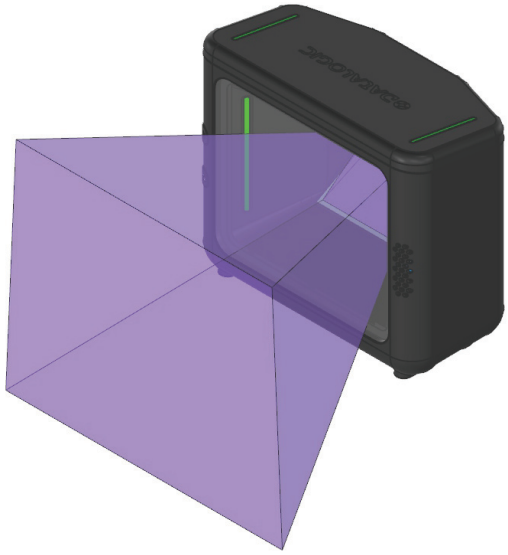
PHYSICAL PARAMETERS

This section provides specifications for performance, environmental and electrical parameters. Reference the section of this manual, Chapter A, Technical Specifications, for physical measurements of all models.

Scanning Item

A scan zone exists in the vertical scan window area. Its projection forms a zone where bar code labels are read.

Figure 3. Scan Zone



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.



NOTE: 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.

ELECTRICAL SPECIFICATIONS

Before installation, always verify that the site's electrical service meets the scanner's requirements. The scanner has been engineered for compatibility with most international electrical systems operating in ranges from 100 to 240VAC at 50-60 Hz. Verify that the power source will supply "clean" electrical power to the equipment; that is, it must be free of excess electrical noise.

Power Supply

The scanner utilizes a single power supply for all models. Unique installation and international connections are accomplished through selection of the proper IEC power cord.

VOLTAGE	FREQUENCY	CURRENT (RMS)
100-240VAC ±10%	50-60 Hz	0.5 Amps @ 100V



CAUTION: Safe operation of your scanner requires properly grounded electrical outlets. Be sure to have a qualified electrician certify the earth-ground connection on circuits which will be used to power the unit.



NOTE: The scanner is powered on/off by connecting/disconnecting its power supply.

Power Consumption:

Operating (Nominal): 3W

Idle (Nominal): 1.8W

Safety Precautions



NOTE: No adjustments or alteration of the scanner are to be attempted by the user.

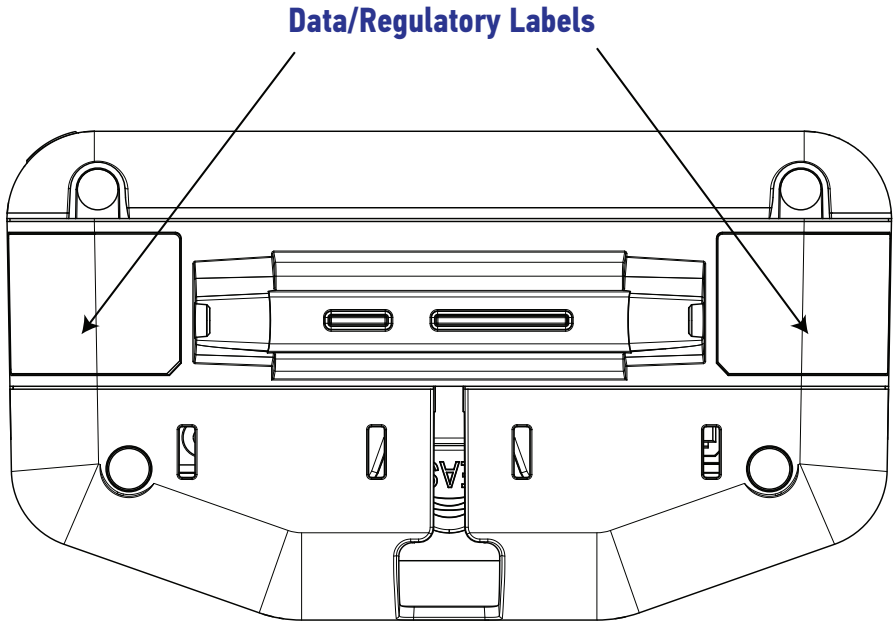


WARNING: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

LABELING

Regulatory, reference and safety labeling are shown in Figure 4.

Figure 4. Labeling



SUPPORTED BARCODES

The scanner can read/decode the following 1D and 2D bar code types (symbologies):

1D Symbologies

- UPC Versions A & E, Coupon Control
- Plural Stage Dual UPC Bar Codes for Japan (2 label read)
- GSI DataBar Omnidirectional, DataBar Expanded, DataBar Stacked
- EAN-8 & 13
- JAN-8 & 13
- UCC/EAN 128
- GTIN Support
- Code 39
- Code 39 full ASCII
- Code 39 CIP, Code 39 Danish PTT, Code 39 LAPOSTE, Code 39 PZN
- Code 128 (including conversion to Code 39)
- Code 93
- Interleaved 2 of 5 (I 2 of 5)
- Interleaved 2 of 5 CIP HR, Interleaved 2 of 5 Follet
- Industrial 2 of 5 (sometimes referred to as Standard 2 of 5)
- IATA 2 of 5
- Code 32 (Italian Pharmaceutical Code)
- Codabar
- MSI
- Plessey
- Trioptic

2D Symbologies

- PDF417, including driver's license parsing
- MicroPDF
- Data Matrix
- Aztec
- QR Code
- Micro QR
- DotCode
- MaxiCode
- GS1 Digital Link

Other Symbologies

- DigiMark (Digital WaterMark)
- Postals (Postnet, Planet, Royal Mail, KIX, Australia Post, Japan Post, IMB, Sweden Post, Portugal Post)

GS1 Digital Link Capabilities

The GS1 organization creates a standardized method for encoding identifiers like GS1 GTINs, GLNs and SSCCs. It achieves two goals. These GS1 Identifiers can then be:

- encoded in a barcode and scanned
- connected to online information

It can be used for different business requirements and use cases.

GS1 Digital Link is an important part of industry's global migration to 2D barcodes where the vision is that each product has a single multipurpose 2D barcode that can be used at the retail point-of-sale, and to access digital content such as certifications, instructions for use, product information, traceability information and more.

Use of the GS1 Digital Link standard means that identifiers such as the GTIN are now a gateway to information that strengthens brand loyalty, improves supply chain traceability information, and enables business partner APIs, customer safety information and more.

Using the GS1 standard means you're not only providing a URL for people to scan, you're also providing GS1 identifiers – the same identifiers relied upon throughout industry today – and leveraging open global standards. The brand owner can link from the GS1 Digital Link URI to any number of digital information sources, all from one barcode symbol, saving space and improving efficiency. Digital content can be continually updated by a brand owner, without the need to change the QR Code, meaning packaging or artwork does not need to be changed for access to things like new promotions or usage ideas. Meanwhile, retailers, supply chain partners, and third-party applications, like diet and health apps, can *still* make use of the barcode as an entry point to look up their own information in their IT systems, exactly as they do today.

CHAPTER 2
GETTING STARTED

ACCESSING THE I/O PORTS

In order to access the I/O ports of Magellan 3600VSi, the Back Cover must be removed. Please follow the below instructions:

Push the recessed part of the Back Panel with your fingers (1) and slide it at the same time (2)

Keep sliding to remove the Back Panel (3)


CONNECTING THE SCANNER

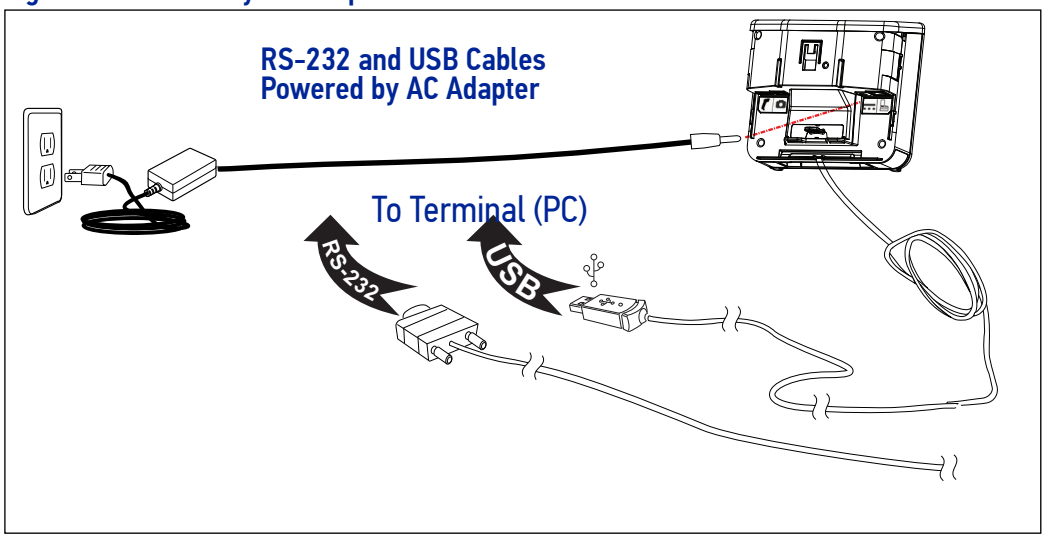
The scanner kit you ordered to match your interface should provide a compatible cable for your installation. Alternatively, it may be possible to connect using a cable from a previously existing installation. Check with your technical support representative about compatibility before connecting. For Powering Off Terminal (POT), please reference "Electrical" on page 338 of Appendix A, to ensure your Host Terminal's power supply is compatible, or contact Datalogic Technical Support.

The USB AUX PORT and the Optional RFID feature will only be supported by using a 12V power supply or a 9-12V USB-C Power Delivery connection. If the scanner is powered only by the standard USB cable as shown in Figure [11], an auxiliary scanner will not be supported.

Use the appropriate instructions below when you're ready to connect the scanner to the terminal, PC or other host device. Upon completing the connection, proceed to the Interface Related Features section of this manual and scan the bar code to select the correct interface type.

RS-232 Serial Connection : Turn off power to the terminal/PC and connect the scanner to the terminal/PC serial port via the RS-232 cable as shown in the following figures. If the terminal will not support POT (Power Off the Terminal) to supply scanner power, use the approved power supply (AC Adapter).

Figure 1. Powered by AC Adapter

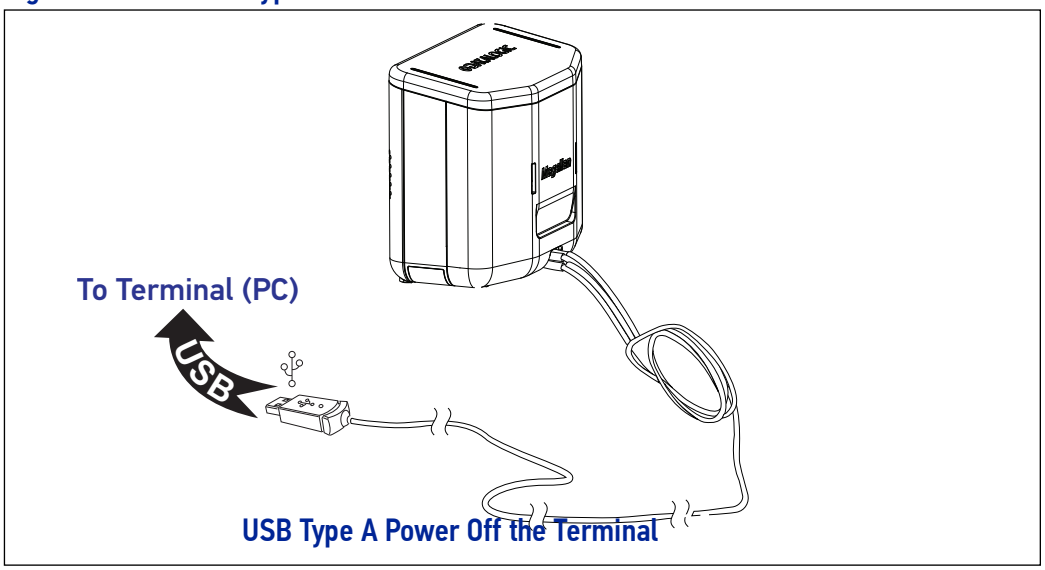


USB Connection : Connect the scanner to a USB port on the terminal/PC using the correct USB cable for the interface type you ordered. Reference the figures on this and the previous page.

NOTE: USB installations may require a power connection via an approved A/C Adapter as shown. For example, this would be the case if the scanner is connected along with a number of other devices to a non-powered USB hub.

CAUTION: When using a cable that includes both data lines (RS-232 or USB) and power terminals, the cable must first be connected to the Scanner and only then to the POS.

Figure 2. USB Cable Type A Power Off the Terminal

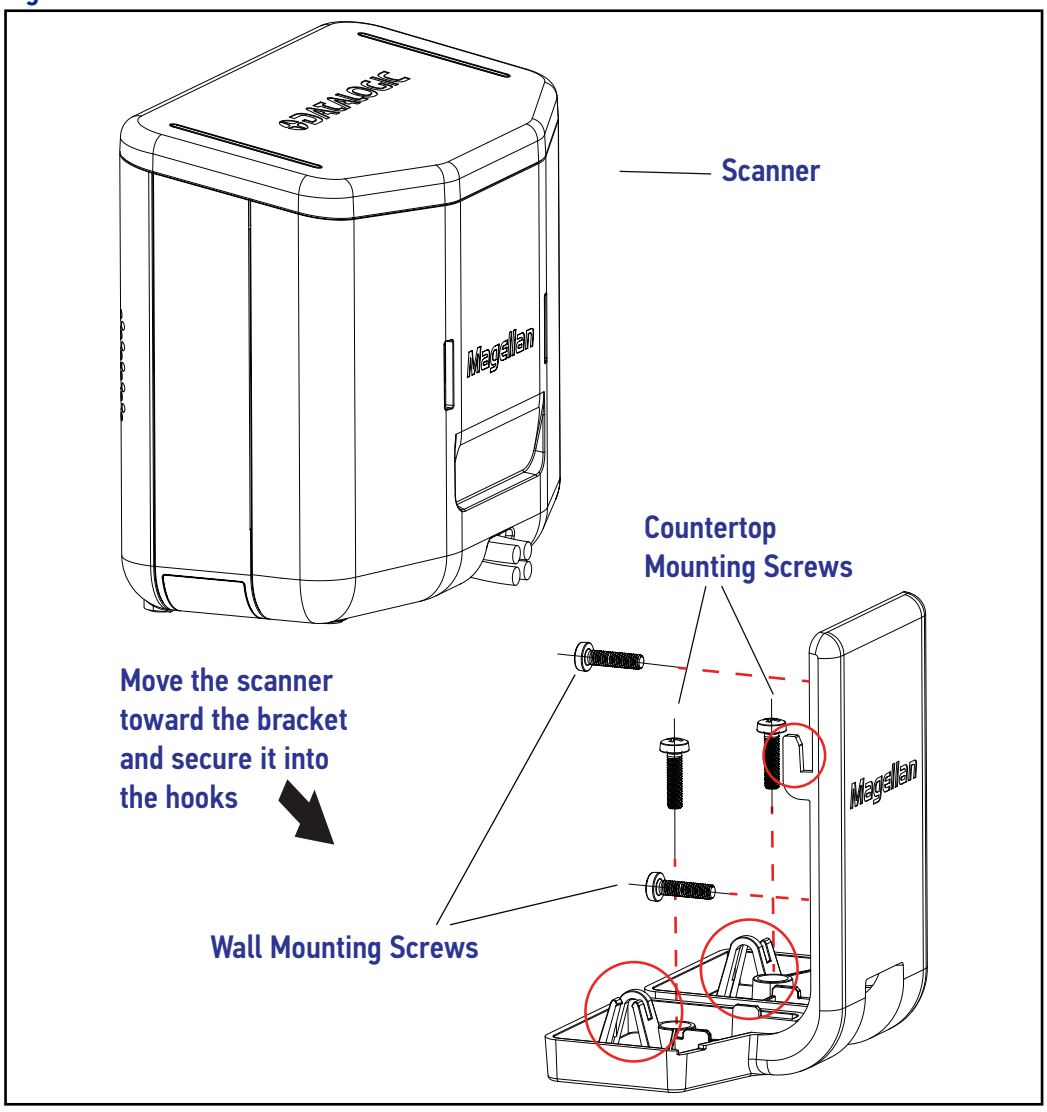


NOTE: This cable (or similar) will not support a USB peripheral. The system must be powered by 12V in order for a peripheral to be attached to the AUX USB PORT.

MOUNT INSTALLATION

Options for mounting the scanner to a wall or countertop include an L-Bracket or an adjustable riser. Figure 3 shows the scanner being seated in an L-Bracket.

Figure 3. L-Bracket Mount



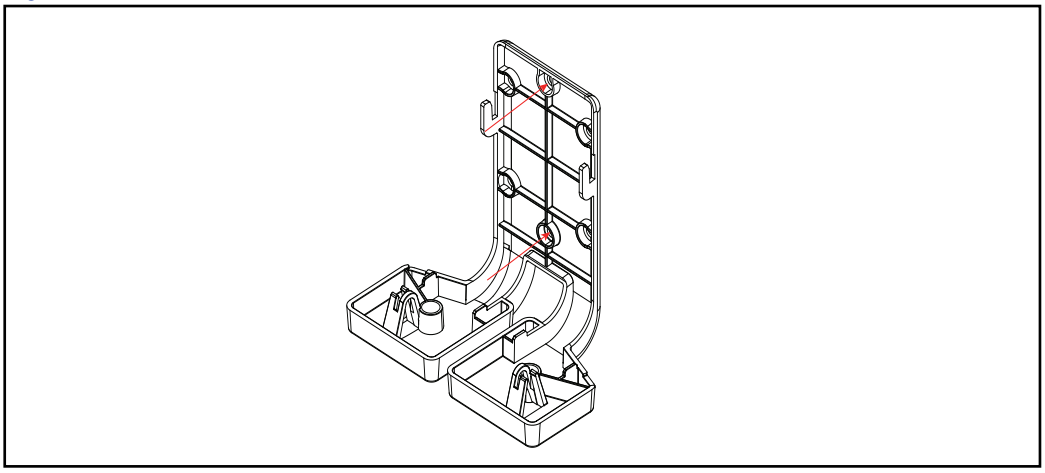
Wall Mount

When using the L-Bracket for wall mount installation, pre-drill the center of the two wall mount bosses (shown in Figure 4) using a 4.5mm or 11/64” drill.

Attach the L-Bracket to the wall over the two drilled holes shown in Figure 4 using two pan head M4 or #8 screws (8.2mm or 5/16” maximum head diameter) with threads that suit the mounting surface of the wall.

CAUTION: Do not remove the plastic ribs around the mounting holes and do not overtighten the mounting screws as this may damage the wall mount.

Figure 4. Wall Mount Drill Location



Countertop Mount

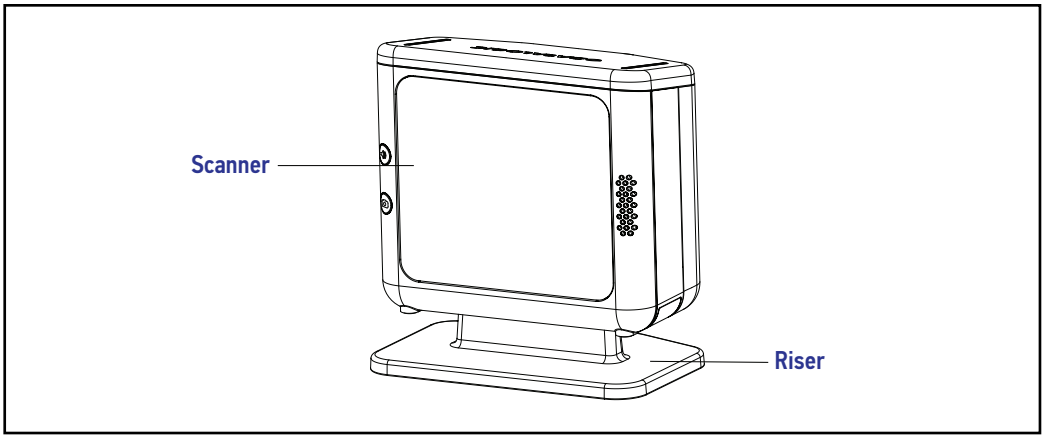
If using the L-Bracket alone for countertop installation, secure the bracket in place using two screws through the bottom face of the bracket (see Figure 3). It is recommended to use two pan head (8.2mm or 5/16” maximum head diameter) #8 screw with a thread profile that suits the mounting surface material in the countertop.

CAUTION: Do not use a countersink type of screw head. Damage will occur from use of a countersunk screw head in the plastic screw bosses

Adjustable Riser

The Adjustable Riser may be attached as shown.

Figure 5. Using the Adjustable Riser

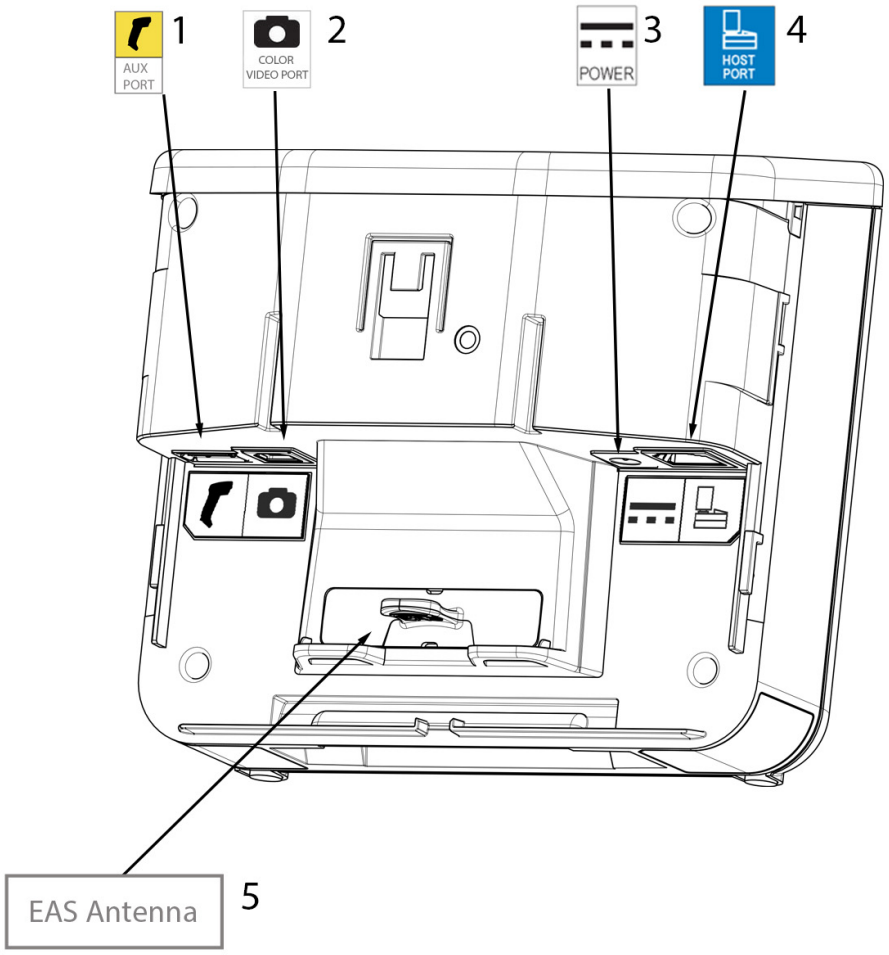


CONNECTORS AND PORTS

Connector port availability and appearance will differ between models.

Figure 6 shows the full set of Connectors and Ports with indication of which is available only in certain models:

Figure 6. Connector Panel



1	Aux Port[a] (USB Type-A)
2	Color Video Port[b] (USB Type-B)
3	Power Port
4	Host Port
5	EAS Antenna

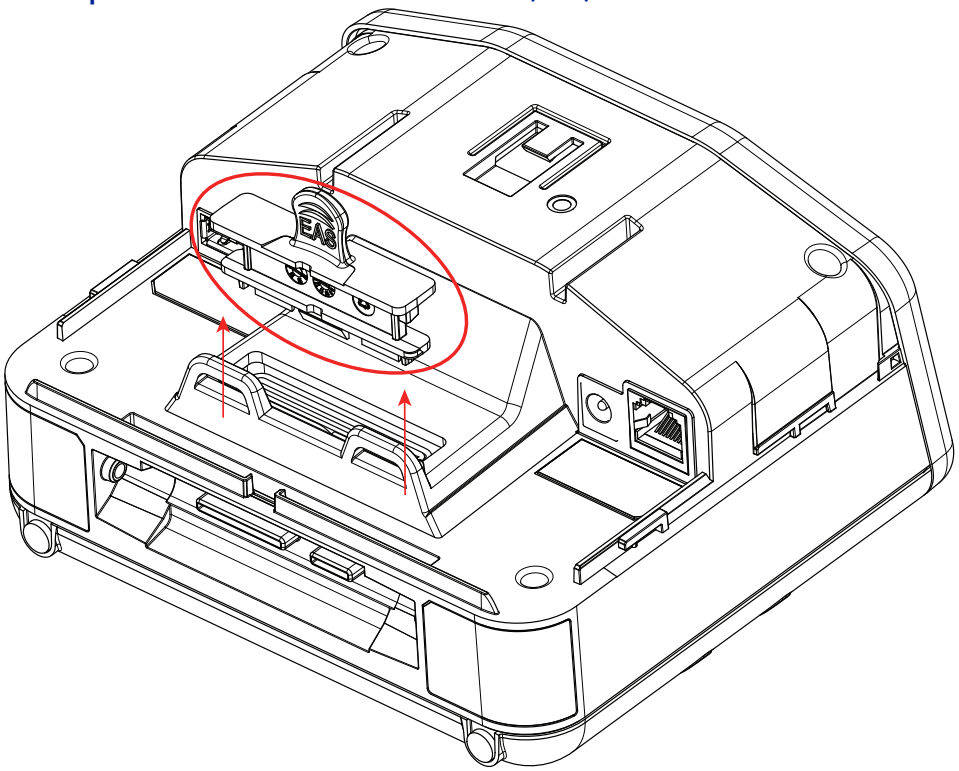
a. this port is available only on models with Aux Port feature.
b. this port is available only on models with Color Camera (CCI) feature.

ELECTRONIC ARTICLE SURVEILLANCE (EAS)

To connect the EAS wires to an external EAS system follow these steps:

1. Remove the spool
2. Unroll the cables
3. Reposition the spool

Figure 7. Optional External Article Surveillance (EAS) Cable Connections





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. One exception to the behaviors listed 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			
		Count	Frequency	Volume	Duration
Pre-operating Mode	OFF	OFF			
Good Read Beep: Frequency, volume and duration are configurable	Bright flash	1	Current	Current	Current
ROM Failure: Indicates either Boot or Program ROM failure.	200ms ON 200 ms OFF	1	Error	Highest	200ms ON 200ms OFF
Scanner Active Mode: The scanner is ready for operation. Scanning is immediately available.	On steady and dim	N/A			
Scanner Disabled: The Host has disabled scanning.	Continuous blink 100ms ON / 900ms OFF	N/A			
Sleep Mode: The scanner has been inactive for a period and is in a power-saving mode.	10ms ON 1990ms OFF	N/A			
Chirp Indications: "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.	N/A	6	Highest	Current	20ms ON 20ms OFF

LABEL PROGRAMMING MODE INDICATIONS

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

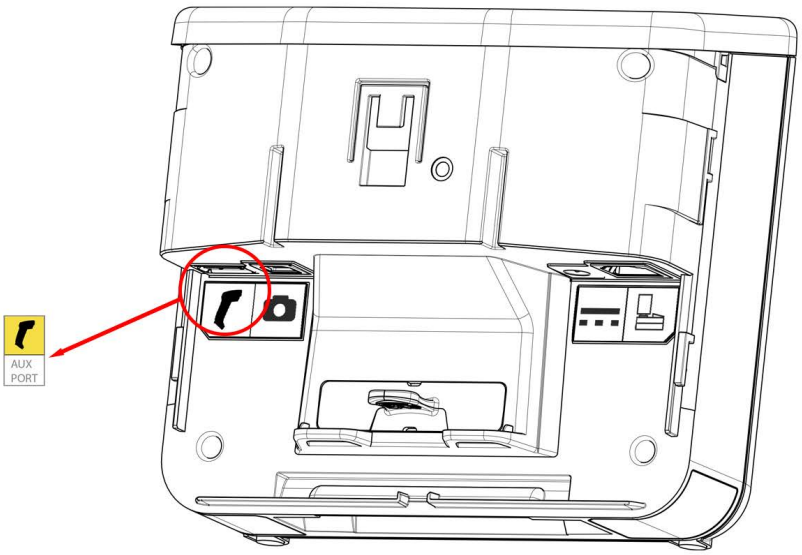
INDICATION	LED	BEEP(S)
Label Programming Mode Entry	Continuous blink 1 sec. ON / 1 sec. OFF	Same as good read indication
Acceptance of Partial Labels	N/A	1
Partial Label Reading Cancel	N/A	6
Acceptance of Complete Labels	N/A	3

AUXILIARY PORT

Depending on the model, the Magellan™ 3600VSi might include the Auxiliary Port (or Aux Port) for connecting a secondary device such as external Mass Storage or Barcode Reader.

The Auxiliary Port is available in the following models:

- Magellan 3650VSi
- Magellan 3670VSi



NOTE: Please follow the below instructions depending on the type of external device.

Connecting a Mass Storage device to the Auxiliary Port

NOTE: "Mass Storage" can be any USB storage device with low power consumption (e.g. USB memory dongles). Other Mass Storage devices that require additional power (e.g. Hard Disks drives) might not work properly.

A Mass Storage device can be plugged anytime into the Auxiliary Port. Please wait 10 seconds to let the Magellan 3600VSi recognize it. Successful recognition is signaled by a short sequence of beeps.

The Mass Storage device can be used for different operations:

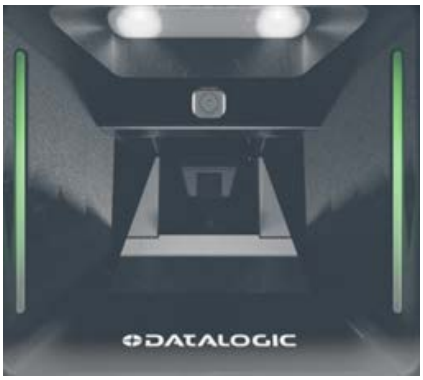
- Capture images and save them into the USB memory stick, See “Image Destination” on page 23.
- Use Autorun commands, see “Mass storage device and Autorun Commands” on page -349

Connecting an external Barcode Reader to the Auxiliary Port

Magellan 3600VSi supports the connection of an external barcode reader (Datalogic HandHeld or Presentation scanner, or third-party barcode scanner) to transmit the decoded labels to the Host.

NOTE: The external Barcode Reader is enabled only if the Magellan 3600VSi is powered via 12V Power Supply, or USB-C Power Delivery source.

CAUTION: When the Magellan 3600VSi is powered by a 5 V USB source and an external barcode reader is connected, the external barcode reader will not be powered. As a result, the Magellan enters "Limited Power State" mode, which is indicated by an error beep and orange Good Read indicators.



Normal Operation



Limited Power State

In this condition, the Magellan 3600VSi continues to work normally, but the Auxiliary Port is turned off. To return to normal operation, please connect an external power source or reboot the system. When you want to connect a Datalogic HandHeld scanner (e.g. QuickScan™, Gryphon™ or PowerScan™ family), its communication interface must be configured as "USB Magellan".

Scan the following barcode with the Datalogic HandHeld scanner to quickly configure it in "USB Magellan" interface:

Select Datalogic Magellan Scanners' USB AUX

COLOR DOCUMENT CAPTURE

Color Image Capture is a feature to capture high quality, on glass, color images for processing ID's, credit and loyalty cards.

It is available for the following models:

- Magellan 3650VSi
- Magellan 3670VSi

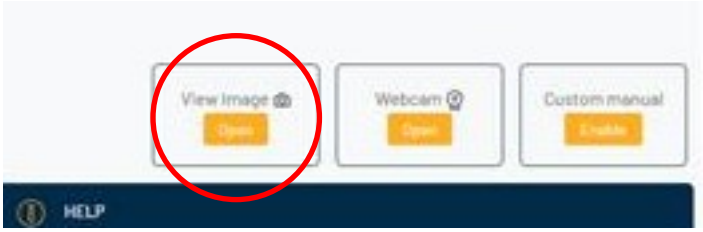
The Field of View of the Color Image Capture corresponds to the very same Field of View of barcode decoding imager. For optimal performances, the document must be placed as closed as possible to the Scan Window and steady.



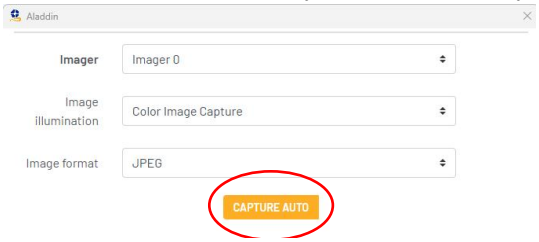
How to use

1. Via Aladdin:

Click on “View Image”.



Then select “Image Illumination” and click the yellow button “Capture Auto”.



2. Via Host Command:

Refer to parameter L - optional illumination on Chapter 3, Image Capture to the Host by Host Command.

COLOR CAMERA IMAGER

The Color Camera Imager (CCI) enables the scanner to capture high-quality, detailed color images. This enables basic AI functionality like Produce recognition when paired with a PC running AI software. These workflows help reduce shrink and improve the customer experience.

The Color Camera Imager is availabe for the following models:

- Magellan 3670VSi

NOTE: The cable for the Color Camera requires its own dedicated cable in order to connect to the 'Color Video Port'.

Figure 8. Color Camera Imager Field

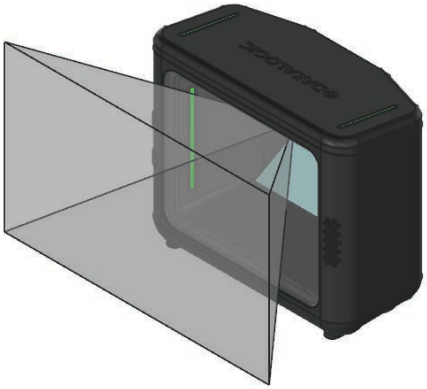
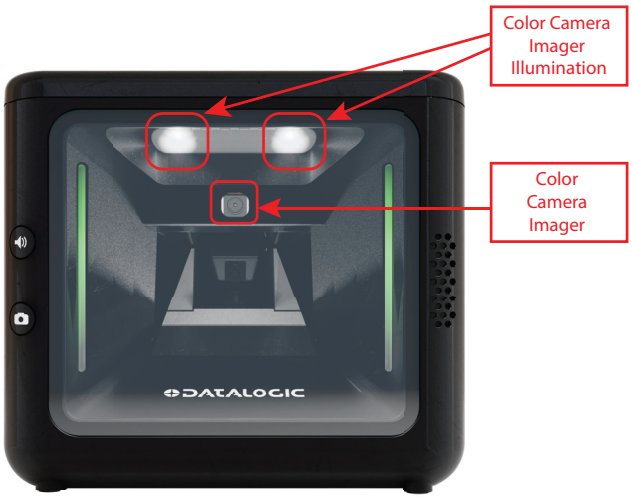


Figure 9. Color Camera Imager Parts



NOTE: To use the Color Camera please refer to Chapter I, Color Video Camera - UVC Streaming

CONTROLS AND INDICATORS

The scanner features two groups of Read LED Indicators: a pair of LEDs facing front, another pair facing Top for extended visibility.

Figure 10. Read LED Indicators



Control Buttons and Indicator LEDs

A panel on the left side of the vertical scan window contains control buttons.

1	Scanner Control Button	2	Camera Button
	-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 3 and 5 seconds to enter beeper tone change state. -Press this button between 5 and 9 seconds to enter Scanner Diagnostics Mode. -Press this button for 30 seconds to initiate a soft reset.		See "Camera Button Mode" on page 22

Image Capture to the Host by Camera Button

Perform the following steps to set up the Camera Button.

1. Set the Camera Button Mode to enabled.
2. Set the Image Capture destination to host port.
3. Press the camera button.

Scanner will beep for a few seconds, then take picture and send the Image Retrieval Event label to the POS to indicate image is ready. The data content of the event label is:

```
A856102000239
```

The POS sends the picture retrieval command to initiate picture download from the scanner. Format of the command is:

```
P\x02pG
```

The scanner sends the picture to the POS with the transmission format described in the previous section, “Image Capture By Host Command”.

Camera Button Mode

This feature enables or disables the camera button.



★Camera Button Mode = Disabled



Camera Button Mode = Enable

Image Destination

Specifies the destination for pictures/images taken with a camera button press.



★Image Destination = Disable



Image Destination = Mass Storage[a]



Image Destination = Host port

a. Contact Customer Service for more information on using this feature.

CLEANING

Exterior surfaces and scan windows exposed to spills, smudges or debris accumulation require periodic cleaning to assure best performance during scanning 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 11. Cleaning the Scanner





CAUTION: 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 performance.

CHAPTER 3
PROGRAMMING

INTRODUCTION TO LABEL PROGRAMMING

The programming bar code labels contained in this manual will allow you to customize and configure features and settings for your scanner. To ensure full compatibility and proper function, use only the programming bar codes in this manual and other product-specific publications to program scanner features.

This manual has been developed to make it quick and easy for users of all levels to find the information needed to understand and configure features. The following descriptions will help you to determine where to go from here.

Understanding the Basics

If you have little or no prior experience with programming using bar code labels, you should review the first few pages of this section to familiarize yourself with the basics of scanner programming before performing any changes to your configuration.

Using a Bar Code Mask

The programming bar codes in this manual have been placed as multiples per page. In order to present them only one at a time to the scanner, a bar code mask is provided on the opposite side of this page.

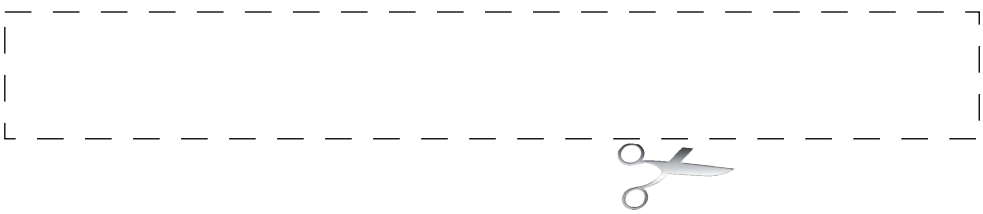
Going Green

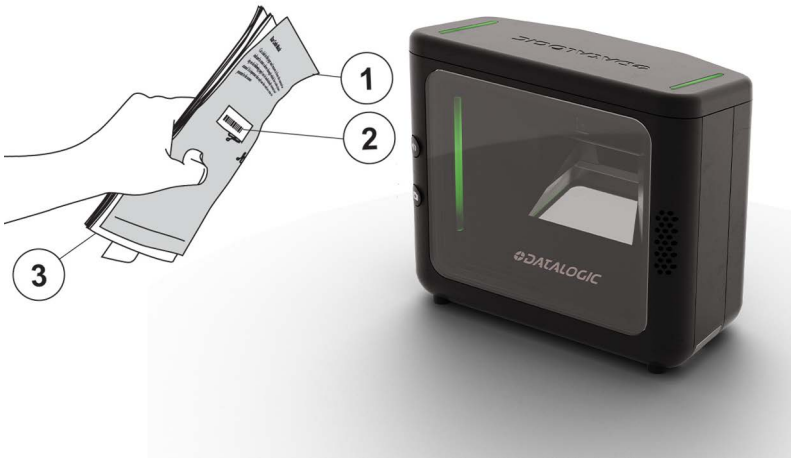
Thank you for using the bar code mask on the opposite side of this page. This manual has been formatted to minimize the quantity of pages needed to provide all of the programming bar codes available for this product.



Bar Code Mask

Cut a hole in this page and remove it from the manual as indicated to create a sleeve through which bar codes (starting in the following section) can be individually viewed and scanned. It is important that only one bar code at a time be presented to the scanner.





1. Bar Code Mask Sheet	3. Manual (folded)
2. Bar Code	

INTEGRATING THE SCANNER WITH YOUR HOST SYSTEM

Your scanner MUST be equipped with the correct hardware (interface board, cable, etc.) to properly communicate with your host system. Contact your dealer for information if you have questions about your scanner's hardware compatibility.

You may also want to contact the dealer or your system administrator if you have no record of how your scanner was pre-programmed at the factory. Scanners are typically programmed with the default settings for specific interface types (see Appendix G Factory Defaults**,** for more information); however, your scanner may have been custom configured with settings that are unique to your company or application.

Once you know the scanner's current settings, you can determine what changes will be required to allow communication with your host system and/or optional features you choose to modify to customize your installation. After recording the modifications needed, finish reading this section, then turn to the appropriate page and follow the instructions to program the scanner.

When all scanner features are programmed to your satisfaction, the scanner is ready to be placed into operation.

Customizing Your Scanner's Operation

Most scanner programming falls within four general categories:

General Scanner Features: features common to all interface types. Examples include beeper adjustments such as volume and length, read verification settings, etc.

EAS Features: control the settings for initerfacing with the EAS device.

Interface Related Features: mandatory settings necessary to allow communication with your host terminal. Examples of these settings are: RS-232 baud rate and parity.



CAUTION: It is possible, via programming bar codes, to change the interface type (for example: from RS-232 to IBM Port 17). Great care should be taken to select the correct interface type, since you can cause damage to the scanner and/or POS terminal by attempting to change to an incompatible interface. ALWAYS make interface selections with the host cable DISCONNECTED.



NOTE: Ensure that your planned modifications are compatible with the current interface. For example, baud rate selections are only valid in the RS-232 interface. The scanner will sound an error tone when scanning programming labels for features invalid to the current interface group.

Symbology Programming: gives the scanner the capability to autodiscriminate as few as one, and as many as all available symbologies. For optimal scanner performance enable only those symbologies required. Additionally the scanner may be programmed with the standard options available for the various symbologies, such as check digit, minimum label length, fixed and variable length bar codes, etc.

If you experience difficulties, have questions or require additional information, contact your local distributor, or call your dealer or sales representative.

PROGRAMMING OVERVIEW

The scanner's programmable feature settings can be modified to accommodate your system's unique requirements. These settings can be communicated to the scanner in one of two ways:

1. Commands can be sent directly from the host. A limited set of host commands are available. Refer to Appendix F Host Commands for more details or contact Tech Support.

2. Programming bar code labels can also be used to modify the scanner's programmable settings. This manual provides the bar code labels and instructions necessary to configure the scanner's features and options.



NOTE: When you program the scanner using any of the methods above, the scanner will store the changes until reprogrammed or returned to factory defaults.

Programming via Handheld Device

The scanner can also accept programming via either its USB or auxiliary ports using a handheld scanning device. Eligible handheld devices must have the ability to transmit the C128 1D and Data Matrix 2D programming bar codes presented in this manual. Several Datalogic handheld models support this functionality. Handheld data format requirements (baud rate, parity, etc.) are presented in Appendix H Handheld Data Format Requirements of this manual. Unless it is a USB handheld model, the programmable feature, Aux Port Mode, must also be set to "External Handheld Input" to allow operation.

What Is Programming Mode?

Programming Mode is a state in which the scanner must be placed in order to accept commands via programming bar code labels. When programming using the bar code labels in this manual, the scanner is typically placed in Programming Mode by scanning the Enter/Exit Programming Mode label.

While in the Programming Mode, the scanner only recognizes the special programming bar codes contained in this programming guide. See Appendix B, for information about scanner indications while in the Programming Mode.

Entering and Exiting Programming Mode

When needed, an Enter/Exit Programming Mode bar code is available at the top of each programming page.



NOTE: Your scanner will read the 2D programming bar codes in this manual while in Programming Mode, regardless of whether 2D reading capability has been enabled as an option.

Programming Session

A typical programming session is conducted as follows:

1. Scan the Enter/Exit Programming Mode bar code to place the scanner in Programming Mode. Depending upon its current programming, the scanner may emit a beep or beeps, indicating it has read the bar code and the green LED will flash on and off slowly while the scanner remains in Programming Mode. Normal scanning functions are disabled.

2. Scan the programming bar code(s) that is (are) specially encoded to make the desired changes. With few exceptions[1], the scanner will emit a triple beep each time you scan a valid programming bar code.



NOTE: Not all features are available for all interfaces and the scanner will sound an error tone when scanning programming bar codes for features invalid to the current interface. Only features supported by the currently active interface will be implemented.



NOTE: If a bar code is scanned that changes the scanner's interface, all previous configuration items scanned in the programming session are lost.

Additionally, when programming a feature requiring you to scan single digits to set a multi-digit number, such as Minimum Label Length, scanning the Enter/Exit Programming Mode bar code (or any item tag/item value bar code) before completing all input will result in an error tone and cause the scanner to exit Programming

1. Some features, such as Minimum Label Length, require you to select the label's length by scanning a series of single-digit bar codes. A single 'good read' beep is sounded when scanning these single digits in Programming Mode. Only the final required digit in the sequence will produce a triple beep when scanned, indicating a successfully programmed feature.

Mode. Under these circumstances, the current feature you were trying to set is thrown out; any previous bar codes scanned during the session will take effect.



NOTE: It is recommended that programming sessions be limited to one feature at a time. Should you make a mistake in the programming sequence, it can be difficult to discover where an error has been made if several features are programmed at once. Additionally, it can be confusing to determine which features may or may not have been successfully set following such a session.

3. Scan the Enter/Exit Programming Mode bar code to save any new settings and exit Programming Mode. The scanner will sound a beep and reset upon exiting Programming Mode, and the green LED will return to its usual state (on steady or off).
   The scanner will exit Programming Mode under the following conditions:

   the programming sequence has been completed or the Enter/Exit Programming Mode bar code is scanned.

   five minutes have passed without scanning activity. Any data programmed during the current session will be ignored, and the scanner will reset and revert to its condition previous to initiating the exited session.

   power is disconnected. Disconnecting power during Programming Mode, before scanning the Enter/Exit Programming Mode bar code, will cause all new settings to be ignored[1]. On power-up, the scanner will return to previous settings.

4. Maintain a good record of all changes made to ensure that you know if the original factory settings have been changed.

Programming Sequence

To modify a scanner feature (item), the programming bar codes contained in this manual must be scanned in a given sequence depending upon the feature being programmed (as shown in Table 1). There are three possible programming sequences:



NOTE: If the scanner's interface type must be changed, always be sure that interface configuration is the FIRST item scanned during a programming session. (Selecting an interface type resets ALL other configuration items to the stored values for that interface type.)

Programming sample A (the most commonly used format) demonstrates how three bar codes are scanned in sequence to do the following:

1. Place the scanner in Programming Mode (Enter/Exit Programming Mode bar code).

2. Scan the Item Tag that will enable the new feature.

3. End the programming session and reset the scanner (Enter/Exit Programming Mode bar code).

Programming sample B provides an example of a programming feature requiring the entry of a range value. Like sample A, the scanner is placed in Programming Mode and an Item Tag1 is scanned. Then, a value must be entered before ending the programming

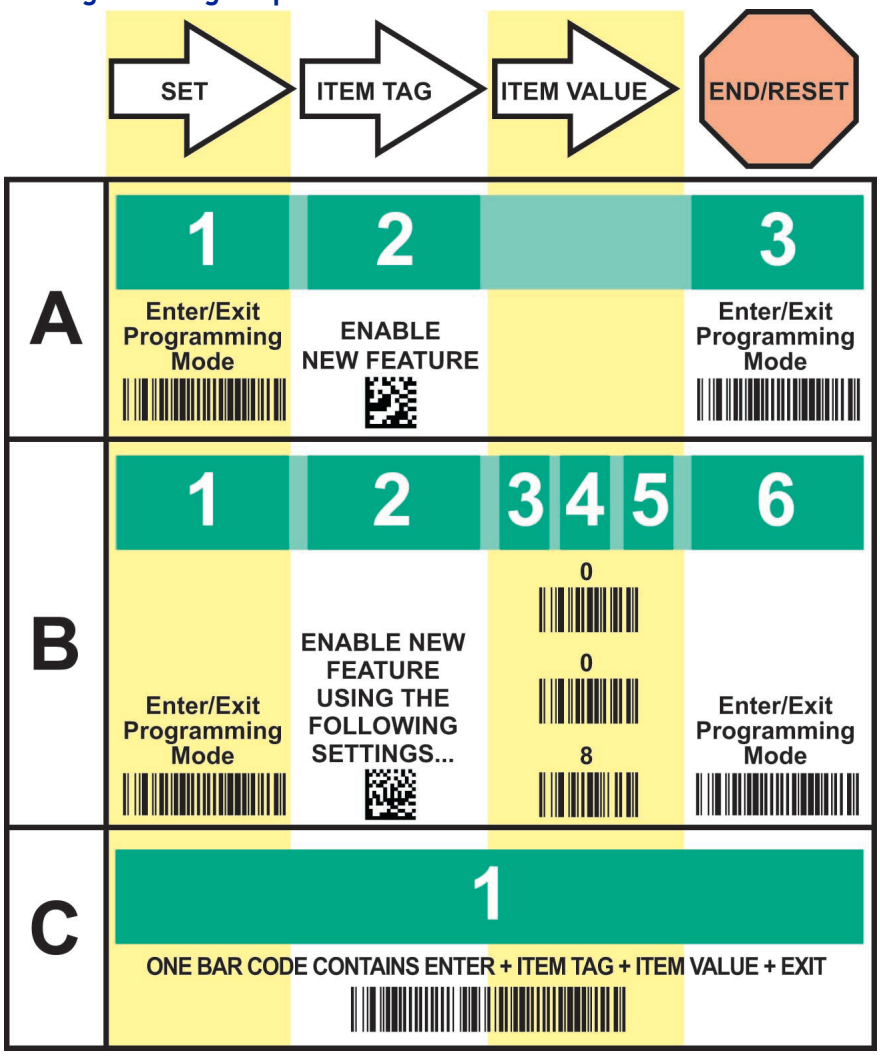
1. Exception: If an interface bar code had been read while in Programming Mode, the scanner will operate on the default settings for the new interface.

session. In the example, three digits must be scanned from the number pad in Appendix D Keypad. This type of format, requiring several bar codes, is necessary to allow flexible programming for item values with larger numeric ranges.

NOTE: Unless otherwise directed, item value settings (for example, label lengths) are entered as decimal numbers. Only enter values as hexadecimal when instructed to do so.

Programming sample C requires scanning of a single, extended length bar code. This special programming bar code contains all the data necessary to enter Programming Mode, set the Item Tag[1] and Item Value, and exit Programming Mode (all in one step).

Table 1. Programming Sequence



LED and Beeper Indicators

The scanner provides a set of indicators that verify/announce the various scanner functions. See Appendix B for more details.

1. An "Item Tag" is a term used to describe an assigned number, which is encoded in a programming bar code, that toggles (selects, enables, disables, etc.) a specific programming feature

If You Make a Mistake...

If, during a programming session, you find that you are unsure of the scanner's settings or wish to reset the scanner's configuration, use the Return to Factory Settings label below to return the scanner's configuration to the factory settings. Scanning this label will also reset any changes made during previous programming sessions.

Return to Factory Settings

Scan the bar code below to return the scanner to the default settings configured at the factory for the currently active interface. This bar code is typically used to return the scanner to a "known" operating state when the present programming status is not known, faulty, or suspect.



CAUTION: Use this bar code with caution, since it will reset ALL features that may have been programmed since the scanner's installation.



NOTE: DO NOT scan the Enter/Exit Programming Mode bar code before and after scanning this bar code.

RETURN TO FACTORY SETTINGS

Test Mode

Use this feature to place the scanner into a testing, or **demo** mode. This special mode disables the scanner interface, meaning that bar code data is not sent out to the host via the scanner interface. This allows the bar code to be scanned continuously without requiring a response from the POS terminal.

Enable Test Mode: The scanner will scan labels and beep without sending data.

Disable Test Mode: The scanner will return to the original configuration before Test Mode was entered.

NOTE: DO NOT scan the Enter/Exit Programming Mode bar code before and after scanning the bar codes on this page.

TEST MODE = DISABLE

TEST MODE = ENABLE

CONFIGURATION | IMAGING AND CSS FEATURES

SECTION CONTENTS

IMAGING FEATURES starting on page 34

- Image Capture to the Host by Host CommandImage Format
- Image Format
- Image Size
- Image Brightness
- Image Contrast
- Image Compression
- Region of Interest (ROI)
- Cell Phone Mode

IMAGING FEATURES

The imaging features in this chapter pertain only to the imaging feature available via the vertical window (or, optionally, the horizontal window) using the Image Capture / CSS Button, below.



The methods of capturing images are discussed below:

- "Image Capture to the Host by Host Command"
- "Image Format"

Image Capture to the Host by Host Command

This feature is only available for RS-232 and USB COM interfaces.



NOTE: If the USB COM interface has been selected, follow the instructions in the chapter of this guide.

The host command format is as follows:

P<cnt>**pSBCIF**

where:

P - ASCII 'P' used as preamble of pass-through commands *<cnt>* - binary value of 6 indicating 6 bytes to follow

p - ASCII lowercase 'p' ; command to take a picture

S - size value of image as ASCII character

- ‘S’ = uses scanner's configuration value CI_IMAGE_SIZE
- 0’-VGA, (640X480)
- ‘1’-WVGA, (800X600)
- 2’-FVGA, (1364X1120)
- '3'-QVGA (320x240)
- '4'-Scaled VGA (640x480)
- '5'-Custom ROI (configured by CI_IMAGE_ROI)

B - brightness value in ASCII

- ‘B’ = uses scanner's configuration value CI_IMAGE_BRIGHTNESS else ‘0’ thru’9’ specifies brightness

C - contrast value in ASCII

- ‘C’ = uses scanner configuration value CI_IMAGE_CONTRAST else ‘0’ thru’9’ specifies contrast

I - imager selection

- ‘V’ = Primary imager
- 'C' = Color Camera (where supported)

F - format of image

- ‘J = jpeg
- ‘M’ = bmp (bitmap)
- 'P' = PNG
- ‘T’ = tiff
- ‘B’ = binary

L - Optional Illumination

- '3' = RGB Illumination (where supported)

IF the image is of a type the scanner supports, capture and transmission occurs, and the command is of proper format

THEN

The scanner will transmit an ACK (0x06) to the Host in response to this command.

The image data transmission starts with a 4 byte binary field representing (Big Endian) number of bytes to follow.

If the “number of bytes to follow” value is zero, there was a problem with generating the image and the request should be retried.

ELSE

The scanner will transmit a BEL (0x07) to the Host in response to this command.

ENDIF

Image Format

This feature specifies the output format for images taken using the camera function of the scanner.

Choices are:

- JPG
- BMP
- TIFF
- PNG
- RAW



★Image Format = JPG



Image Format = BMP



Image Format = TIFF



Image Format = PNG



Image Format = RAW

Image Size

This feature specifies the size of the captured image. Choices are:

VGA : Video Graphics Array. 640 x 480 pixels.

WVGA: Wide Video Graphics Array, various physical sizes, 16:9 shape

Full Size: Maximum image height and width. Largest image.

Half VGA: Half of the size of a regular VGA image, 320 x 240 pixels. Smallest image.

Scaled VGA: Video Graphics Array, 640 x 480 pixels.

ROI: The size of an ROI image is determined by the value of the ROI setting. See "Region of Interest (ROI)" on page 43.



★ Image Size = VGA



Image Size = WVGA



Image Size = Full Size



Image Size = Half VGA

Image Brightness

Specifies the image brightness value. The selectable range is from 0 to 10, with 10 being the brightest.



★ Image Brightness = 0



Image Brightness = 1



Image Brightness = 2



Image Brightness = 3



Image Brightness = 4



Image Brightness = 5



Image Brightness = 6



Image Brightness = 7

Image Brightness — continued

Image Size = Scaled VGA

Image Size = ROI

Image Brightness = 8

Image Brightness = 9

Image Brightness = 10

Image Contrast

This feature sets the contrast level for a captured image. The selectable range is from 0 to 10, with 0 being the lowest and 10 being the highest contrast.



★ Image Contrast = 0



Image Contrast = 1



Image Contrast = 2



Image Contrast = 3



Image Contrast = 4



Image Contrast = 5



Image Contrast = 6



Image Contrast = 7

Image Contrast — continued



Image Contrast = 8



Image Contrast = 9



Image Contrast = 10

Image Compression

Specifies the starting image compression factor.



Image Compression = 5



Image Compression = 10



Image Compression = 25



Image Compression = 50



Image Compression = 70



Image Compression = 80



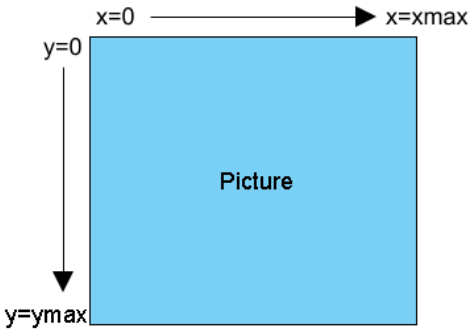
Image Compression = 90



★ Image Compression = 100

Region of Interest (ROI)

This feature specifies the X-Y coordinates for the Region of Interest (ROI). The region of interest coordinates are defined as follows:



Where xmax is the x-size of a full size image (1119 pixels), and ymax is the y-size of a full size image (1359 pixels).

For example, a coordinate set of 0, 559, 680, 1359 will produce the bottom left section of a full size image.

NOTE: Picture coordinates are NOT defined on a Cartesian coordinate plane.

- Byte [0]-[1]: 16 bit hex value xmin
- Byte [2]-[3]: 16 bit hex value xmax
- Byte [4]-[5]: 16 bit hex value ymin
- Byte [6]-[7]: 16 bit hex value ymax

NOTE: If the xmax/ymax values are configured larger than the maximum values above, they will default to 1 less than their respective maximum values.

If the xmin/ymin values are configured larger than xmax/ymax, they will default to 0.

Region of Interest (continued)



★Region of Interest = default



Region of Interest = upper left quadrant



Region of Interest = upper right quadrant



Region of Interest = lower left quadrant



Region of Interest = lower right quadrant

CELL PHONE MODE

Cell Phone Mode

Sets the level of cell phone mode reading.

NOTE: Higher cell phone settings will reduce time available for reading printed barcodes.

Cell Phone Mode = Low

★Cell Phone Mode = Medium

Cell Phone Mode = High

NOTES

CONFIGURATION | GENERAL SCANNER FEATURES

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SCANNING FEATURES starting on page 48

- 1D Double Read Timeout
- 2D Double Read Timeout
- Sleep Mode Timer
- 1D Inverse Read Control
- 2D Inverse Read Control
- 2D Contrast Improvement
- Illumination Control

LED AND BEEPER INDICATORS starting on page 56

- Good Read LED Idle State
- Scanner Control Button Options
- Power-up Tone Control
- Good Read Beep Control
- Good Read Beep Frequency
- Good Read Beep Length
- Good Read Beep Volume
- Good Read When to Indicate

HOST DOWNLOAD TO HANDHELD starting on page 64

SCANNING FEATURES

1D Double Read Timeout

The 1D Double Read Timeout feature specifies the minimum allowable time which must pass before reading the same 1D label again (e.g. two identical items in succession).

To set the Double Read Timeout:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

NOTE: If the incidence of multiple reads is not acceptable, increase the Double Read Timeout setting to a higher value.

1D Double Read Timeout = 300ms

★ 1D Double Read Timeout = 400ms

1D Double Read Timeout = 600ms

1D Double Read Timeout = 800ms

2D Double Read Timeout

The 2D Double Read Timeout feature specifies the minimum allowable time which must pass before reading the same 2D label again (e.g. two identical items in succession).

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

NOTE: If the incidence of multiple reads is not acceptable, increase the Time-out setting to a higher value.

2D Double Read Timeout = 300ms

2D Double Read Timeout = 400ms

2D Double Read Timeout = 600ms

★ 2D Double Read Timeout = 700ms

2D Double Read Timeout = 800ms

Label Gone Timeout

Specifies the amount of time in cycles (one cycle = 25ms) that data segments are stored by the software before being discarded if a label has not been successfully decoded during the current "label in volume session," which is defined as the time between when the label gone time is first started until the label gone timer expires.

NOTE: This only applies to UPC/EAN labels when segment assembly is enabled.

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Label Gone Timeout = 0.4 Seconds

Label Gone Timeout = 0.6 Seconds

Label Gone Timeout = 0.8 Seconds

★ Label Gone Timeout = 1.2 Seconds

Label Gone Timeout = 1.6 Seconds

Sleep Mode Timer

This feature specifies the amount of time of inactivity (with no label reads) before the scanner enters sleep mode.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code, Set Sleep Mode Timer below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the in Appendix D, that represent the desired time interval. The selectable range is 000-255 in 15 second increments. Pad all numbers with leading zeros to yield a three-digit entry (000-255).
4. Scan the Enter/Exit Programming Mode bar code to exit Programming Mode.



Set Sleep Mode Timer

★ Default setting for this feature is: 5 minutes

1D Inverse Read Control

This configuration item is used to toggle inverted label reading for 1D bar codes, for example, a label printed as white on black as opposed to black on white.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★1D Inverse Read Control = Disable



1D Inverse Read Control = Enable



1D Inverse Read Control = Normal + Inverse (auto detect bar/space colors)

2D Inverse Read Control

This configuration item is used to toggle inverted label reading for 2D bar codes, for example, a label printed as white on black as opposed to black on white.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★2D Inverse Read Control = Disable



2D Inverse Read Control = Enable



2D Inverse Read Control = Disable

2D Contrast Improvement

This feature enables / disables the scanner's ability to enhance the image contrast for scanned 2D symbologies.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★2D Contrast Improvement = Disable

2D Contrast Improvement = Enable

Illumination Control

This feature allows illumination to be turned off when the scanner is disabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below:
   Disable = Illumination remains on during the time the scanner is disabled.
   Enable = Illumination turns off during the time the scanner is disabled.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



Illumination Control = Disable



★ Illumination Control = Enable

LED AND BEEPER INDICATORS

Good Read LED Idle State

This feature specifies the state of the green scanner LEDs when the scanner is idle and ready to read a label. Options are:

- Off
- On dim

To set the Scanner LEDs Idle State:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Scanner LED Idle State = Off

★Scanner LED Idle State = On Dim

Scanner Control Button Options

Configure the Scanner Control Button to one of the following modes of operation:

- Enable all functions: Volume, tone, diagnostics and reset.
- Enable only volume, tone and reset.
- Enable reset only.
- Enable volume and tone, disable reset.
- Disable all button functions

To set the desired Scanner Control Button Option:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



Scanner Control Button = Enable All Functions



★Scanner Control Button = Enable Only Volume Tone and Reset



Scanner Control Button = Enable Reset Only



Scanner Control Button = Enable volume and tone, disable reset



Scanner Control Button = Disable All Functions

Power-up Tone Control

Specifies the type of audible indication that is made when entering scanner-active mode on power-up. Choices are:

- No tone
- Play tone

To set the Power-up tone:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Power-up Tone Control = No Beep

★ Power-up Tone Control = Beep

Good Read Beep Control

This feature enables/disables scanner beep upon successfully decoding of a label.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Good Read Beep Control = Disable

★Good Read Beep Control = Enable

Good Read Beep Frequency

Adjusts the scanner's good read beep to sound at low, medium, or high frequency (controls the beeper's pitch/tone).

- Low
- Medium
- High

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



Good Read Beep Frequency = Low



★Good Read Beep Frequency = Medium



Good Read Beep Frequency = High

Good Read Beep Length

Specifies the duration of a good read beep.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code, Set Good Read Beep Length. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the keypad in Appendix D, that represent the desired good read beep length setting. The selectable range is 1-255, which is the timeout in 10-millisecond increments. Times have a tolerance of +/-25%. Pad all single and double digit numbers with leading zeroes to yield a three-digit entry (001-255).
   Examples:
   001 = 10ms
   005 = 50ms
   040 = 400ms
   250 = 2,500ms (2.5 seconds)
4. The scanner will automatically exit Programming Mode when the appropriate amount of digits have been scanned.

Set Good Read Beep Length

★ Default setting for this feature is:
008 - 80ms

Good Read Beep Volume

Selects the beeper volume upon a good read beep. There are five selectable volumes, with each volume increment adding approximately five decibels to the previous level:

- Lowest Volume
- Low Volume
- Medium Volume
- High Volume
- Highest Volume

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



Good Read Beep Volume = Lowest



Good Read Beep Volume = Low



Good Read Beep Volume = Medium



Good Read Beep Volume = High



★Good Read Beep Volume = Highest

Good Read When to Indicate

This feature specifies when the scanner will provide indication (beep and/or flash its green LEDs) upon successfully reading a bar code.

- Good Read = Indicate after decode.
  For scanner models having intelligent integrated EAS, label transmission (and hence the good read beep) is completed after the EAS logic executes.
- Good Read = Indicate after transmit
- Good Read = Indicate after CTS goes inactive, then active.
  This mode applies to RS-232 STD and RS-232 WN interfaces only. If set in other interfaces, “Indicate after decode” mode will be implemented.
- Good Read = Indicate after each output structure proofed.
  When beeping after each output structure decoded, if there are multiple output structures, there is a delay after the beep has finished. This delay is equal to the Good Read Beep Length.

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the desired mode bar code from those provided below You’ll need to cover any unused bar codes on facing pages to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the Enter/Exit Programming Mode bar code to complete.



★Good Read When to Indicate = After Decode



Good Read When to Indicate = After Transmit



Good Read When to Indicate = After CTS goes Inactive, Then Active



Good Read When to Indicate = After Each Output Structure Proofed

HOST DOWNLOAD TO HANDHELD

Attached Datalogic handheld scanners can be updated via the host port. Contact Technical Support for details.

Handheld Host Download Timeout

This feature sets the timeout (in seconds) to wait for a response from the handheld when performing a host download to the handheld.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code below, Set Handheld HDL Timeout. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D, that represent the desired delay. The selectable range is 0-255, which is the delay in 1-second increments. Pad all single and double digit numbers with leading zeroes to yield a three-digit entry (000-255).
4. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Examples:

002 = 2 seconds

005 = 5 seconds

015 = 15 seconds



Set Handheld HDL Timeout

★Default setting for this feature is: 15 seconds

CONFIGURATION | EAS FEATURES

SECTION CONTENTS

EAS FEATURES — CHECKPOINT starting on page 66

ERI Active State
•ERI Timeout

EAS FEATURES — CHECKPOINT

The features in this section apply only to Checkpoint® EAS systems.

ERI Active State

Specifies the active state polarity of ERI; the inactive state is its opposite polarity. ERI output goes active during the good read of a bar code, allowing the EAS device to deactivate a tag on the product.

To set the ERI Active State:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★ ERI Active State = Active Low



ERI Active State = Active High

ERI Timeout

Specifies the amount of time that an ERI signal is held in its active state for a good read.

To set the ERI Timeout:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code, Set ERI Timeout below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D, that represent the desired duration. The selectable range is 1-255, which is the duration in 10-milli-second increments. Pad all single and double digit numbers with leading zeros to yield a three-digit entry (001-255).
   Examples:
   000 = ERI timeout disabled
   001 = 10ms
   005 = 50ms
   040 = 400ms
   250 = 2,500ms (2.5 seconds)

NOTE: A setting of 0 (000) disables this feature.

4. The scanner will automatically exit Programming Mode when the appropriate amount of digits have been scanned.

Set ERI Timeout

★ Default setting for this feature is:
002 -20ms

CONFIGURATION|INTERFACE RELATED FEATURES

SECTION CONTENTS

INTERFACE TYPE starting on page 70

- RS-232 Interface Selection
- USB Interface Selection
- Keyboard Interface Selection

USB OEM SCANNER DEVICE TYPE starting on page 74

RS-232 FEATURES starting on page 75

- RS-232 Baud Rate
- RS-232 Number of Data Bits
- RS-232 Number of Stop Bits
- RS-232 Parity
- RS-232 Hardware Control
- RS-232 Software Flow Control
- RS-232 Software Flow Control
- RS-232 Ignore Host Commands
- RS-232 TTL
- RS-232 TTL Invert
- RS-232 Beep on ASCII BEL
- Beep on Not on File
- Beep on Not on File
- RS-232 ACK NAK Features
  - ACK NAK Enable
  - RS-232 ACK Character
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  - RS-232 Retry on ACK NAK Timeout
- **RS-232 Features (continued)**
- RS-232 ACK NAK Timeout Value
  - RS-232 ACK NAK Retry Count
  - RS-232 ACK NAK Error Handling
- RS-232 Indicate Transmission Failure

SECTION CONTENTS (CONTINUED)

USB KEYBOARD AND KEYBOARD WEDGE FEATURES starting on page 95

- USB Keyboard and Keyboard Wedge Intercharacter Delay
- USB Keyboard and Keyboard Wedge Country Mode
- USB Keyboard and Keyboard Wedge Country Mode
- USB Keyboard and Keyboard Wedge Country Mode

Interface Type

Specifies the current scanner interface. To access a scanner's interface identification number, place the scanner in Scanner Diagnostic Mode and view the 7-segment FRU display (reference Chapter 2, Getting started, for more information). Selections are:

INTERFACE (I/F) TYPE	I/F I.D. NUMBER	NOT USER-SELECTABLE	
RS-232 Standard	05	System Interface	7-segment FRU display indicates 0 at start-up (accompanied by trill beep for approx. 2 seconds)
RS-232 Wincor-Nixdorf	12		
RS-232 Single Cable	20		
USB OEM	45		
USB Keyboard	35		
USB COM	47		



NOTE: A new scanner may have been shipped from the factory with a Null Interface (no interface type selected) to ensure system compatibility at installation. In this case, the correct Interface Type programming bar code must be scanned first before the scanner can be used with a POS system.



NOTE: If the scanner's interface type must be changed, always be sure that interface configuration is the FIRST item scanned during a programming session. (Selecting an interface type resets ALL other configuration items to the factory default for that interface type.)



CAUTION: Great care should be taken to select the correct interface type, since you can cause damage to the scanner and/or POS terminal by attempting to change to an incompatible interface. ALWAYS make interface selections with the host cable DISCONNECTED.



NOTE: When an interface is selected, the scanner loads the configuration for that interface as the selection is made. Any custom configurations done in the previous interface will not be carried over to the configuration for the new interface.

Interface Type (continued)

To select the desired interface:

1. Disconnect current interface cable(s) if currently connected.
2. Scan the Enter/Exit Programming Mode bar code.
3. Scan the bar code representing the appropriate interface located on the following pages. You'll need to cover any unused bar codes adjacent to and on any facing pages to ensure the scanner reads only the bar code you intend to scan.
4. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



NOTE: Once the correct interface has been set, it will be necessary to proceed to the appropriate pages in this manual that select parameters and options for that interface. For example, if RS-232 is selected, turn to the pages in this manual headed as features specific to the RS-232 interface.

5. Connect new interface cable(s).

RS-232 Interface Selection

Remember to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.

CAUTION: Great care should be taken to select the correct interface type, since you can cause damage to the scanner and/or POS terminal by attempting to change to an incompatible interface. ALWAYS make interface selections with the host cable DISCONNECTED.



Interface Type = RS-232 Standard



Interface Type = RS-232 Wincor-Nixdorf

NOTE: Single cable installations require connection at the POS Terminal (host) port.



Interface Type = RS-232 Single Cable

USB Interface Selection

Remember to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.

CAUTION: Great care should be taken to select the correct interface type, since you can cause damage to the scanner and/or POS terminal by attempting to change to an incompatible interface. ALWAYS make interface selections with the host cable DISCONNECTED.

NOTE: Single cable installations require connection at the POS Terminal (host) port.

Interface Type = USB OEM

Interface Type = USB COM

Keyboard Interface Selection

Remember to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.

NOTE: Great care should be taken to select the correct interface type, since you can cause damage to the scanner and/or POS terminal by attempting to change to an incompatible interface. ALWAYS make interface selections with the host cable DISCONNECTED.

Interface Type = USB Keyboard

USB OEM SCANNER DEVICE TYPE

The OEM-USB protocol allows for the scanner to be identified as one of two different types of bar code scanners. Depending on what other scanners you may already have connected to a USB POS, you may need to change this setting to enable all scanners to communicate. Options are:

- Table Top Scanner
- Handheld Scanner

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★USB OEM Scanner Device Type = Table Top Scanner



USB OEM Scanner Device Type = Handheld Scanner

RS-232 FEATURES

RS-232 Baud Rate

This feature selects the baud rate required for sending and receiving data.

NOTE: Single cable interfaces are limited to Baud Rate selections up to 19200. They cannot communicate at Baud Rates of 38400 and up.

To specify the RS-232 Baud Rate:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the desired baud rate from the bar codes below and on the immediately following pages. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

RS-232 Baud Rate = 1200

RS-232 Baud Rate = 2400

RS-232 Baud Rate = 4800

RS-232 Baud Rate (continued)

RS-232 Baud Rate = 38400

RS-232 Baud Rate = 57600

RS-232 Baud Rate = 115200

RS-232 Baud Rate = 230400

RS-232 Baud Rate = 460800

RS-232 Baud Rate = 921600

★ RS-232 Baud Rate = 9600

RS-232 Baud Rate = 19200

RS-232 Number of Data Bits

Specifies number of data bits required for sending and receiving data.

NOTE: A setting of 7 data bits with no parity will default to 8 data bits and no parity.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code below representing the desired Data Bit setting. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

RS-232 Number of Data Bits = 7

★RS-232 Number of Data Bits = 8

RS-232 Number of Stop Bits

Specifies number of stop bits required for sending and receiving data.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code below representing the desired Stop Bit setting. You'll need to cover any unused barc odes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★RS-232 Number of Stop Bits = 1



RS-232 Number of Stop Bits = 2

RS-232 Parity

Specifies parity required for sending and receiving data.

Options for this setting are:

- RS-232 PARITY = NONE
- RS-232 PARITY = EVEN
- RS-232 PARITY = ODD

NOTE: A setting of no parity with 7 data bits will default to 8 data bits and no parity.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code below or on the following pages representing the desired Parity setting. You'll need to cover any unused bar codes, as well as facing pages to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★RS-232 Parity = None

RS-232 Parity = Even

RS-232 Parity = Odd

RS-232 Hardware Control

Enables/disables use of the RS-232 CTS signal for flow control and/or scan control.

- Disable — The scanner transmits to the host regardless of any activity on the CTS line.
- Enable CTS Flow Control — The CTS signal controls transmission of data to the host.
- Enable CTS Scan Control — The CTS line must be active for scanner to read and transmit data. While the CTS line is inactive, scanner remains in a host- disabled state; following a successful label transmission, the CTS signal must transition to inactive and then to active to enable scanning for the next label.
- Enable Magellan SL CTS Scan Control — Follows the same hardware protocol as older Magellan SL scanners.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan bar code below or from the following page for the desired setting. You'll need to cover any unused bar codes on facing pages to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★RS-232 Hardware Control = Disable



RS-232 Hardware Control = Enable CTS Flow Control



RS-232 Hardware Control = Enable CTS Scan Control



RS-232 Hardware Control = Enable MGL SL CTS Scan Control

RS-232 Software Flow Control

Enables/disables RS-232 Flow Control using XON/ XOFF characters.

NOTE: This item will be ignored when the feature, RS-232 NAK Character, is enabled

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★RS-232 Software Flow Control= Disable

RS-232 Software Flow Control= Enable

RS-232 Ignore Host Commands

When set to ignore host commands, the scanner will ignore all host commands except for the minimum set necessary to keep the interface active and transmit labels. For normal operation of the interface, disable this feature.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★RS-232 Ignore Host Commands = Don't Ignore



RS-232 Ignore Host Commands = Ignore

RS-232 TTL

Specifies whether RS-232 interface provides TTL levels on the output pins TxD and RTS.

Choices are:

- Normal RS-232 levels
- TTL levels

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code below which represents the desired setting for this feature. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★RS-232 TTL = Normal RS-232 levels



RS-232 TTL = TTL Levels

RS-232 TTL Invert

Enables/disables inversion of TTL.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code below which represents the desired setting for this feature. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★RS-232 TTL Invert = Disable



RS-232 TTL Invert = Enable

RS-232 Beep on ASCII BEL

Enables/disables ability of scanner to beep (sound a good read tone) on receiving an ASCII BEL (07 hex).

- Disable
- Enable

To enable/disable this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★RS-232 Beep on ASCII BEL = Disable



RS-232 Beep on ASCII BEL = Enable

Beep on Not on File

Select for the host to beep (or not) when a not-on-file condition is detected by the host. This feature is also applicable to single cable RS-232.

Options for this feature are:

- Muted (no beep will sound)
- Low Volume
- Medium Volume
- High Volume

To configure this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code for the desired selection below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



RS-232 Beep on Not on File = Muted



★RS-232 Beep on Not on File = Low Volume



RS-232 Beep on Not on File = Medium Volume



RS-232 Beep on Not on File = High Volume

RS-232 ACK NAK FEATURES

ACK NAK Enable

This enables/disables the ability of the scanner to support the RS-232 ACK/NAK protocol. When configured, the scanner and/or host sends an “ACK” when it receives data properly, and sends “NAK” when the data is in error. Selections for this option are:

- Disable ACK NAK
- Enable for Label Transmission — the scanner expects an ACK/NAK response from the host when a label is sent)
- Enable for Host Acknowledgement — Enabled for Host Commands (the scanner will respond with ACK/NAK when the host sends a command)
- Enable for Label & Host — Enabled for both Label Transmission & Host Command acknowledgement.

To select the option for RS-232 ACK NAK Enable:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the desired option from bar codes below and on the following page. You’ll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★RS-232 ACK NAK = Disable

RS-232 ACK NAK = Enable for Label Transmission

RS-232 ACK NAK = Enable for Host Acknowledgement

RS-232 ACK NAK = Enable for Label & Host

RS-232 ACK Character

This feature specifies which ASCII character will be used as an ACK character.

NOTE: DO NOT set this feature to use previously defined characters such as XON, XOFF or host commands as this will conflict with normal operation of these characters. 8-bit data is not recognized when the feature, RS-232 Number of Data Bits, is set to 7 data bits.

To specify the RS-232 ACK Character:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code, SET RS-232 ACK Character below. You'll need to cover any unused bar codes on this and the facing page to ensure the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D, that represent the hex designation for the desired character. A table containing the ASCII Character Set and their corresponding Hex Values is available in the inside back cover of this manual. ASCII parameters must be input by scanning a pair of hexadecimal digits for the desired character. For example, if ASCII "A" were the desired ACK character, you would scan the digits "4", then "1" (the ASCII corresponding hex value).
4. The scanner will automatically exit Programming Mode when the appropriate amount of digits/characters have been scanned.

Set RS-232 ACK Character

★Default setting for this feature is:
06 - ACK

RS-232 NAK Character

This feature specifies which ASCII character will be used as a NAK character.

NOTE: DO NOT set this feature to use previously defined characters such as XON, XOFF or host commands as this will conflict with normal operation of these characters. 8-bit data is not recognized when the feature, RS-232 Number of Data Bits, is set to 7 data bits.

To specify the RS-232 NAK Character:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code, SET RS-232 NAK Character below. You'll need to cover any unused bar codes on this and the facing page to ensure the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the keypad in Appendix D, that represent the hex designation for the desired character. A table containing the ASCII Character Set and their corresponding Hex Values is available in the inside back cover of this manual. ASCII parameters must be input by scanning a pair of hexadecimal digits for the desired character. For example, if ASCII "A" were the desired NAK character, you would scan the digits "4", then "1" (the ASCII corresponding hex value).
4. The scanner will automatically exit Programming Mode when the appropriate amount of digits/characters have been scanned.

Set RS-232 NAK Character

★Default setting for this feature is:
15 - NAK

RS-232 Retry on ACK NAK Timeout

This option specifies the action scanner performs on expiration of the RS-232 ACK NAK Timeout Value.

Options are:

- Disable (transmission failure occurs)
- Enable (retry)

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



RS-232 Retry on ACK NAK Timeout = Disable



★RS-232 Retry on ACK NAK Timeout = Enable

RS-232 ACK NAK Timeout Value

This item specifies the time the scanner will wait for an ACK character from the host following a label transmission.

- 0 = Infinite timeout
- 1 - 75 = Timeout in 200-millisecond increments

To set the ACK NAK Timeout Value:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code below, Set RS-232 ACK NAK Timeout Value. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the in Appendix D, that represent the desired timeout. A setting of 0 specifies an infinite timeout. The remaining selectable range is 1-75, which is the timeout in 200-millisecond increments. Pad all single digit numbers with a leading zero to yield a two-digit entry (00-75).

- Examples:
- 00 = Infinite timeout
- 01 = 200ms
- 05 = 1,000ms (1 second)
- 40 = 8,000ms (8 seconds)
- 75 = 15,000ms (15 seconds)

The scanner will automatically exit Programming Mode when the appropriate amount of digits have been scanned.



Set RS-232 ACK NAK Timeout Value

★ Default setting for this feature is:
01 - 200ms

RS-232 ACK NAK Retry Count

This feature sets the number of times for the scanner to retry a label transmission under a retry condition.

To set the RS-232 ACK NAK Retry Count:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code, Set RS-232 ACK NAK Retry Count below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D, that represent the desired number. The selectable range is 000-255 resets. Pad all single and double digit numbers with leading zeroes to yield a three-digit entry (000-255).

NOTE: A setting of 255 specifies "retry forever."

4. The scanner will automatically exit Programming Mode when the appropriate amount of digits have been scanned.

Set RS-232 ACK NAK Retry Count

★ Default setting for this feature is:
003 - Three retrys

RS-232 ACK NAK Error Handling

This item specifies the method the scanner will use to handle errors detected while waiting to receive the ACK character from the host. Errors include unrecognized host commands and communication errors such as parity or framing errors.

- Ignore Errors (recommended setting)
- Assume ACK (risk of lost label data)
- Assume NAK (risk of duplicate label)

To select the option for RS-232 ACK NAK Error Handling:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the desired option from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★ RS-232 ACK NAK Error Handling = Ignore Errors



RS-232 ACK NAK Error Handling = Assume ACK



RS-232 ACK NAK Error Handling = Assume NAK

RS-232 Indicate Transmission Failure

This feature enables / disables the ability of the scanner to sound a bad label beep indication when a transmission failure occurs.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the desired option from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



RS-232 Indicate Transmission Failure = Disable



★ RS-232 Indicate Transmission Failure = Enable

USB KEYBOARD AND KEYBOARD WEDGE FEATURES

USB Keyboard and Keyboard Wedge Intercharacter Delay

Specifies a time delay between characters.

To set this feature:

1. Scan the USB Keyboard and Keyboard Wedge Intercharacter Delay bar code.
2. Scan the appropriate characters/digits from the **Keypad** in Appendix D, that represent the desired delay. The selectable range for this option is any decimal value from 00 (no delay) to 99 in 10 ms increments. A table containing the ASCII Character Set and their corresponding decimal values is available in the inside back cover of this manual. ASCII parameters must be input by scanning decimal digits for each character. Pad all single digit numbers with leading zero to yield a two-digit entry (00-99). Thus, to set an intercharacter delay of 70ms, bar codes containing the digits '0' and '7' must be scanned.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Set USB Keyboard/Keyboard Wedge Intercharacter Delay

★ Default setting for this feature is: 00 (0ms)

USB Keyboard and Keyboard Wedge Country Mode

This feature specifies the country/language that will be supported by the keyboard.



★USB Keyboard and Keyboard Wedge Country Mode = USA



USB Keyboard and Keyboard Wedge Country Mode = Belgium



USB Keyboard and Keyboard Wedge Country Mode = Britain



USB Keyboard and Keyboard Wedge Country Mode = Denmark



USB Keyboard and Keyboard Wedge Country Mode = France



USB Keyboard and Keyboard Wedge Country Mode = Germany

USB Keyboard and Keyboard Wedge Country Mode — continued



USB Keyboard and Keyboard Wedge Country Mode = Italy



USB Keyboard and Keyboard Wedge Country Mode = Norway



USB Keyboard and Keyboard Wedge Country Mode = Portugal



USB Keyboard and Keyboard Wedge Country Mode = Spain



USB Keyboard and Keyboard Wedge Country Mode = Sweden



USB Keyboard and Keyboard Wedge Country Mode = Switzerland

USB Keyboard and Keyboard Wedge Country Mode — continued



USB Keyboard and Keyboard Wedge Country Mode = Japanese 106-key



USB Keyboard and Keyboard Wedge Country Mode = Hungary



USB Keyboard and Keyboard Wedge Country Mode = Czech Republic



USB Keyboard and Keyboard Wedge Country Mode = Slovakia



USB Keyboard and Keyboard Wedge Country Mode = Romania



USB Keyboard and Keyboard Wedge Country Mode = Croatia



USB Keyboard and Keyboard Wedge Country Mode = Poland

USB Keyboard and Keyboard Wedge Country Mode — continued



USB Keyboard and Keyboard Wedge Country Mode = French Canadian



USB Keyboard and Keyboard Wedge Country Mode = Turkish



USB Keyboard and Keyboard Wedge Country Mode = Russian



USB Keyboard and Keyboard Wedge Country Mode = Portuguese



USB Keyboard and Keyboard Wedge Country Mode = Vietnamese

CONFIGURATION | DATA EDITING

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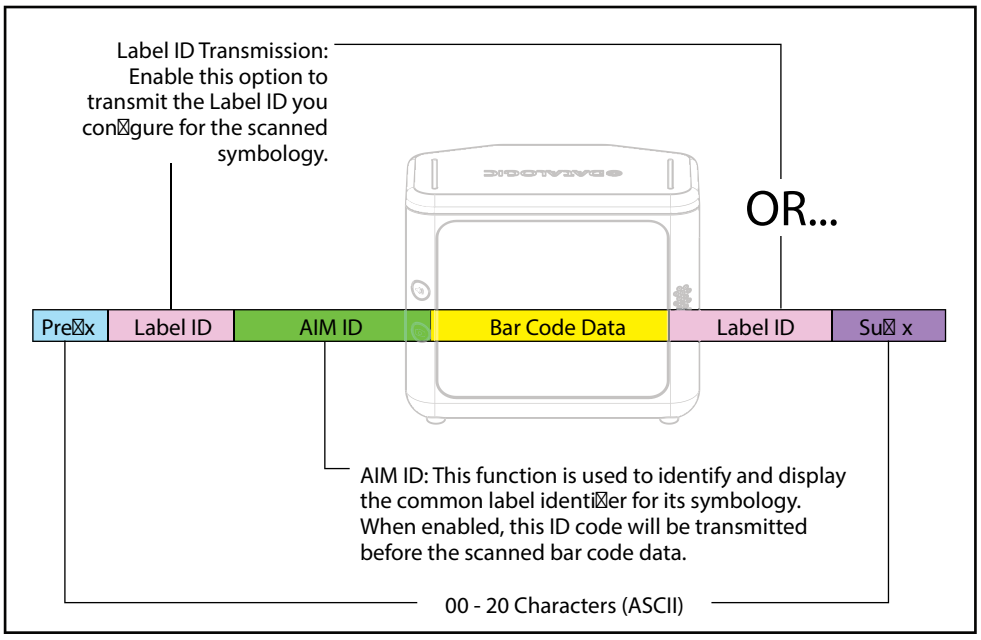
DATA EDITING OVERVIEW

CAUTION: These features are not supported by the USB-OEM interface.

When a bar code is scanned, additional information can be sent to the host computer along with the bar code data. This combination of bar code data and supplementary user-defined data is called a “message string.” The features in this chapter can be used to build specific user-defined data into a message string.

There are several types of selectable data characters that can be sent before and after scanned data. You can specify if they should be sent with all symbologies, or only with specific symbologies. Figure 12 shows the available elements you can add to a message string.

Figure 12. Breakdown of a Message String



Additional data editing options include the features Case Conversion and Character Conversion.

Please Keep In Mind...

- Modifying a message string is not a mandatory requirement. Data editing is a sophisticated feature allowing highly customizable output for advanced users. Factory default settings for data editing is typically set to NONE.
- A prefix or suffix may be applied (reference the Chapter 3, 1D Symbologies chapter for these settings) across all symbologies (set via the Global features in this chapter).
- You can add any character from the ASCII Character set, page 384 (from 00-7F) on the inside back cover of this manual as a prefix, suffix or Label ID.
- Enter prefixes and suffixes in the order in which you want them to appear on the output.

CASE CONVERSION

This option can change the case of all alphabetic characters to upper or lower case.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan bar code for the desired option below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★ Case Conversion = No Case Conversion



Case Conversion = Upper Case



Case Conversion = Lower Case

CHARACTER CONVERSION

Character conversion is an eight byte configuration item. The eight bytes are 4 character pairs represented in hexadecimal ASCII values. The first character in the pair is the character that will be converted. The second character in the pair is the character to convert to. If the character to convert in a pair is FF, then no conversion is done.

For example, if you have the character conversion configuration item set to the following:

41423132FFFFFFFF

The first pair is 4142 or AB (41 hex is an ASCII capital A, 42 hex is an ASCII capital B) and the second pair is 3132 or 12 (31 hex is an ASCII 1, 32 is an ASCII 2). The other two pairs are FFFF and FFFF.

With the label, AG15TA81, it would look as follows after the character conversion: BG25TB82.

The A characters were converted to the B character and the 1 characters were converted to the numeral 2 character. Nothing is done with the last two character pairs, since they are all FF.

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the Character Conversion bar code.
3. Determine the desired string. Up to sixteen positions can be determined as in the above example. Next, turn to the ASCII Chart on the inside back cover of this manual and find the equivalent hex digits needed to fulfill the string.

NOTE: The positions not used must be filled with the character 'F'.

4. Turn to the Chapter D, Keypad and scan the bar codes representing the hex characters determined in the previous step. When the last character is scanned, the scanner will sound a triple beep.
5. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Set Character Conversion

★Default setting for this feature is:
FFFFFFFFFFFFFFFF (No Character Conversion)

GLOBAL PREFIX/SUFFIX

Global Prefix

This feature applies to RS-232 interfaces (Standard, Wincor-Nixdorf, and Single Cable). It specifies the prefix that is added to beginning of label transmission.

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code Set Global Prefix below. Cover any unused bar codes to ensure the scanner reads only the bar code you intend to scan.
3. Scan the appropriate characters/digits from the Chapter D, Keypad that represent the hex designation for the desired character(s). The ASCII Character Set and their corresponding Hex Values are available in the inside back cover of this manual. ASCII parameters must be input by scanning a pair of hexadecimal digits for each character. Thus, to set a two-character value of AB, bar codes containing the digits '4', '1', '4', and '2' must be scanned. The selectable range for this option is any hex value from 00 to FF. Up to 20 hex pairs can be designated.

NOTE: To specify "no Global Prefix," scan 00.

4. If designating the full 20 hex pairs, the scanner will exit Programming Mode when the appropriate amount of digits have been scanned. If designating less than 20 hex pairs, you can end the programming sequence early by scanning the Terminate Sequence bar code.
5. Complete by scanning the Enter/Exit Programming Mode bar code.

Set Global Prefix

Terminate Sequence

★Default setting for this feature is:
00 - No Global Prefix

Global Suffix

This feature applies to RS-232 interfaces (Standard, Wincor-Nixdorf, and Single Cable). It specifies the suffix that is added to end of a label transmission. Three standard options are available below. Contact your dealer for other alternate settings for this feature.

- No Global Suffix
- CR — Carriage Return
- CR LF — Carriage Return, Line Feed

To set the Global Suffix:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



Global Suffix = No Global Suffix



★ Global Suffix = CR



Global Suffix = CR LF

GLOBAL AIM ID ENABLE

This option enables or disables the addition of the AIM ID to all bar code types except for EAN 128.

To set this option:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★Global AIM ID = Disable



Global AIM ID = Enable

LABEL ID

Label ID Control

This feature specifies whether or not Label IDs are transmitted to the host and if so, whether to attach them as a prefix or suffix.

Choices are:

- Disable
- Enable as a Prefix
- Enable as a Suffix

To select the option for Label ID Control:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the desired option from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Label ID Control = Disable

★Label ID Control = Enable as a Prefix

Label ID Control = Enable as a Suffix

Label ID

A Label ID is a customizable code of up to three ASCII characters (each can be one of hex 0x01-0xFF), used to identify a bar code (symbology) type. It can be appended previous to or following the transmitted bar code data depending upon how this option is enabled. This feature provides options for configuring custom Label IDs as a pre-loaded set or individually per symbology. If you wish to program the scanner to always include an industry standard label identifier for ALL symbology types, see "Global AIM ID Enable" on page 106.

Label ID: Pre-loaded Sets

The following table lists the pre-loaded label ID sets for the USA.

SYMBOLOGY	USA LABEL ID SET	
1D Symbologies	ASCII character	Hex value
UPC-A	A	410000
UPC-E	CE	450000
EAN-13	F	460000
EAN-13 ISBN	I	490000
EAN-8	FF	464600
GTIN	G	470000
GTIN 2-Digit	G2	473200
GTIN 5-Digit	G5	473500
GS1 DataBar Omnidirectional	R4	523400
GS1 DataBar Omnidirectional Composite	R4	523400
DataBar Limited	RL	524C00
DataBar Limited Composite	RL	524C00
DataBar Expanded	RX	525800
DataBar Expanded Composite	RX	525800
Code 39	*	2A0000
Code 39 CIP	Y	590000
Code 39 Danish PTT	$Y	245900
Code 39 La Poste	$a	246100
Code 39 PZN	$Z	245A00
Code 32	A	410000
Code 128	#	230000
EAN 128		000000
Interleaved 2 of 5	i	690000
Interleaved 2 of 5 CIP HR	e	650000
Interleaved 2 of 5 Follett	O	4F0000
Code 93	&	260000
Standard 2 of 5	s	730000
IATA Industrial 2 of 5	IA	494100
MSI	@	400000
2D Symbologies	ASCII character	Hex value
Data Matrix	Dm	446D00
PDF 417	P	500000
Micro PDF 417	mP	6D5000

SYMBOLOGY	USA LABEL ID SET	
QR Code	QR	515200
Micro QR Code	$Q	245100
Aztec Label	Az	417A00
GS1 Datamatrix	Dg	446700
GS1 QR Code	QG	514700

Setting Label ID

This feature allows the setting of custom Label ID character(s) for each available symbology type if other than the default Label ID is desired.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code for the desired symbology below. You'll need to cover any unused bar codes on this and the facing page to ensure the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Chapter D, Keypad that represent the desired Label ID characters; entered as two hex pairs. A table containing the ASCII Character Set and their corresponding Hex Values is available in the inside back cover of this manual. ASCII parameters must be input by scanning a pair of hexadecimal digits for each character. Thus, to set a two-character value of AB, bar codes containing the digits '4', '1', '4', and '2' must be scanned. The selectable range for this option is any hex value from 00 to FF.

Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

1D Symbologies



Set UPC-A Label ID



Set UPC-A 2-Digit Supplemental Label ID



Set UPC-A 5-Digit Supplemental Label ID



Set UPC-E Label ID

Setting Label ID — continued



Set UPC-E 2-Digit Supplemental Label ID



Set UPC-E 5-Digit Supplemental Label ID



Set EAN-13 Label ID



Set EAN-13 2-Digit Supplemental Label ID



Set EAN-13 5-Digit Supplemental Label ID



Set EAN-8 Label ID



Set EAN-8 2-Digit Supplemental Label ID

Setting Label ID — continued



Set EAN-8 5-Digit Supplemental Label ID



Set GTIN Label ID



Set GTIN 2-Digit Supplemental Label ID



Set GTIN 5-Digit Supplemental Label ID



Set GTIN Code 128 Supplemental Label ID



Set DataBar Omnidirectional Label ID



Set DataBar Omnidirectional Composite Label ID



Set DataBar Limited Label ID

Setting Label ID — continued

DataBar Expanded Label ID

DataBar Expanded Composite Label ID

Set DataBar Limited Composite Label ID

Code 39 Label ID

Code 32 Label ID

Code 128 Label ID

EAN 128 Label ID

Setting Label ID — continued

I 2 of 5 Label ID

Codabar Label ID

Code 93 Label ID

MSI Label ID

Standard 2 of 5 Label ID

ISBN Label ID

2D Symbologies

Data Matrix Label ID

PDF 417 Label ID

Micro PDF 417 Label ID

QR Code Label ID

Micro QR Code Label ID

Aztec Label ID

GS1 Datamatrix label ID

GS1 QR Code label ID

Global Mid-Label ID

This feature specifies a global mid-label ID that is added between two bar codes for transmission.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the Set Global Mid-Label ID bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Chapter D, Keypad that represent the desired mid-label ID characters; entered as two hex pairs. A table containing the ASCII Character Set and their corresponding Hex Values is available in the inside back cover of this manual. ASCII parameters must be input by scanning a pair of hexa-decimal digits for each character. Thus, to set a two-character value of AB, bar codes containing the digits '4', '1', '4', and '2' must be scanned. The selectable range for this option is any hex value from 00 to FF.

Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



Set Global Mid-Label ID

★ Default Label ID for this symbology is:
00 = No Global Mid-label ID

CONFIGURATION | 1D SYMBOLOGIES

The following pages contain configuration information concerning the various bar code types (symbologies) the scanner supports.

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COUPON CONTROL

Coupon Control Enable

This feature is used to control the method of processing coupon labels. For the purposes of this feature, coupon labels are defined as:

1. UPC-A labels that start with a ‘5’
2. GS1 DataBar Expanded labels that start with ‘8110’

The options for this setting are:

- Disable — Coupon Control is turned off.
- Enable UPC-A Coupons — UPC-A coupon labels will decode but GS1 DataBar Expanded coupon labels will not. GS1 DataBar Expanded labels that are not coupon labels will decode and all UPC-A labels will decode.
- Enable GS1 DataBar Expanded Coupons — GS1 DataBar Expanded coupon labels will decode but UPC-A coupon labels will not. UPC-A labels that are not coupon labels will decode and all GS1 DataBar Expanded labels will decode.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your choice from the Coupon Control selections below. You’ll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

Coupon Control = Disable

★ Coupon Control = Enable UPC-A Coupons

Coupon Control = Enable GS1 DataBar Expanded Coupons

Coupon Label Priority Timer

This feature sets the duration of the UPCA / DataBar coupon label priority timer.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



Coupon Label Priority Timer = 0.1 Seconds



★ Coupon Label Priority Timer = 0.2 Seconds



Coupon Label Priority Timer = 0.3 Seconds



Coupon Label Priority Timer = 0.4 Seconds



Coupon Label Priority Timer = 0.5 Second



Coupon Label Priority Timer = 1 Second

UPC-A

UPC-A Enable

Enables/disables the ability of the scanner to decode UPC-A labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



UPC-A = Disable



★ UPC-A = Enable

UPC-A Number System Character Transmission

Enables/disables transmission of a UPC-A number system character.

NOTE: This feature MUST be enabled for IBM interfaces for proper function. This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

UPC-A Number System Character Transmission = Disable

★UPC-A Number System Character Transmission = Enable

UPC-A Check Character Transmission

Enables/disables transmission of a UPC-A check character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

UPC-A Check Character Transmission = Disable

★UPC-A Check Character Transmission = Enable

UPC-A Minimum Read

This feature specifies the minimum number of consecutive UPC-A decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ UPC-A Minimum Read = 1



UPC-A Minimum Read = 2



UPC-A Minimum Read = 3



UPC-A Minimum Read = 4

Expand UPC-A to EAN-13

Enables/disables expansion of UPC-A labels to EAN/JAN-13.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★Expand UPC-A to EAN-13 = Disable

Expand UPC-A to EAN-13 = Enable

UPC-E

UPC-E Enable

Enables/disables the ability of the scanner to decode UPC-E labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



UPC-E = Disable



★UPC-E = Enable

UPC-E Number System Character Transmission

Enables/disables transmission of a UPC-E number system character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

UPC-E Number System Character Transmission = Disable

★UPC-E Number System Character Transmission = Enable

UPC-E Check Character Transmission

Enables/disables transmission of a UPC-E check character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

UPC-E Check Character Transmission = Disable

★UPC-E Check Character Transmission = Enable

Expand UPC-E to UPC-A

Enables/disables expansion of UPC-E labels to UPC-A.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★ Expand UPC-E to UPC-A = Disable



Expand UPC-E to UPC-A = Enable

Expand UPC-E to EAN-13

Enables/disables expansion of UPC-E labels to EAN/JAN-13.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★Expand UPC-E to EAN-13 = Disable



Expand UPC-E to EAN-13 = Enable

UPC-E Minimum Read

This feature specifies the minimum number of consecutive UPC-E decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★UPC-E Minimum Read = 1



UPC-E Minimum Read = 2



UPC-E Minimum Read = 3



UPC-E Minimum Read = 4

EAN-13

EAN-13 Enable

Enables/disables the ability of the scanner to decode EAN/JAN-13 labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



EAN-13 = Disable



★EAN-13 = Enable

EAN-13 First Character Transmission

Enables/disables transmission of EAN/JAN-13 first character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

EAN-13 First Character Transmission = Disable

★EAN-13 First Character Transmission = Enable

EAN-13 Check Character Transmission

Enables/disables transmission of an EAN/JAN-13 check character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

EAN-13 Check Character Transmission = Disable

★EAN-13 Check Character Transmission = Enable

EAN-13 ISBN Conversion Enable

Enables/disables conversion of EAN/JAN-13 labels starting with 978 to Bookland ISBN labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★EAN-13 ISBN Conversion = Disable



EAN-13 ISBN Conversion = Enable

EAN-13 Minimum Read

This feature specifies the minimum number of consecutive EAN-13 decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★EAN-13 Minimum Read = 1



EAN-13 Minimum Read = 2



EAN-13 Minimum Read = 3



EAN-13 Minimum Read = 4

EAN-13 ISBN CONVERSION ENABLE

Enables/disables conversion of EAN/JAN-13 labels starting with 978 to Bookland ISBN labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.



★EAN-13 ISBN Conversion = Disable



EAN-13 ISBN Conversion = Enable

EAN-8

EAN-8 Enable

Enables/disables the ability of the scanner to decode EAN/JAN-8 labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

EAN-8 = Disable

★ EAN-8 = Enable

EAN-8 Check Character Transmission

Enables/disables transmission of an EAN/JAN-8 check character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

EAN-8 Check Character Transmission = Disable

★EAN-8 Check Character Transmission = Enable

Expand EAN-8 to EAN-13

Enables/disables expansion of EAN/JAN-8 labels to EAN/JAN-13.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★ Expand EAN-8 to EAN-13 = Disable



Expand EAN-8 to EAN-13 = Enable

EAN-8 Minimum Read

This feature specifies the minimum number of consecutive EAN-8 decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★EAN-8 Minimum Read = 1



EAN-8 Minimum Read = 2



EAN-8 Minimum Read = 3



EAN-8 Minimum Read = 4

EAN-8 Guard Insertion

This setting enables the insertion of either a missing leading or trailing guard to a scanned bar code.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★EAN-8 Guard Insertion = Disable



EAN-8 Guard Insertion = Enable

EAN-8 Guard Substitution

This setting enables the scanner to substitute a guard pattern for even-parity 6 for EAN8/JAN8 labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★EAN-8 Guard Insertion = Disable



EAN-8 Guard Insertion = Enable

EAN-8/Jan-8 Both Guards Substitution

Enables/disables the ability of the scanner to find an EAN/JAN8 guard pattern in cases where the EAN/JAN8 margin makes the guard look like a character.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★ EAN-8/JAN-8 Both Guards Substitution = Disable



EAN-8/JAN-8 Both Guards Substitution = Enable

EAN-8 Stitch Exact Label Halves

This setting enables the stitching of exact EAN-8 label halves with no overlapping characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★EAN-8 Stitch Exact Label Halves = Disable



EAN-8 Stitch Exact Label Halves = Enable

EAN-8 Stitch Unlike Label Halves

This setting enables the stitching of two EAN-8 label halves together that may have different characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★ EAN-8 Stitch Unlike Label Halves = Disable

EAN-8 Stitch Unlike Label Halves = Enable

EAN-8 Minimum Segment Length

Specifies the minimum number of characters necessary in an EAN-8/JAN-8 label segment in order for the scanner to accept a label for decoding. Selectable from 5 to 15 characters. Default setting for this feature is: 08 (8 characters).

EAN-8 Minimum Segment Length = 5 characters

EAN-8 Minimum Segment Length = 6 characters

EAN-8 Minimum Segment Length = 7 characters

★ EAN-8 Minimum Segment Length = 8 characters

EAN-8 Minimum Segment Length = 9 characters

EAN-8 Minimum Segment Length = 10 characters

EAN-8 Minimum Segment Length = 11 characters



EAN-8 Minimum Segment Length = 12 characters



EAN-8 Minimum Segment Length = 13 characters



EAN-8 Minimum Segment Length = 14 characters



EAN-8 Minimum Segment Length = 15 characters

EAN-8 Decoding Levels

Decoding levels allow the decoder to be set to perform at one of four selectable levels:

- Very Conservative — Slower scan time, virtually eliminates misreads. The most secure setting.
- Slightly More Aggressive — Faster scanning, more aggressive, yet minimizes misreads.
- Moderately Aggressive — Even faster scanning, even more aggressive.
- Very Aggressive — Fastest scan speed, most aggressive.

CAUTION: Use caution when setting this feature, as more aggressive settings for this feature allow a higher potential for misreads.



★EAN-8 Decoding Level = Very Conservative



EAN-8 Decoding Level = Slightly More Aggressive



EAN-8 Decoding Level = Moderately Aggressive



EAN-8 Decoding Level = Very Aggressive

OTHER UPC/EAN OPTIONS

The following pages contain other selectable features for UPC/EAN symbologies:

- In-Store Printed Label Minimum Read
- UPC/EAN Correlation
- UPC/EAN Guard Insertion
- UPC/EAN Stitch Exact Label Halves
- UPC/EAN Stitch Unlike Label Halves
- UPC/EAN Minimum Segment Length
- Price Weight Check
- Enable EAN Two Label
- Addons

In-Store Printed Label Minimum Read

This feature specifies the minimum number of consecutive In-Store Printed Label decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ In-Store Printed Label Minimum Read = 1



In-Store Printed Label Minimum Read = 2



In-Store Printed Label Minimum Read = 3



In-Store Printed Label Minimum Read = 4

UPC/EAN Correlation

Enables/disables character correlation for UPC/EAN.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★UPC/EAN Correlation = Disable



UPC/EAN Correlation = Enable

UPC/EAN Guard Insertion

This setting enables the insertion of either a missing leading or trailing guard to a scanned bar code.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★UPC/EAN Guard Insertion = Disable



UPC/EAN Guard Insertion = Enable

UPC/EAN Stitch Exact Label Halves

This setting enables the stitching of exact UPC-A/EAN-13 label halves with no overlapping characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★UPC/EAN Stitch Exact Label Halves = Disable



UPC/EAN Stitch Exact Label Halves = Enable

UPC/EAN Stitch Unlike Label Halves

This setting enables the stitching of two UPC-A/EAN-13 label halves together that may have different characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★UPC/EAN Stitch Unlike Label Halves = Disable



UPC/EAN Stitch Unlike Label Halves = Enable

UPC/EAN Minimum Segment Length

This feature specifies the minimum number of characters needed in a UPC/EAN segment in order to be accepted for decoding.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code for the desired setting below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★ UPC/EAN Minimum Segment Length = 5 Characters



UPC/EAN Minimum Segment Length = 6 Characters



UPC/EAN Minimum Segment Length = 7 Characters



UPC/EAN Minimum Segment Length = 8 Characters



UPC/EAN Minimum Segment Length = 9 Characters

UPC/EAN Minimum Segment Length — continued



UPC/EAN Minimum Segment Length = 10 Characters



UPC/EAN Minimum Segment Length = 11 Characters



UPC/EAN Minimum Segment Length = 12 Characters



UPC/EAN Minimum Segment Length = 13 Characters



UPC/EAN Minimum Segment Length = 14 Characters



UPC/EAN Minimum Segment Length =15 Characters

Price Weight Check

Enables/disables calculation and verification of price/weight check digits. Applies to all UPC-A and EAN/JAN-13 labels with eligible[1] Number System/First Character digits.

Options are:

- Disable
- 4-digit price/weight
- 5-digit price/weight
- 4-digit European price/weight
- 5-digit European price/weight

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code representing the desired option below or on the following pages. You'll need to cover any unused bar codes on facing pages to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★Price Weight Check = Disable



Price Weight Check = 4-digit price/weight



Price Weight Check = 5-digit price/weight

1. Price Weight Check generally applies to UPC-A labels with a Number System Digit of 2 and EAN/JAN-13 labels with a First Character of 2. There are a total of six flag digits corresponding to the six types. Checking applies depending upon which type is enabled.

Price Weight Check (continued)



Price Weight Check = 4-digit European price/weight



Price Weight Check = 5-digit European price/weight

Enable EAN Two Label

Enables/disables the ability of the scanner to decode EAN two-label pairs.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

NOTE: Contact Customer Support for details about advanced programming for this feature.

★EAN Two Label = Disable

EAN Two Label = Enable

EAN Two Label Minimum Read

This feature specifies the minimum number of consecutive EAN Two Label decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ EAN Two Label Minimum Read = 1



EAN Two Label Minimum Read = 2



EAN Two Label Minimum Read = 3



EAN Two Label Minimum Read = 4

EAN Two Label Combined Transmission

Enables/disables the transmitting of an EAN two label pair as one label.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★EAN Two Label Combined Transmission = Disable



EAN Two Label Combined Transmission = Enable

ADDONS

The scanner is capable of processing different types of addon codes, including:

- 2-Digit Supplemental
- 5-Digit Supplemental

Options are provided on the following pages for your convenience:

- Disable all addons — The scanner will not look for or read addons.
- Optional 2-Digit and 5-Digit Supplemental — Bar Codes can be read which include 2-Digit or 5-Digit Supplementals, however, it is not required that addons be included in bar codes.

NOTE: Contact customer support for advanced programming of optional and conditional addons.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code representing the desired option on this and the following page. You'll need to cover any unused bar codes on facing pages to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★Addons = Disable All Addons

Addons = Optional 2-Digit and 5-Digit Supplemental

P2 Addon Minimum Read

This feature specifies the minimum number of times a P2 addon must decode before it is marked valid.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code representing the desired option on this and the following page. You'll need to cover any unused bar codes on facing pages to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★P2 Addon Minimum Read = 2



P2 Addon Minimum Read = 3



P2 Addon Minimum Read = 4



P2 Addon Minimum Read = 5



P2 Addon Minimum Read = 6

P2 Addon Minimum Read — continued



P2 Addon Minimum Read = 7



P2 Addon Minimum Read = 8



P2 Addon Minimum Read = 9



P2 Addon Minimum Read = 10



P2 Addon Minimum Read = 11



P2 Addon Minimum Read = 12



P2 Addon Minimum Read = 13

P2 Addon Minimum Read — continued



P2 Addon Minimum Read = 14



P2 Addon Minimum Read = 15

P5 Addon Minimum Read

This feature specifies the minimum number of times a P5 addon must decode before it is marked valid.

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code representing the desired option on this and the following page. You'll need to cover any unused bar codes on facing pages to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★P5 Addon Minimum Read = 1



P5 Addon Minimum Read = 2



P5 Addon Minimum Read = 3



P5 Addon Minimum Read = 4



P5 Addon Minimum Read = 5



P5 Addon Minimum Read = 6

P5 Addon Minimum Read — continued



P5 Addon Minimum Read = 7



P5 Addon Minimum Read = 8



P5 Addon Minimum Read = 9



P5 Addon Minimum Read = 10



P5 Addon Minimum Read = 11



P5 Addon Minimum Read = 12



P5 Addon Minimum Read = 13

P5 Addon Minimum Read — continued



P5 Addon Minimum Read = 14



P5 Addon Minimum Read = 15

GTIN

GTIN Enable

Enables/Disables the ability to convert UPCE, UPCA, EAN8, and EAN13 labels into the GTIN 14-character format.

NOTE: If add-on information is present on the base label prior to the conversion taking place, the add-on information will be appended to the converted GTIN bar code.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★GTIN = Disable

GTIN = Enable

GS1 DATABAR

The symbology family, GS1 DataBar™, was formerly known as Reduced Space Symbology (RSS). For the purpose of simplicity, GS1 DataBar variants are listed in this manual as "DataBar."

DATABAR OMNIDIRECTIONAL

DataBar Omnidirectional Enable

Enables/disables the ability of the scanner to decode DataBar Omnidirectional labels.

NOTE: This value-added feature is a factory-programmed option. Contact your dealer for information about upgrading your system to include this advanced capability.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★ DataBar Omnidirectional = Disable

DataBar Omnidirectional = Enable

DataBar Omnidirectional/EAN-128 Emulation

Enables/disables the ability of DataBar Omnidirectional to be transmitted as EAN-128.

1. To set this feature:
2. Scan the ENTER/EXIT Programming Mode bar code.
3. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★DataBar Omnidirectional/EAN-128 Emulation = Disable



DataBar Omnidirectional/EAN-128 Emulation = Enable

DataBar Omnidirectional 2D Component Enable

When this feature is enabled, the software will not decode an DataBar Omnidirectional bar code with a 2D component associated with it, and the 2D component will be discarded.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ DataBar Omnidirectional 2D Component = Disable



DataBar Omnidirectional 2D Component = Enable

DataBar Omnidirectional Minimum Read

This feature specifies the minimum number of consecutive DataBar Omnidirectional decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ DataBar Omnidirectional Minimum Read = 1



DataBar Omnidirectional Minimum Read = 2



DataBar Omnidirectional Minimum Read = 3



DataBar Omnidirectional Minimum Read = 4

DataBar Omnidirectional Double Read Timeout

Specifies the minimum allowable time which must pass before reading the same DataBar Omnidirectional label again (e.g. two identical items in succession).

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.

Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



DataBar Omnidirectional Double Read Timeout = 0.5 Seconds



DataBar Omnidirectional Double Read Timeout = 1 Second



★DataBar Omnidirectional Double Read Timeout = 2.5 Seconds



DataBar Omnidirectional Double Read Timeout = 3 Seconds



DataBar Omnidirectional Double Read Timeout = 3.5 Seconds

DATABAR LIMITED

DataBar Limited Enable

Enables/disables the ability of the scanner to decode DataBar Expanded labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Databar Limited = Disable



Databar Limited = Enable

DataBar Limited Minimum Read

This feature specifies the minimum number of consecutive Databar Limited decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Databar Limited Minimum Read = 1



Databar Limited Minimum Read = 2



Databar Limited Minimum Read = 3



Databar Limited Minimum Read = 4

DataBar Limited 2D Component Enable

This feature controls if a 2D label component be decoded when a Databar Limited base label is decoded.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★Databar Limited 2D Component = Disable

Databar Limited 2D Component = Enable

DataBar Limited EAN128 Emulation Enable

Enables/disables GS1-EAN128 emulation for GS1 Databar Limited.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Databar Limited EAN128 Emulation = disable



Databar Limited EAN128 Emulation = enable

DataBar Limited Composite

Enables/disables GS1-DataBar Limited Composite for GS1 Databar Limited.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Databar Limited Composite = disable



Databar Limited Composite= enable

DATABAR EXPANDED

DataBar Expanded Enable

Enables/disables the ability of the scanner to decode DataBar Expanded labels.

NOTE: This value-added feature is a factory-programmed option. Contact your dealer for information about upgrading your system to include this advanced capability.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★DataBar Expanded = Disable

DataBar Expanded = Enable

DataBar Expanded EAN-128 Emulation

Enables/disables EAN 128 emulation for DataBar Expanded.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★DataBar Expanded EAN-128 Emulation = Disable



DataBar Expanded EAN-128 Emulation = Enable

DataBar Expanded 2D Component Enable

When this feature is enabled, the software will not decode an DataBar Expanded bar code with a 2D component associated with it, and the 2D component will be discarded.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ DataBar Expanded 2D Component = Disable



DataBar Expanded 2D Component = Enable

DataBar Expanded Minimum Read

This feature specifies the minimum number of consecutive DataBar Expanded decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★DataBar Expanded Minimum Read = 1



DataBar Expanded Minimum Read = 2



DataBar Expanded Minimum Read = 3



DataBar Expanded Minimum Read = 4

DataBar Expanded Length Control

This feature specifies either variable-length or fixed-length decoding for DataBar Expanded.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★ DataBar Expanded Length Control = Variable Length

DataBar Expanded Length Control = Fixed Length

DataBar Expanded Length 1

Length 1 is the minimum label length if in variable length mode, or the first fixed length if in fixed length mode. Length includes the bar code's data characters only.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set DataBar Expanded Length 1 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00 to 74. Pad all single digit numbers with a leading zero to yield a two-digit entry (00-74).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Set DataBar Expanded Length 1

★ Default setting for this feature = 01

DataBar Expanded Length 2

Length 2 is the maximum label length if in variable length mode, or the second fixed length if in fixed length mode. Length includes the bar code's data characters only.

NOTE: When in Fixed Length mode, if Length 2 is set to the value of 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set DataBar Expanded Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00 to 74. Pad all single digit numbers with a leading zero to yield a two-digit entry (00-74).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set DataBar Expanded Length 2

★ Default setting for this feature = 4A (length = 74)

DataBar Expanded Reverse Retry

Enables/disables the reading of out of specification labels where the last row has been printed in reverse.

- When enabled, DataBar Expanded Stacked labels that have the last row incorrectly printed in reverse will be re-decoded.
- When disabled, DataBar Expanded Stacked labels that have the last row incorrectly printed in reverse will not be read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ DataBar Expanded Reverse Retry = Disable



DataBar Expanded Reverse Retry = Enable

CODE 39

Code 39 Enable

Enables/disables the ability of the scanner to decode Code 39 labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Code 39 = Disable



★Code 39 = Enable

Code 39 Start Stop Character Transmission

Enables/disables transmission of Code 39 start and stop characters.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★Code 39 Start Stop Character Transmission = Disable

Code 39 Start Stop Character Transmission = Enable

Code 39 Check Character Calculation

Enables/disables calculation and verification of an optional Code 39 check character. When disabled, any check character in label is treated as a data character.

NOTE: If check calculation is disabled, the risk is increased that a misread can occur.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★ Code 39 Check Character Calculation = Disable

Code 39 Check Character Calculation = Enable

Code 39 Check Character Transmission

Enables/disables transmission of optional Code 39 check character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Code 39 Check Character Transmission = Disable

★ Code 39 Check Character Transmission = Enable

Code 39 Full ASCII

Enables/disables the ability of the scanner to translate to Code 39 full ASCII labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Code 39 Full ASCII = Disable



Code 39 Full ASCII = Enable

Code 39 Minimum Read

This feature specifies the minimum number of consecutive Code 39 decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Code 39 Minimum Read = 1



Code 39 Minimum Read = 2



Code 39 Minimum Read = 3



Code 39 Minimum Read = 4

Code 39 Correlation

Enables/disables character correlation for Code 39.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Code 39 Correlation = Disable



Code 39 Correlation = Enable

Code 39 Length Control

This feature specifies whether variable-length or fixed-length decoding will be set for Code 39.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Code 39 Length Control = Variable Length



Code 39 Length Control = Fixed Length

Code 39 Length 1

If Code 39 Length Control is set to Fixed-Length decoding, this feature specifies Code 39 first fixed length. If Code 39 Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Code 39 Length 1 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00 to 50. Pad all single digit numbers with a leading zero to yield a two-digit entry (00-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set Code 39 Length 1

★Default setting for this feature = 02

Code 39 Length 2

If Code 39 Length Control is set to Fixed-Length decoding, this feature specifies Code 39 second fixed length. If Code 39 Length Control is set to Variable-Length decoding, this feature specifies the maximum label length.

NOTE: When in Fixed Length mode, if Length 2 is set to the value of 00, then only Length 1 will apply

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Code 39 Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00, no second fixed length, or 01 to 50. Pad all single digit numbers with a leading zero to yield a two-digit entry (00-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set Code 39 Length 2

★ Default setting for this feature = 32 (length = 50)

Code 39 Stitching

Enables/disables stitching for Code 39 labels. When parts of a Code 39 bar code are presented to the scanner with this feature enabled, the bar code parts will be assembled by the scanner's software, and the data will be decoded if all bar code proofing requirements are met.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Code 39 Stitching = Disable



Code 39 Stitching = Enable

Code 39 Require Margins

Enables/disables the requirement that quiet zones be present in a Code 39 bar code.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Code 39 Require Margins = Quiet Zones Not Required



Code 39 Require Margins = Quiet Zones Required

CODE 39 CIP

Code 39 CIP Enable

Enables/disables the ability of the scanner to decode Code 39 CIP labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★Code 39 CIP = disable



Code 39 CIP = enable

Code 39 CIP Start Stop Character Transmission

Enables/disables transmission of Code 39 CIP start and stop characters.

This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

★Code 39 CIP Start Stop Character Transmission = Disable

Code 39 CIP Start Stop Character Transmission = Enable

CODE 39 DANISH PTT

Code 39 Danish Ptt Enable

Enables/disables the ability of the scanner to decode Code 39 Danish Ptt labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.



★Code 39 Danish Ptt = Disable



Code 39 Danish Ptt = Enable

Code 39 Danish Ptt Check Character Calculation

Enables/disables calculation and verification of an optional Code39 Danish Ptt check character.

NOTE: If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check characters in a barcode are treated as data characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★Code 39 Danish Ptt Check Character Calculation = Disable



Code 39 Danish Ptt Check Character Calculation = Enable

Code 39 Danish Ptt Check Character Transmission

Enables/disables transmission of an optional Code 39 Danish Ptt check character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



Code 39 Danish Ptt Check Character Transmission = Disable



★Code 39 Danish Ptt Check Character Transmission = Enable

Code 39 Danish Ptt Start Stop Character Transmission

Enables/disables transmission of Code 39 Danish Ptt start and stop characters.

This item is ignored when the advanced feature, Full Label Edit, is enabled

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

★Code 39 Danish Ptt Start Stop Character Transmission = Disable

Code 39 Danish Ptt Start Stop Character Transmission = Enable

CODE 39 LAPOSTE

Code 39 Laposte Enable

Enables/disables the ability of the scanner to decode Code 39 Laposte labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.

★Code39 Laposte = Disable

Code39 Laposte = Enable

Code 39 Laposte Check Character Calculation

Enables/disables calculation and verification of an optional Code39 Laposte check character.

If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check characters in a barcode are treated as data characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

★Code39 Laposte Check Character Calculation = Disable

Code39 Laposte Check Character Calculation = Enable

Code 39 Laposte Check Character Transmission

Enables/disables transmission of an optional Code39 Laposte check character.

This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

Code39 Laposte Check Character Transmission = Disable

Code39 Laposte Check Character Transmission = ★Enable

Code 39 Laposte Start Stop Character Transtmission

Enables/disables transmission of Code39 Laposte start and stop characters.

This item is ignored when the advanced feature, Full Label Edit, is enabled

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

★Code39 Laposte Start Stop Character Transmission = Disable

Code39 Laposte Start Stop Character Transmission = Enable

CODE 39 PZN

Code 39 Pzn Enable

Enables/disables the ability of the scanner to decode Code39 Pzn labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★Code39 Pzn = disable



Code39 Pzn = enable

Code 39 Pzn Check Character Calculation

Enables/disables calculation and verification of an optional Code39 Pzn check character.

If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check character in a barcode is treated as data character.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

★Code39 Pzn Check Character Calculation = disable

Code39 Pzn Check Character Calculation = enable

Code 39 Pzn Check Character Transmission

Enables/disables transmission of an optional Code39 Pzn check character.

This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

Code39 Pzn Check Character transmission = disable

★Code39 Pzn Check Character transmission = enable

Code 39 Pzn Start Stop Character Transmission

Enables/disables transmission of Code39 Pzn start and stop characters.

This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

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Code39 Pzn Start Stop Character Transmission = ★Disable

Code39 Pzn Start Stop Character Transmission = Enable

CODE 32 ITALIAN PHARMACODE

Code 32 Italian Pharmacode Enable

Enables/disables the ability of the scanner to decode Italian Pharmaceutical Code 39 labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Code 32 Italian Pharmacode Enable = Disable



Code 32 Italian Pharmacode Enable = Enable

Code 32 Start Stop Character Transmission

Enables/ disables transmission of start and stop characters for Code 32.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★Code 32 Start Stop Character Transmission = Disable

Code 32 Start Stop Character Transmission = Enable

Code 32 Check Character Transmission

Enables/disables transmission of Code 32 check character.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★Code 32 Check Character Transmission = Disable

Code 32 Check Character Transmission = Enable

CODE 128

Code 128 Enable

Enables/disables the ability of the scanner to decode Code 128 labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Code 128 = Disable



★ Code 128 = Enable

Code 128 Transmit Function Characters

Enables/disables transmission of Code 128 function characters 1, 2, 3, and 4.

NOTE: Disabled is the recommended setting for all interfaces.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★ Code 128 Transmit Function Characters = Disable

Code 128 Transmit Function Characters = Enable

Expand Code128 to Code 39

Enables/disables expansion of Code 128 labels to Code 39.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Expand Code128 to Code 39 = Disable



Expand Code128 to Code 39 = Enable

Code 128 Minimum Read

This feature specifies the minimum number of consecutive Code 128 decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Code 128 Minimum Read = 1



Code 128 Minimum Read = 2



Code 128 Minimum Read = 3



Code 128 Minimum Read = 4

Code 128 Correlation

Enables/disables character correlation for Code 128.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Code 128 Correlation = Disable



Code 128 Correlation = Enable

Code 128 Length Control

This feature specifies whether variable-length or fixed-length decoding will be set for Code 128.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★Code 128 Length Control = Variable Length

Code 128 Length Control = Fixed Length

Code 128 Length 1

If Code 128 Length Control is set to Fixed-Length decoding, this feature specifies Code 128 first fixed length. If Code 128 Length Control is set to Variable-Length decoding, this feature specifies the minmum label length.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Code 128 Length 1 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 01 to 80. Pad all single digit numbers with a leading zero to yield a two-digit entry (01-80).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Set Code 128 Length 1

★ Default setting for this feature = 01

Code 128 Length 2

If Code 128 Length Control is set to Fixed-Length decoding, this feature specifies Code 128 second fixed length. If Code 128 Length Control is set to Variable-Length decoding, this feature specifies the maximum label length.

NOTE: When in Fixed Length mode, if Length 2 is set to the value of 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Code 128 Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 01 to 80. Pad all single digit numbers with a leading zero to yield a two-digit entry (01-80).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set Code 128 Length 2

★ Default setting for this feature = 50 (length = 80)

Code 128 Stitching

Enables/disables stitching for Code 128 labels. When parts of a Code 128 bar code are presented to the scanner with this feature enabled, the bar code parts will be assembled by the scanner's software, and the data will be decoded if all bar code proofing requirements are met.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Code 128 Stitching = Disable



★ Code 128 Stitching = Enable

EAN-128

EAN-128 Enable

Enables/disables the ability of the scanner to translate EAN128 labels to the EAN128 data format.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ EAN-128 = Transmit EAN128 labels in Code128 data format



EAN-128 = Transmit EAN128 labels in EAN128 data format

INTERLEAVED 2 OF 5 (I 2 OF 5)

Interleaved 2 of 5 (I 2 OF 5) Enable

Enables/disables the ability of the scanner to decode Interleaved 2 of 5 labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★I 2 of 5 = Disable



I 2 of 5 = Enable

I 2 of 5 Check Character Calculation

Enables/disables calculation and verification of an optional Interleaved 2 of 5 check character.

NOTE: If check character calculation is disabled, the risk is increased that a mis-read can occur. When disabled, any check characters in a bar code are treated as data characters.

1. To set this feature:
2. Scan the ENTER/EXIT Programming Mode bar code.
3. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★I 2 of 5 Check Character Calculation = Disable

I 2 of 5 Check Character Calculation = Enable

I 2 of 5 Check Character Transmission

Enables/disables transmission of an optional Interleaved 2 of 5 check character.

NOTE: This feature applies only when I 2 of 5 Check Character Calculation is enabled. This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



I 2 of 5 Check Character Transmission = Disable



★I 2 of 5 Check Character Transmission = Enable

I 2 of 5 Minimum Read

This feature specifies the minimum number of consecutive I 2 of 5 decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★I 2 of 5 Minimum Read = 1



I 2 of 5 Minimum Read = 2



I 2 of 5 Minimum Read = 3



I 2 of 5 Minimum Read = 4

I 2 of 5 Correlation

Enables/disables character correlation for I 2 of 5.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★I 2 of 5 Correlation = Disable



I 2 of 5 Correlation = Enable

I 2 of 5 Length Control

This feature specifies whether variable-length or fixed-length decoding will be set for I 2 of 5.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★I 2 of 5 Length Control = Variable Length

I 2 of 5 Length Control = Fixed Length

I 2 of 5 Length 1

If I 2 of 5 Length Control is set to Fixed-Length decoding, this feature specifies I 2 of 5 first fixed length. If I 2 of 5 Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set I 2 of 5 Length 1 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 02 to 50, even numbers only. Pad all single digit numbers with a leading zero to yield a two-digit entry (02-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Set I 2 of 5 Length 1

★ Default setting for this feature = 06

I 2 of 5 Length 2

If I 2 of 5 Length Control is set to Fixed-Length decoding, this feature specifies I 2 of 5 second fixed length. If I 2 of 5 Length Control is set to Variable-Length decoding, this feature specifies the maximum label length.

NOTE: When in Fixed Length mode, if Length 2 is set to the value of 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set I 2 of 5 Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00, or 02 to 50; even numbers only. Pad all single digit numbers with a leading zero to yield a two-digit entry (02-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set I 2 of 5 Length 2

★Default setting for this feature = 50

I 2 of 5 Stitching

Enables/disables stitching for I 2 of 5 labels. When parts of an I 2 of 5 bar code are presented to the scanner with this feature enabled, the bar code parts will be assembled by the scanner's software, and the data will be decoded if all bar code proofing requirements are met.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★I 2 of 5 Stitching = Disable



I 2 of 5 Stitching = Enable

I 2 OF 5 CIP HR

I 2 of 5 Cip Hr Enable

Enables/disables the ability of the scanner to decode I25 Cip Hr labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★I25 Cip Hr = disable



I25 Cip Hr = enable

I 2 of 5 Cip Hr Check Character Calculation

Enables/disables calculation and verification of an optional I25 Cip Hr check character.

If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check character in a barcode is treated as data character.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★I25 Cip Hr Check Character Calculation = disable



I25 Cip Hr Check Character Calculation = enable

I 2 OF 5 FOLLETT

I 2 of 5 Follett Enable

Enables/disables the ability of the scanner to decode I25 Follett labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★I25 Follett = disable



I25 Follett = enable

CODABAR

Codabar Enable

Enables/disables the ability of the scanner to decode Codabar labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Codabar = Disable



Codabar = Enable

Codabar Start Stop Character Transmission

Enables/disables transmission of Codabar start and stop characters.

NOTE: This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Codabar Start Stop Character Transmission = Disable

★Codabar Start Stop Character Transmission = Enable

Codabar Start Stop Character Set

This feature specifies the format of transmitted Codabar start/stop characters.

Options are:

- ABCD/TN* E
- ABCD/ABCD
- abcd/tn* e
- abcd/abcd

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code below or from the following page representing the desired option. You'll need to cover any unused bar codes and facing pages to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Codabar Start Stop Character Set = ABCD/TN* E



Codabar Start Stop Character Set = ABCD/ABCD



Codabar Start Stop Character Set = abcd/tn* e



★ Codabar Start Stop Character Set = abcd/abcd

Codabar Start Stop Character Match

Enables/disables the requirement that start and stop characters match.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Codabar Start Stop Character Match = Disable



Codabar Start Stop Character Match = Enable

Codabar Check Character Calculation

Enables/disables calculation and verification of an optional Codabar check character.

NOTE: If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check characters in a bar code are treated as data characters.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Codabar Check Character Calculation = Disable



Codabar Check Character Calculation = Enable

Codabar Check Character Transmission

Enables/disables transmission of an optional Codabar check character.

NOTE: Applies only when Codabar Check Character Calculation is enabled. This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Codabar Check Character Transmission = Disable

★ Codabar Check Character Transmission = Enable

Codabar Minimum Read

This feature specifies the minimum number of consecutive Codabar decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Codabar Minimum Read = 1



Codabar Minimum Read = 2



Codabar Minimum Read = 3



Codabar Minimum Read = 4

Codabar Correlation

Enables/disables character correlation for Codabar.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★ Codabar Correlation = Disable

Codabar Correlation = Enable

Codabar Length Control

This feature specifies whether variable-length or fixed-length decoding will be set for Codabar.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Codabar Length Control = Variable Length



Codabar Length Control = Fixed Length

Codabar Length 1

If Codabar Length Control is set to Fixed-Length decoding, this feature specifies Codabar first fixed length. If Codabar Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Codabar Length 1 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 03 to 50. Pad all single digit numbers with a leading zero to yield a two-digit entry (03-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set Codabar Length 1

★ Default setting for this feature = 03

Codabar Length 2

If Codabar Length Control is set to Fixed-Length decoding, this feature specifies Codabar second fixed length. If Codabar Length Control is set to Variable-Length decoding, this feature specifies the maximum label length.

NOTE: When in Fixed Length mode, if Length 2 is set to the value of 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Codabar Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00 (meaning ignore this length), or 03 to 50. Pad all single digit numbers with a leading zero to yield a two-digit entry (03-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set Codabar Length 2

★ Default setting for this feature = 32

Codabar Stitching

Enables/disables stitching for Codabar labels. When parts of a Codabar bar code are presented to the scanner with this feature enabled, the bar code parts will be assembled by the scanner's software, and the data will be decoded if all bar code proofing requirements are met.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Codabar Stitching = Disable



Codabar Stitching = Enable

Codabar Require Margins

Enables/disables the requirement that quiet zones be present in a Codabar bar code.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Codabar Require Margins = Quiet Zones Not Required



Codabar Require Margins = Quiet Zones Required

CODE 93

Code 93 Enable

Enables/disables the ability of the scanner to decode Code 93 labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Code 93 = Disable



Code 93 = Enable

Code 93 Minimum Read

This feature specifies the minimum number of consecutive Code 93 decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Code 93 Minimum Read = 1



Code 93 Minimum Read = 2



Code 93 Minimum Read = 3



Code 93 Minimum Read = 4

Code 93 Correlation

Enables/disables character correlation for Code 93.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★ Code 93 Correlation = Disable



Code 93 Correlation = Enable

Code 93 Length Control

This feature specifies whether variable-length or fixed-length decoding will be set for Code 93.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Codabar Length Control = Variable Length



Codabar Length Control = Fixed Length

Code 93 Length 1

If Code 93 Length Control is set to Fixed-Length decoding, this feature specifies Code 93 first fixed length. If Code 93 Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Code 93 Length 1 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 01 to 50. Pad all single digit numbers with a leading zero to yield a two-digit entry (01-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set Code 93 Length 1

★Default setting for this feature = 01

Code 93 Length 2

If Code 93 Length Control is set to Fixed-Length decoding, this feature specifies Code 93 second fixed length. If Code 93 Length Control is set to Variable-Length decoding, this feature specifies the maximum label length.

NOTE: When in Fixed Length mode, if Fixed Length 2 is set to the value of 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Code 93 Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00 (meaning ignore this length), or 01 to 50. Pad all single digit numbers with a leading zero to yield a two-digit entry (01-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set Code 93 Length 2

★ Default setting for this feature = 32 (length = 50)

Code 93 Stitching

Enables/disables stitching for Code 93 labels. When parts of a Code 93 bar code are presented to the scanner with this feature enabled, the bar code parts will be assembled by the scanner's software, and the data will be decoded if all bar code proofing requirements are met.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Code 93 Stitching = Disable



★ Code 93 Stitching = Enable

STANDARD 2 OF 5

Standard 2 of 5 Enable

Enables/disables the ability of the scanner to decode Standard 2 of 5 labels.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Standard 2 of 5 = Disable



Standard 2 of 5 = Enable

Standard 2 of 5 Check Character Calculation

Enables/disables calculation and verification of an optional Standard 2 of 5 check character.

NOTE: If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check character in a bar code is treated as data character.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★Standard 2 of 5 Check Character Calculation = Disable

Standard 2 of 5 Check Character Calculation = Enable

Standard 2 of 5 Check Character Transmission

Enables/disables transmission of an optional Standard 2 of 5 check character.

NOTE: This feature applies only when Standard 2 of 5 Check Character Calculation **is enabled. This item is ignored when the advanced feature, Full Label Edit, is enabled.**

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Standard 2 of 5 Check Character Transmission = Disable

★Standard 2 of 5 Check Character Transmission = Enable

Standard 2 of 5 Minimum Read

This feature specifies the minimum number of consecutive Standard 2 of 5 decodes before is accepted as good read.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★Standard 2 of 5 Minimum Read = 1

Standard 2 of 5 Minimum Read = 2

Standard 2 of 5 Minimum Read = 3

Standard 2 of 5 Minimum Read = 4

Standard 2 of 5 Correlation

Enables/disables character correlation for Standard 2 of 5.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Standard 2 of 5 Correlation = Disable



Standard 2 of 5 Correlation = Enable

Standard 2 of 5 Length Control

This feature specifies whether variable-length or fixed-length decoding will be set for Standard 2 of 5.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



★Standard 2 of 5 Length Control = Variable Length



Standard 2 of 5 Length Control = Fixed Length

Standard 2 of 5 Length 1

If Standard 2 of 5 Length Control is set to Fixed-Length decoding, this feature specifies Standard 2 of 5 first fixed length. If Standard 2of 5 Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Standard 2 of 5 Length 1 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 1 to 50. Pad all single digit numbers with a leading zero to yield a two-digit entry (01-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.



Set Standard 2 of 5 Length 1

★ Default setting for this feature = 08

Standard 2 of 5 Length 2

If Standard 2 of 5 Length Control is set to Fixed-Length decoding, this feature specifies Standard 2 of 5 second fixed length. If Standard 2of 5 Length Control is set to Variable-Length decoding, this feature specifies the maximum label length.

NOTE: When in Fixed Length mode, if Length 2 is set to the value of 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Standard 2 of 5 Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 1 to 50. Pad all single digit numbers with a leading zero to yield a two-digit entry (01-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set Standard 2 of 5 Length 2

★ Default setting for this feature = 32

Standard 2 of 5 Stitching

Enables/disables stitching for Standard 2 of 5 labels. When parts of a Standard 2 of 5 bar code are presented to the scanner with this feature enabled, the bar code parts will be assembled by the scanner's software, and the data will be decoded if all bar code proofing requirements are met.

NOTE: This applies when Standard 2 of 5 Length Control **is set to fixed-length decoding.**

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★Standard 2 of 5 Stitching = Disable

Standard 2 of 5 Stitching = Enable

IATA 2 OF 5

IATA Enable

Enables/disables the ability of the scanner to decode IATA labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★IATA = disable



IATA = enable

IATA Check Character Transmission

Enables/disables transmission of an optional IATA check character.

NOTE: This feature applies only when IATA Check Character Calculation is enabled. This item is ignored when the advanced feature, Full Label Edit, is enabled.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

IATA check character transmission = disable

★IATA check character transmission = enable

MSI

MSI Enable

Enables/disables the ability of the scanner to decode MSI labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★MSI = Disable



MSI = Enable

MSI Check Character Calculation

Enables/disables calculation and verification of optional MSI check characters.

NOTE: If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check characters in a barcode are treated as data characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

MSI Check Character Calculation = Disable

★MSI Check Character Calculation = Enable

MSI Number of Check Characters

Specifies number of MSI check characters to be calculated and verified.

NOTE: Check characters are always modulus 10.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan the barcode below representing the desired number of MSI check characters to be calculated and verified. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

★MSI Number of Check Characters = 1

MSI Number of Check Characters = 2

MSI Check Character Transmission

Enables/disables transmission of optional MSI check characters.

NOTE: This feature applies only when MSI Check Character Calculation **is enabled. This item is ignored when the advanced feature, Full Label Edit, is enabled.**

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

MSI Check Character Transmission = Disable

★MSI Check Character Transmission = Enable

MSI Minimum Read

This feature specifies the minimum number of consecutive MSI decodes before is accepted as good read.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan your selection from the barcodes below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★MSI Minimum Read = 1



MSI Minimum Read = 2



MSI Minimum Read = 3



MSI Minimum Read = 4

MSI Length Control

This feature specifies whether variable-length or fixed-length decoding will be set for MSI.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan your selection from the barcodes below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★MSI Length Control = Variable Length



MSI Length Control = Fixed Length

MSI Length 1

If MSI Length Control is set to Fixed-Length decoding, this feature specifies MSI first fixed length. If MSI Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan the barcode, Set MSI Length 1 below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D that represent the desired label length. The selectable range for this option is 4 to 16. Pad all single digit numbers with a leading zero to yield a two-digit entry (04-16).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



Set MSI Length 1

★Default setting for this feature = 04

MSI Length 2

If MSI Length Control is set to Fixed-Length decoding, this feature specifies MSI second fixed length. If MSI Length Control is set to Variable-Length decoding, this feature specifies the maximum label length.

NOTE: When in Fixed Length mode, if Length 2 is set to the value 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan the barcode, Set MSI Length 2 below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D that represent the desired label length. The selectable range for this option is 00 (meaning ignore this length), or 04 to 16. Pad all single digit numbers with a leading zero to yield a two-digit entry (00, 04-16).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

Set MSI Length 2

★Default setting for this feature = 10 (length = 16)

PLESSEY

Plessey Enable

Enables/disables the ability of the scanner to decode Plessey labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

★Plessey = disable

Plessey = enable

Plessey Check Character Calculation

Enables/disables calculation and verification of an optional Plessey check character.

NOTE: If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check character in a barcode is treated as data character.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★Plessey Check Character Calculation = disable



Plessey Check Character Calculation = enable

Plessey Length Control

This feature specifies whether variable-length or fixed-length decoding will be set for Plessey.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan your selection from the barcodes below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★Plessey Length Control = Variable Length



Plessey Length Control = Fixed Length

Plessey Length 1

If Plessey Length Control is set to Fixed-Length decoding, this feature specifies Plessey first fixed length. If Plessey Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan the barcode Set Plessey Length 1. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D that represent the desired label length. The selectable range for this option is 01 to 50, even numbers only. Pad all single digit numbers with a leading zero to yield a two-digit entry (01-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



Set Plessey Length 1

★Default setting for this feature = 01

Plessey Length 2

If Plessey Length Control is set to Fixed-Length decoding, this feature specifies Plessey second fixed length. If Plessey Length Control is set to Variable-Length decoding, this feature specifies the maximum label length.

NOTE: When in Fixed Length mode, if Length 2 is set to the value of 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan the barcode Set Plessey Length 2. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D that represent the desired label length. The selectable range for this option is 00, or 01 to 50; even numbers only. Pad all single digit numbers with a leading zero to yield a two-digit entry (01-50).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

Set Plessey Length 2

★Default setting for this feature = 32 (length = 50)

TRIOPTIC

Trioptic Enable

Enables/disables the ability of the scanner to decode Trioptic labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.



★Trioptic = disable



Trioptic = enable

CONFIGURATION | 2D SYMBOLOGIES



NOTE: If the scanner's interface type must be changed, always be sure that interface configuration is the FIRST item scanned during a programming session. (Selecting an interface type resets ALL other configuration items — including symbology programming — to the factory default for that interface type.)

The following pages contain configuration information concerning the various 2D bar code types (symbologies) the scanner supports.

SECTION CONTENTS

DATA MATRIX starting on page 285

PDF 417 starting on page 289

MICRO PDF 417 starting on page 293

QR CODE starting on page 297

MICRO QR CODE starting on page 302

AZTEC CODE starting on page 305

GS1 DIGITAL LINK starting on page 314

GS1 DATAMATRIX starting on page 320

GS1 QR CODE starting on page 321

DATA MATRIX

Data Matrix Enable

Enables/disables the ability of the scanner to decode Data Matrix labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★ Data Matrix = Disable

Data Matrix = Enable

Data Matrix Length Control

Fixed Length Decoding: When fixed length decoding is enabled, the scanner will decode a bar code if the label length matches one of the configurable fixed lengths.

Variable Length Decoding: When variable length decoding is enabled, the scanner will decode a bar code if the label length falls in the range of the configurable minimum and maximum length.

Configuring Fixed Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Fixed Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the first fixed length using the Data Matrix Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the second fixed length (or to '0000' if there is only one fixed length) using the Data Matrix Length 1, Length 2 Programming Instructions.

Configuring Variable Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Variable Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the minimum length using the Data Matrix Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the maximum length using the Data Matrix Length 1, Length 2 Programming Instructions.



★Data Matrix Length Control = Variable Length



Data Matrix Length Control = Fixed Length

Data Matrix Length 1, Length 2 Programming Instructions

If Data Matrix Length Control is set to Fixed-Length decoding, this feature specifies Data Matrix first fixed length. If Data Matrix Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

NOTE: For Data Matrix bar codes, only the data characters are included in the length calculations.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Data Matrix Length 1 or Set Data Matrix Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 0001 to 3116. Pad all numbers with leading zeros to yield a four-digit entry (0001-3116).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Default setting for this feature = 0001

Set Data Matrix Length 1

Set Data Matrix Length 2

Default setting for this feature = 0320

GS1 Datamatrix Enable

Enables/disables the ability of the scanner to decode GS1 Datamatrix labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★GS1 Datamatrix disabled

GS1 Datamatrix enabled

PDF 417

PDF 417 Enable

Enables the processing of PDF417 labels read by a handheld scanner attached to the auxiliary port.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



PDF 417 = Disable



★ PDF 417 = Enable

PDF 417 Length Control

Fixed Length Decoding: When fixed length decoding is enabled, the scanner will decode a bar code if the label length matches one of the configurable fixed lengths.

Variable Length Decoding: When variable length decoding is enabled, the scanner will decode a ar code if the label length falls in the range of the configurable minimum and maximum length.

Configuring Fixed Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Fixed Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the first fixed length using the PDF 417 Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the second fixed length (or to '0000' if there is only one fixed length) using the PDF 417 Length 1, Length 2 Programming Instructions.

Configuring Variable Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Variable Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the minimum length using the PDF 417 Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the maximum length using the PDF 417 Length 1, Length 2 Programming Instructions.



★PDF 417 Length Control = Variable Length



PDF 417 Length Control = Fixed Length

PDF 417 Length 1, Length 2 Programming Instructions

If PDF417 Length Control is set to Fixed-Length decoding, this feature specifies PDF417 first fixed length. If PDF417 Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

NOTE: This tag is only valid for units with a model id that supports PDF.

Length 1 is the minimum label length if in variable length mode, or the first fixed length if in fixed length mode. Length 2 is the maximum label length if in variable length mode, or the second fixed length if in fixed length mode. Length includes the bar code's data characters only. Any value > 2710 will be considered to be 2710.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set PDF 417 Length 1 or Set PDF 417 Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 0001 to 2710. Pad all numbers with leading zeros to yield a four-digit entry (0001-2710).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Default setting for this feature = 0001



Set PDF 417 Length 1



Set PDF 417 Length 2

★Default setting for this feature = 0A96

PDF 417 Read Option

This feature specifies an additional read control option for PDF 417 bar codes.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★PDF 417 Read Option = None



PDF 417 Read Option = Turn Off Codeword Length Checking

MICRO PDF 417

Micro PDF 417 Enable

Enables/disables the ability of the scanner to decode Micro PDF 417 labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★Micro PDF 417 = Disable

Micro PDF 417 = Enable

Micro PDF 417 Length Control

Fixed Length Decoding: When fixed length decoding is enabled, the scanner will decode a bar code if the label length matches one of the configurable fixed lengths.

Variable Length Decoding: When variable length decoding is enabled, the scanner will decode a ar code if the label length falls in the range of the configurable minimum and maximum length.

Configuring Fixed Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Fixed Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the first fixed length using the Micro PDF 417 Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the second fixed length (or to '0000' if there is only one fixed length) using the Micro PDF 417 Length 1, Length 2 Programming Instructions.

Configuring Variable Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Variable Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the minimum length using the Micro PDF 417 Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the maximum length using the Micro PDF 417 Length 1, Length 2 Programming Instructions.

★Micro PDF 417 Length Control = Variable Length

Micro PDF 417 Length Control = Fixed Length

Micro PDF 417 Length 1, Length 2 Programming Instructions

If Micro PDF 417 Length Control is set to Fixed-Length decoding, this feature specifies Micro PDF 417 first fixed length. If Micro PDF 417 Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

NOTE: This tag is only valid for units with a model ID that supports PDF. Length 1 is the minimum label length if in variable length mode, or the first fixed length if in fixed length mode. Length 2 is the maximum label length if in variable length mode, or the second fixed length if in fixed length mode. Length includes the bar code's data characters only. Any value > 0366 will be considered to be 0366.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Micro PDF 417 Length 1 or Set Micro PDF 417 Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from theAppendix D, Keypad that represent the desired label length. The selectable range for this option is 0001 to 0366. Pad all numbers with leading zeros to yield a four-digit entry (0001-0366).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Default setting for this feature = 0001

Set Micro PDF 417 Length 1

Set Micro PDF 417 Length 2

Default setting for this feature = 016E

Micro PDF 417 128 Emulation

This feature specifies which AIM ID to use for Micro PDF 417 labels when performing Code 128 or EAN 128 emulation.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan the bar code below for the desired setting. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★Micro PDF 417 128 Emulation = Micro PDF AIM ID and label type when emulating EAN128 or Code 128



Micro PDF 417 128 Emulation = Code 128 / EAN128 AIM ID and label type when emulating EAN128 or Code 128

QR CODE

QR Code Enable

Enables/disables the ability of the scanner to decode QR Code labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★ QR Code = Disable



QR Code = Enable

QR Code Length Control

Fixed Length Decoding: When fixed length decoding is enabled, the scanner will decode a bar code if the label length matches one of the configurable fixed lengths.

Variable Length Decoding: When variable length decoding is enabled, the scanner will decode a ar code if the label length falls in the range of the configurable minimum and maximum length.

Configuring Fixed Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Fixed Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the first fixed length using the QR Code Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the second fixed length (or to '0000' if there is only one fixed length) using the QR Code Length 1, Length 2 Programming Instructions.

Configuring Variable Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Variable Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the minimum length using the QR Code Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the maximum length using the QR Code Length 1, Length 2 Programming Instructions.



★QR Code Length Control = Variable Length



QR Code Length Control = Fixed Length

QR Code Length 1, Length 2 Programming Instructions

If QR Code Length Control is set to Fixed-Length decoding, this feature specifies QR Code first fixed length. If QR Code Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

NOTE: Length 1 is the minimum label length if in variable length mode, or the first fixed length if in fixed length mode. Length 2 is the maximum label length if in variable length mode, or the second fixed length if in fixed length mode. Length includes the bar code's data characters only. Any value > 2710 will be considered to be 2710.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set QR Code Length 1 or Set QR Code Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 0001 to 2710. Pad all numbers with leading zeros to yield a four-digit entry (001-02710).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Default setting for this feature = 0001



Set QR Code Length 1



Set QR Code Length 2

Default setting for this feature = 0A96

QR Code URL Link Enable

Enables/Disables the decoding of QR codes with a URL link on imagers other than the optional Customer Service Scanner (CSS).

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★QR Code URL Link = Disable



QR Code URL Link = Enable

GS1 QR Code Enable

This feature controls the ability of the scanner to decode GS1 QR Code labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★GS1 QR Code = Disable

GS1 QR Code = Enable

MICRO QR CODE

Micro QR Code Enable

Enables/disables the ability of the scanner to decode Micro QRCode labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

★Micro QR Code = Disable

Micro QR Code = Enable

Micro QR Code Length Control

Fixed Length Decoding: When fixed length decoding is enabled, the scanner will decode a bar code if the label length matches one of the configurable fixed lengths.

Variable Length Decoding: When variable length decoding is enabled, the scanner will decode a ar code if the label length falls in the range of the configurable minimum and maximum length.

Configuring Fixed Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Fixed Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the first fixed length using the Micro QR Code Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the second fixed length (or to '0000' if there is only one fixed length) using the Micro QR Code Length 1, Length 2 Programming Instructions.

Configuring Variable Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Variable Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the minimum length using the Micro QR Code Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the maximum length using the Micro QR Code Length 1, Length 2 Programming Instructions.



★ Micro QR Code Length Control = Variable Length



Micro QR Code Length Control = Fixed Length

Micro QR Code Length 1, Length 2 Programming Instructions

If Micro QR Code Length Control is set to Fixed-Length decoding, this feature specifies Micro QR Code first fixed length. If Micro QR Code Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

NOTE: Length 1 is the minimum label length if in variable length mode, or the first fixed length if in fixed length mode. Length 2 is the maximum label length if in variable length mode, or the second fixed length if in fixed length mode. Length includes the bar code's data characters only. Any value > 3700 will be considered to be 3700.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Aztec Length 1 or Set Micro QR Code Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 0001 to 3700. Pad all numbers with leading zeros to yield a four-digit entry (0001-3700).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Default setting for this feature = 0001

Set Micro QR Code Length 1

Set Micro QR Code Length 2

Default setting for this feature = 0E74

AZTEC CODE

Aztec Enable

Enables/disables the ability of the scanner to decode Aztec labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★Aztec = Disable



Aztec = Enable

Aztec Length Control

Fixed Length Decoding: When fixed length decoding is enabled, the scanner will decode a bar code if the label length matches one of the configurable fixed lengths.

Variable Length Decoding: When variable length decoding is enabled, the scanner will decode a ar code if the label length falls in the range of the configurable minimum and maximum length.

Configuring Fixed Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Fixed Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the first fixed length using the Aztec Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the second fixed length (or to '0000' if there is only one fixed length) using the Aztec Length 1, Length 2 Programming Instructions.

Configuring Variable Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Variable Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the minimum length using the Aztec Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the maximum length using the Aztec Length 1, Length 2 Programming Instructions.



★ Aztec Length Control = Variable Length



Aztec Length Control = Fixed Length

Aztec Length 1, Length 2 Programming Instructions

If Aztec Length Control is set to Fixed-Length decoding, this feature specifies Aztec first fixed length. If Aztec Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.

NOTE: Length 1 is the minimum label length if in variable length mode, or the first fixed length if in fixed length mode. Length 2 is the maximum label length if in variable length mode, or the second fixed length if in fixed length mode. Length includes the bar code's data characters only. Any value > 3700 will be considered to be 3700.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set Aztec Length 1 or Set Aztec Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 0001 to 3700. Pad all numbers with leading zeros to yield a four-digit entry (0001-3700).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Default setting for this feature = 0001



Set Aztec Length 1



Set Aztec Length 2

Default setting for this feature = 0E74

DOTCODE

DotCode Enable

Enables/disables the ability of the scanner to decode DotCode labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.



★DotCode = Disable



DotCode = Enable

DotCode Length Control

Fixed Length Decoding: When fixed length decoding is enabled, the scanner will decode a bar code if the label length matches one of the configurable fixed lengths.

Variable Length Decoding: When variable length decoding is enabled, the scanner will decode a ar code if the label length falls in the range of the configurable minimum and maximum length.

Configuring Fixed Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Fixed Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the first fixed length using the DotCode Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the second fixed length (or to '0000' if there is only one fixed length) using the DotCode Length 1, Length 2 Programming Instructions.

Configuring Variable Length Decoding:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the Variable Length Decoding bar code.
3. Scan the ENTER/EXIT Programming Mode bar code.
4. Set Length 1 to the minimum length using the DotCode Length 1, Length 2 Programming Instructions that follow this page.
5. Set Length 2 to the maximum length using the DotCode Length 1, Length 2 Programming Instructions.



★DotCode Length Control = Variable Length



DotCode Length Control = Fixed Length

DotCode Length 1, Length 2 Programming Instructions

If DotCode Length Control is set to Fixed-Length decoding, this feature specifies DotCode first fixed length. If DotCode Length Control is set to Variable-Length decoding, this feature specifies the minimum label length.



NOTE: Length 1 is the minimum label length if in variable length mode, or the first fixed length if in fixed length mode. Length 2 is the maximum label length if in variable length mode, or the second fixed length if in fixed length mode. Length includes the barcode's data characters only. Any value > 3700 will be considered to be 3700.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the barcode, Set DotCode Length 1 or Set DotCode Length 2 below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Keypad in Appendix D that represent the desired label length. The selectable range for this option is 0001 to 3700. Pad all numbers with leading zeros to yield a four-digit entry (0001-3700).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Default setting for this feature = 0001

Set DotCode Length 1

Set DotCode Length 2

Default setting for this feature = 0320

MAXICODE

MaxiCode Enable

Enables/disables the ability of the scanner to decode MaxiCode Expanded labels.

NOTE: This value-added feature is a factory-programmed option. Contact your dealer for information about upgrading your system to include this advanced capability.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan either the enable or disable bar code below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

★MaxiCode Expanded = Disable

MaxiCode Expanded = Enable

MaxiCode Expanded Length Control

Length 1 is the minimum label length if in variable length mode, or the first fixed length if in fixed length mode. Length includes the bar code's data characters only.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set MaxiCode Expanded Length 1 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00 to 138. Pad all single digit numbers with a leading zero to yield a three-digit entry (00-138).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set MaxiCode Expanded Length 1

★ Default setting for this feature = 01

MaxiCode Expanded Length 2

Length 2 is the maximum label length if in variable length mode, or the second fixed length if in fixed length mode. Length includes the bar code's data characters only.

NOTE: When in Fixed Length mode, if Length 2 is set to the value of 00 (zero), then only Length 1 will apply.

To set this feature:

1. Scan the ENTER/EXIT Programming Mode bar code.
2. Scan the bar code, Set MaxiCode Expanded Length 2 below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Scan the appropriate digits from the Appendix D, Keypad that represent the desired label length. The selectable range for this option is 00 to 74. Pad all single digit numbers with a leading zero to yield a two-digit entry (00-74).
4. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode bar code.

Set MaxiCode Expanded Length 2

★ Default setting for this feature = 4A (length = 74)

GS1 DIGITAL LINK

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

GS1 Digital Link Enable/Disable Transmit Mode

This option enables or disables GS1 Digital Link. The possible values are:

NOTE: If the 2D portion of the Digital Link contains a URL, then QR Code URL Link Enable **must be enabled for GS1 Digital Link to work.**

★GS1 Digital Link = Disable

Disabled (Default), do not look for GS1 Label Set

GS1 Digital Link = Mode 1

Mode 1: Send first decoded label of the GS1 Label Set, discard other labels of the set read within the timeout specified by GS1 Digital Link Set Timeout. This is known as software Mode 1 by GS1 Digital Link Specifications.



GS1 Digital Link = Mode 2

Mode 2: Give priority to GS1 2D Label, if 2D label is not seen within time specified by GS1 Digital Link Set Time-out, then send the 1D label if read. This is known as software Mode 2 by GS1 Digital Link Specifications.

GS1 Digital Link = Mode 3

Mode 3: Send all decoded labels and prepend label data with Label Set Number [USBOEM interface transmits GS1 2D labels as unknown label type]. This is known as software Mode 3 by GS1 Digital Link Specifications.

Set Monitoring Timeout for GS1 Digital Link

This option sets the time the device is allowed to look for a Digital Link set.

In Transmit mode = Send All Labels, this is the time allowed for all labels to form the same Label Set with the same ID. In Transmit mode = Send Priority 2D, this is the time that, after scanning a 1D label, that the systems waits for a 2D label before sending the 1D label. This option sets the time the device is allowed to look for a Digital Link set.

Mode 2 = is the time that, after scanning a 1D label, that the system waits for a 2D label before sending the 1D label.

Mode 3 = this is the time allowed for all labels to form the same Label Set with the same ID.



★GS1 Digital Link Set Timeout 250 ms



GS1 Digital Link Set Timeout 400ms



★GS1 Digital Link Set Timeout 600ms



GS1 Digital Link Set Timeout 800ms



GS1 Digital Link Set Timeout 1000ms



GS1 Digital Link Set Timeout 1200ms



GS1 Digital Link Set Timeout 1500ms

GS1 Digital Link Set Double Read Timeout

The GS1 Digital Link Double Read Timeout feature specifies the minimum allowable time which must pass before reading the same label again (for example, if there are two identical items in succession).



GS1 Digital Link Set Double Read Timeout 400 ms



GS1 Digital Link Set Double Read Timeout 600ms



★GS1 Digital Link Set Double Read Timeout 700ms



GS1 Digital Link Set Double Read Timeout 800ms



GS1 Digital Link Set Double Read Timeout 1000ms



GS1 Digital Link Set Double Read Timeout 1200ms



GS1 Digital Link Set Double Read Timeout 1500ms

GS1 Digital Link Label Set ID

This feature specifies whether or not the field identifier number for the label set is transmitted to the host. The field identifier for the label set is transmitted before the label data.

This is only active when GS1 Digital Line Enable Mode is set to 3. Currently not supported for USBOEM. The Label ID is 4 bytes, the first 3 bytes are characters for the label ID.

★ Default setting for this feature = 05C8



Set GS1 Digital Link Label Set ID

GS1 DATAMATRIX

Enables ability of scanner to decode GS1-Datamatrix labels.

Transmit GS1 Datamatrix labels as standard Datamatrix labels.



★GS1 Datamatrix = Enable Transmit as Standard



GS1 Datamatrix = Enable = Transmit as GS1 Datamatrix labels

Transmit GS1 Datamatrix labels as GS1 Datamatrix labels

Do not decode GS1 Datamatrix labels



GS1 Datamatrix = Enable Do Not Decode



GS1 Datamatrix = Enable Transmit GS1

Transmit GS1 Datamatrix labels as GS1 Datamatrix labels.
Do not decode standard Datamatrix labels.

GS1 QR CODE

Enables ability of scanner to decode GS1-QR Code labels.



★GS1 QR Code = Enable Transmit as Standard



GS1 QR Code = Enable = Transmit as GS1 QR Code labels



GS1 QR Code = Enable Do Not Decode



GS1 QR Code = Enable Transmit GS1

CONFIGURATION | OTHER SYMBOLOGIES

The following pages contain configuration information concerning the other symbologies the scanner supports.

SECTION CONTENTS

DIGITAL WATERMARK (DIGIMARC®) FEATURES starting on page 323

POSTAL CODE SELECTION starting on page 326

POSTNET starting on page 326

PLANET CODE starting on page 328

ROYAL MAIL starting on page 330

KIX starting on page 332

AUSTRALIA POST starting on page 333

JAPAN POST starting on page 334

IMB starting on page 335

SWEDEN POST starting on page 336

PORTUGAL POST starting on page 337

DIGITAL WATERMARK (DIGIMARC®) FEATURES

Digital Watermark (Digimarc) Enable

Enables/Disables the ability of the scanner to decode Digimarc® Digital Watermarks.

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

NOTE: The Digimarc Digital Watermark feature requires the purchase of a special software license to activate it. For more information, please contact your Datalogic representative.

Digital Watermark (Digimarc) = Disable

★Digital Watermark (Digimarc) = Enable

Digital Watermark (Digimarc) Double Read Timeout

Specifies the minimum allowable time which must pass before reading the same Digital Watermark (Digimarc) label again (e.g. two identical items in succession).

To set this feature:

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.

Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

NOTE: If the incidence of multiple reads is not acceptable, increase the Double Read Timeout setting to a higher value.

Digimarc Double Read Timeout = 0.3 Seconds

Digimarc Double Read Timeout = 0.4 Seconds

★Digimarc Double Read Timeout = 0.5 Seconds

Digimarc Double Read Timeout = 0.7 Seconds

Digimarc Double Read Timeout = 1 Second

Digital Watermark (Digimarc) Data Format

Selects the format for the watermark data. Choices are:

- Compatibility mode
- Databar-14
- Native

1. Scan the Enter/Exit Programming Mode bar code.
2. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode bar code.

NOTE: The Digital Watermark feature must be enabled for decode functionality.

★Digital Watermark (Digimarc) Data Format = Compatibility mode

Digital Watermark (Digimarc) Data Format = Databar-14 mode

Digital Watermark (Digimarc) Data Format = Native mode

POSTAL CODE SELECTION

Enables/disables the ability of the scanner to decode labels of the specified postal symbology.

POSTNET

Postnet Enable

Enables/disables the ability of the scanner to decode Postnet labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.



★Postnet = Disable



Postnet = Enable

Postnet Check Character Calculation

Enables/disables calculation and verification of an optional Postnet check character.

NOTE: If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check characters in a barcode are treated as data characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

Postnet Check Character Calculation = Disable

Postnet Check Character Calculation = Enable

PLANET CODE

Planet Code Enable

Enables/disables the ability of the scanner to decode Planet Code labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.



Planet Code = Disable



Planet Code = Enable

Planet Check Character Calculation

Enables/disables calculation and verification of an optional Planet check character.

NOTE: If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check characters in a barcode are treated as data characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

Planet Check Character Calculation = Disable

Planet Check Character Calculation = Enable

ROYAL MAIL

Royal Mail Enable

Enables/disables the ability of the scanner to decode Royal Mail labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.



Royal Mail = Disable



Royal Mail = Enable

Royal Mail Check Character Calculation

Enables/disables calculation and verification of an optional Royal Mail check character.

NOTE: If check character calculation is disabled, the risk is increased that a misread can occur. When disabled, any check characters in a barcode are treated as data characters.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the ENTER/EXIT Programming Mode barcode.

Royal Mail Check Character Calculation = Disable

Royal Mail Check Character Calculation = Enable

KIX

Kix Enable

Enables/disables the ability of the scanner to decode Kix labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.

Kix = Disable

Kix = Enable

AUSTRALIA POST

Australian Post Enable

Enables/disables the ability of the scanner to decode Australia Post labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.

Australia Post = Disable

Australia Post = Enable

JAPAN POST

Japan Post Enable

Enables/disables the ability of the scanner to decode Japan Post labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.



Japan Post = Disable



Japan Post = Enable

IMB

IMB Enable

Enables/disables the ability of the scanner to decode IMB labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.

IMB = Disable

IMB = Enable

SWEDEN POST

Sweden Post Enable

Enables/disables the ability of the scanner to decode Sweden Post labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.

Sweden Post = Disable

Sweden Post = Enable

PORTUGAL POST

Portugal Post Enatble

Enables/disables the ability of the scanner to decode Portugal Post labels.

To set this feature:

1. Scan the Enter/Exit Programming Mode barcode at the top of the page.
2. Scan either the enable or disable barcode below. You'll need to cover any unused barcodes on this and the facing page to ensure that the scanner reads only the barcode you intend to scan.
3. Complete the programming sequence by scanning the Enter/Exit Programming Mode barcode.

Portugal Post = Disable

Portugal Post = Enable

APPENDIX A
TECHNICAL SPECIFICATIONS

MAGELLAN 3600VSI

DECODING CAPABILITIES	
1D / Linear Codes	Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes
Stacked Codes	GS1 Digital Link, GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MicroPDF417; PDF417
2D Codes	Aztec Code; Data Matrix (ECC200 only); QR Code
Digital Watermarks	Digimarc® Barcodes/GS1 DW Code
ELECTRICAL	
Power Requirements	AC Input: 100-240 VAC, 50-60 Hz DC Input: 5-12 V USB-C Power Delivery (3650/3670): 9 or 12 V
Power Consumption	All models, no auxiliary HandHeld device attached: Operating (Maximum): 3 Watts Operating (Nominal): 1.2 Watts Sleep Mode: 1.0 Watts M3x50 and M3x70 only: with Auxiliary HandHeld device attached, 12V power source: Operating (Maximum): 6 Watts Operating (Nominal): 1.8 Watts Sleep Mode: 1.5 Watts (average values considering Datalogic QD2500 HandHeld scanner)
ENVIRONMENTAL	
Ambient Light	0-86,100 lux
ESD Protection (Air Discharge)	25 kV
Humidity (Non-Condensing)	5 - 95%
Particulate and Water Sealing	IP52

Temperature	Operating: 0 to 40 °C / 50 to 104 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F
INTERFACES	
Interfaces	OEM (IBM) USB; RS-232; USB Keyboard, USB Com
Auxiliary Ports (3650/ 3670)	Powered Type A USB (USB Com) Requires 12V Power Supply, 12V OEM-USB, or 9-12V USB-C Power Delivery
OPTIONAL FEATURES	
EAS Features	Checkpoint Systems: Integrated EAS hardware will work with Counterpoint IX and Evolve D11 models; Sensormatic: Good Read Acknowledgement
Value Added Features	Diagnostic Reporting; Host Download; Magellan ULE Scripting
PHYSICAL CHARACTERISTICS	
Dimensions	Magellan 3600 VSi: 13.7 x 15.2 x 8.4 cm / 5.4 x 6.0 x 3.3 in
Weight	0.60 kg / 1.3 lb
SAFETY & REGULATORY	
Agency Approvals	The product meets necessary safety and regulatory approvals for its intended use.
Environmental Compliance	Complies to China RoHS; Complies to EU RoHS
LED Classification	EN62471 and IEC62471 Lamp Illumination - Exempt Group

READING PERFORMANCE	
Image Capture	Graphic Formats: BMP, JPEG, TIFF, RAW Color (3650/3670) and Grayscale
Image Sensor Resolution	1360 x 1120 pixels, Global Shutter
Light Source	Multiple diffused LEDs, orientation and wavelength optimized for eye comfort
Print Contrast Ratio (Minimum)	25%
Read Height	15 cm / 6 in (EAN 13 mils at 15 cm distance)
Grayscale Read Rate (Maximum)	60 Million pixels per second
Color Image Read Rate (Maximum, 3650/3670)	4 seconds per image (JPEG format)
Reading Angle	Pitch: +/- 65°; Roll (Tilt): 0 - 360°; Skew (Yaw): +/- 65°
Reading Indicators	Audio speaker with adjustable tone and volume; Good Read LED; Good Transmission
Resolution (Maximum)	1D Codes: 3 mil 2D Codes: 6 mil

READING RANGES	
PARAMETER	**SPECIFICATION**
Typical Depth Of Field (DOF)	Printing Resolution, Symbol Length, Scan Angle, Contrast and Ambient Light Dependent. For Magellan 3600VSi distances are measured from the product window.
1D / Linear Codes	5 mils (Code39): 1 to 13cm / 0.5 to 5.0 in
	7.5 mils (Code39): 0 to 18cm / 0 to 7.0 in
	10 mils (EAN): 0 to 19cm / 0 to 7.5 in
	13 mils (EAN): 0 to 22cm / 0 to 8.7 in
	20 mils (Code39): 0 to 26cm / 0 to 10.0 in
2D Codes (Optional)	6.6 mils (PDF): 1 to 12cm / 0.5 to 4.7 in
	10 mils (PDF): 0 to 18cm / 0 to 7.0 in
	10 mils (DM): 1 to 9cm / 0.5 to 3.5 in
	15 mils (DM): 0 to 16cm / 0 to 6.3 in
	15 mils (QR): 0 to 16cm / 0 to 6.3 in
	20 mils (DM): 0 to 18cm / 0 to 7.0 in
	20 mils (QR): 0 to 18cm / 0 to 7.0 in

UTILITIES	
Aladdin	Magellan Aladdin configuration software is available for download at www.datalogic.com
OPOS / JavaPOS	OPOS and JavaPOS utilities are available for download at no charge.
WARRANTY	
Warranty	3-Year Standard Factory Warranty

RFID (AVAILABLE FOR 3650/3670)	
Standard	EPC UHF Class 1 Gen 2 (ISO 18000-6C) Requires 12V Power Supply, 12V OEM-USB, or 9-12V USB-C Power Delivery
Frequency	US: 902 MHz to 928 MHz EU: 865 MHz to 868 MHz
Modulation	ASK (which stands for Amplitude Shift Keying)
Power	Max 9dBm (configurable)
Reading Range	Up to 20 cm / 7.9 inch (linear)

COLOR VIDEO CAMERA (3670)	
Power Consumption (on dedicated USB 5V interface)	Without White Illumination enabled: Operating: 0.5 Watts With White Illumination enabled: Operating (Maximum): 2.5 Watts Operating (Nominal): 0.8 Watts Sleep Mode: 0.5 Watts
Resolution	1280 x 800 pixels, Global Shutter
Framerate	40 frames per second
Field of View	74°H x 50°V
Connectivity	USB Type B Port (USB 2.0), USB Video Class (UVC) Protocol

APPENDIX B
LED/AUDIO INDICATIONS AND CONTROLS

GOOD READ INDICATOR

The scanner features two groups of Read LED Indicators: a pair of LEDs facing front, another pair facing Top for extended visibility.

Figure 13. Scanner Control



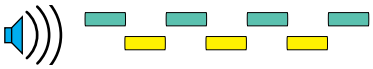
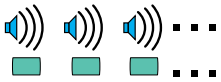
NOTE: For further information on Controls and Indicators panel, please refer to Chapter 2, Controls and Indicators**.**

LED AND AUDIO INDICATIONS

NOTE: Since audio indications are configurable, your unit may not be programmed to sound all the indications as listed. For more information, see the Chapter 3, Programming **section of this manual.**

Scanner LED Indications

The Green Good Read indicator bar (see) indicates scanner status.

LED INDICATION	DURATION	COMMENT
Scanner Active[a] (Normal Mode)	Scanner (Green) LED on steady and dim 	The scanner is ready for operation. Scanning is immediately available.
Scanner Active[a] (Limited Power State)	Scanner (Orange) LED on steady and dim	The scanner is ready for operation but Aux Port is powered-off. See “Connecting an external Barcode Reader to the Auxiliary Port” on page 17.
Good Read Indication[a]	Scanner (Green) LED - bright flash	Indicates a bar code has been read and decoded.
Program Mode Indication	Scanner (Green) LED - Continuous flashing	Indicates the scanner is in Label Programming Mode. Cycle power (or read an Exit Programming label) to exit Programming Mode.
Sleep Mode Indication	Scanner (Green) LED flashes slowly 10ms on, 1990ms off. 	The scanner has automatically switched off and the unit has entered Sleep Mode due to extended inactivity.
Low Power Level 3 Indication	Scanner (Green) LED flashes slowly 10ms on, 2990ms off. 	The scanner has automatically switched off and the unit has entered Level 3 Low Power Mode due to extended inactivity.
Scanner Disabled[a]	Scanner (Green) LED blinks100ms on, 900ms off.	Host has disabled scanning.
Field Replaceable Unit (FRU) Warning (Error Mode)	Audible low tone 1 second. Alternating Scanner LEDs flash continuously[b]. 	Serves notice that a fatal FRU failure has been detected. Consult in this manual for more details.
FRU Indication	Scanner (Green) LED flashes a coded sequence in concert with the speaker. 	Occurs ONLY upon Volume/Tone button push following a FRU warning. Enables service technicians to identify FRU failures.
ROM Failure	Scanner (Green) LED - Continuous flashing 200ms on, 200ms off. 	Indicates Boot ROM failure or Program ROM failure.

a. Certain functions of the Green and Yellow LEDs are selectable to be enabled or disabled. Your scanner may not be programmed to display all indications.
b. For FRU error 9, the Deactivator LED (tri-color) is off.

Audio Indications

The speaker (beeper) mounted in the scanner's bonnet will beep or sound other audio indications to announce scanning, weighing, errors or other functions. Beep indications specific to Electronic Article Surveillance (EAS) are listed in the next section.



NOTE: The indications listed below are the factory default settings. Your scanner may have been configured with different beeper settings. For example, certain beeper indications may be turned off.

AUDIO INDICATION	DESCRIPTION OF SOUND	COMMENT
Power-up Beep	One beep at current frequency and volume.	Indicates the scanner is powering-on.
Good Read Beep	One beep at current frequency and volume.	The duration of the beep is also at the current setting.
ROM Failure	One 200ms error beep at low frequency.	Indicates Boot ROM or Program ROM failure.
Chirp Indications	Six "Chirps" at highest frequency and current volume.	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.
Bootload Entry Indications	The beeper sounds a series of beeps at highest frequency and current volume to indicate various	See Chapter 3, for more details.
Null Interface Selected	40 error beeps at highest volume, 20ms ON and 20 ms OFF.	This means that no interface has been selected. Refer to the Chapter 3, Programming section for interface configuration information.
Insert Mass Storage device	Unique WAV file sound. Similar to a high pitched plucked string.	This sound occurs upon a Mass Storage device being installed in the USB Aux port.
Eject Mass Storage Device	Unique SAVE file sound. Similar to a medium pitched plucked string.	Indicates that a Mass Storage device has been removed from the USB Aux port.

APPENDIX C
CABLE PINOUTS

STANDARD CABLE PINOUTS (PRIMARY INTERFACE CABLES)

PIN #	RS-232	USB-OEM	USB, USB KEYBOARD, USB COM
1		D+	D+
2	CTS		
3		D-	D-
4	RTS		
5	RxD		
6	TxD		
7			
8	Vin	Vin/VBUS	Vin/VBUS
9	GND	GND	GND
10	ERI	ERI	ERI

APPENDIX D
KEYPAD

Use the bar codes in this section to enter numbers and characters as you would select digits/characters from a keypad. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.

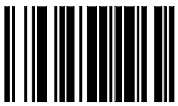

0


1


2

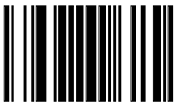

3


4


5


6

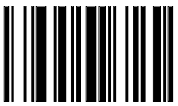
Use the bar codes in this section to enter numbers and characters as you would select digits/characters from a keypad. Scan your selection from the bar codes below. You'll need to cover any unused bar codes on this and the facing page to ensure that the scanner reads only the bar code you intend to scan.



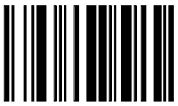
7



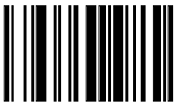
8



9



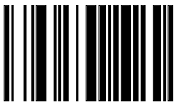
A



B



C



D



E



F

APPENDIX E
MASS STORAGE DEVICE AND AUTORUN COMMANDS

MASS STORAGE DEVICE COMPATIBILITY

The following Magellan 3600/3700 models support the usage of a Mass Storage device for Image Capture and other operations by means of "Autorun" method (see sections below):

- "Magellan 3650VSi
- "Magellan 3670VSi

"Mass Storage" refers to common storage devices like USB keys. To use it, the storage device should be formatted using FAT32 format and must be plugged into the "AUX PORT" connector (USB-A type) on the back of the product

:

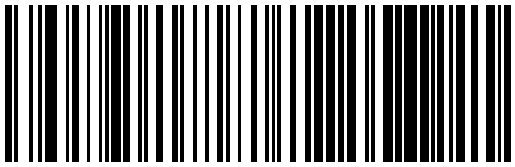


When the external drive is inserted into the main scanner, the main scanner will audibly indicate that it is trying to mount the drive with a periodic beep. When the external drive successfully mounts, the audible indication ends with a rapid trill. If the rapid trill does not occur, it is likely that the external drive did not mount correctly.

When the external drive is removed from the main scanner, the main scanner indicates this audibly with a low frequency trill.

CAPTURE AND SAVE AN IMAGE TO A MASS STORAGE CARD BY SCANNING A LABEL.

1. Insert the Mass Storage device card into the scanner



2. Scan the Capture Label. The scanner enters image capture mode.
3. Present the item to be captured to the scanner.
4. Press and release the Camera Button. The scanner will automatically capture and save the image to the Mass Storage device.
5. Upon scanner audio indication of completion, an image is saved to the Mass Storage device.



NOTE: The image file name range is from IMAGE000 to IMAGE999. if the same name already exists in the Mass Storage device, the scanner skips that name and uses the next. For example, if IMAGE000.JPG is already used in the Mass Storage device, the scanner uses IMAGE001.JPG. The time stamp is not real, since scanner does not have a real time clock.

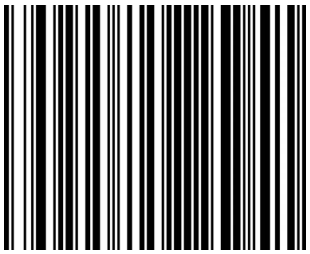
Image format (.BMP, .JPG), image size (VGA, WVGA, Full size), Brightness (0~9), contrast (0~9), and JPG compression ratio (0~100) are defined in configuration.

EXPORT SCANNER STATUS TO MASS STORAGE

The data includes scanner ID, statistics and scanner health.

By scanning a label

1. Insert the microSD card into the scanner.
2. Scan the status export label.



<FNC3>STATUS<CR>

Upon scanner audio indication of completion, the scanner status text file named STATUS.TXT is saved to the microSD card.

AUTORUN FILE PROCESSING

The scanner provides a way to perform different operations by writing an "AUTORUN.DLS" file into the Mass Storage. Depending on the contents of such file, the following operations can be executed:

- Operations from the Scanner to the Mass Storage:
  - Export the current Configuration (DUMPCFG command)
  - Export useful information about the status of the System (DUMPSTATS command)
- Operations from the Mass Storage to the Scanner:
  - Load a custom Configuration (CONFIG command)
- Upgrade the Firmware (LOADSW command)

After insertion of the Mass Storage, the scanner will mount it and search for the file "AUTORUN.DLS". Embedded in that file is a validation pattern of the ASCII strings "$START$" and "END" located at the respective starting and ending of the file.

If the validation pattern is found, the file may contain any of the following commands.

The scanner will parse the file taking action according to these commands. Filenames in italics specify a user-defined name.

Example AUTORUN.DLS file:

$START$ (REQUIRED)
DUMPCFG, FILENAME.TEX
DUMPSTATS, FILENAME.TXT
CONFIG, FILENAME.TEX
LOADSW, FILENAME.SWU
END (REQUIRED)

When an autorun file is processed, the following events can be logged in the event log:

AUTORUN_FILE_LOADED - the file is successfully processed

AUTORUN_FILE_FAULT - the file is not constructed correctly, most likely due to a missing Start Line

The definition of each command is listed here below:

DUMPCFG,filename

This command writes the current configuration of the scanner to the file specified by "filename", on the external drive. The resulting file will start with a "cfg_" prefix, and will have the ".tex" extension. The first line of the resulting config file will start with "CFO3". If writing the config file to the external drive fails, the following event will be written to the event log:

DMPCFG_FAIL - Config file write to the external drive has failed.

Example usage:

$START$
DUMPCFG,CONFIG.TEX
END

DUMPSTATS,filename

This command writes the statistics of the scanner to the file specified by "filename", on the external drive. The resulting file will start with a "stats_" prefix, and will have the ".txt" extension. If writing the statistics file to the external drive fails, the following event will be written to the event log:

DMPSTATS_FAIL - Statistics file write to the external drive has failed

Example usage:

```
$START$
DUMPSTATS,STATS.TXT
$END$
```

CONFIG,filename

This command loads the config file specified by "filename" from the external drive onto the main scanner. Usually, the config file has TEX extension and was previously created using Aladdin tool.

If the config file is loaded to the main scanner successfully, then the following entry will be added to the event log:

AUTORUN_CONFIG_LOAD

Example usage:

```
$START$
CONFIG,R96-CFG1.TEX
$END$
```

LOADSW,filename

This command loads new scanner software from the external drive to the main scanner. The software is verified before the load operation begins. This operation can take several minutes.

If writing the software to the scanner fails, the following event will be written to the event log:

AUTORUN_LOADSW_FAIL - Software write to the main scanner has failed

If writing the software to the scanner succeeds, the following events will be written to the event log:

SOFTWARE_UPDATE_STARTED - Software update process has started

SOFTWARE_UPDATE_COMPLETE - Software update process has finished

AUTORUN_LOADSW_PASS - Software write to the main scanner has succeeded

Example usage:

```
$START$
LOADSW,FIRMWARE.SWU
$END$
```

APPENDIX F
HOST COMMANDS

ACCEPTING COMMANDS FROM AN RS-232 SCANNER HOST

The scanner responds to the following RS-232 commands:

COMMAND	ASCII	HEX	COMMENT
Enable Scanner	E	0x45	
Disable Scanner	D	0x44	
Reset Scanner	R	0x52	
Not On File Indication	F	0x46	Long series of beeps
Beep Good Read Tone	B	0x42	Beeps if Good Read Beep is enabled
Force Good Read Tone		0x01	Beeps regardless of beep setting
Bel		0x07	Force Good Read Tone
Identification request	i	0x69	Returns long response[a]
Health request	h	0x68	Returns long response[a]
Status request	s	0x73	Returns long response[a]

a. Call Tech Support for information.

If one of the above commands is received, the scanner will perform the steps indicated for the command. Host commands for other interfaces are also available. Contact Tech Support for more details.

APPENDIX G
FACTORY DEFAULTS

The following table provides a listing of the most common factory settings for the interfaces shown.



NOTE: Some of the individual interfaces listed in the defaults table below appear in the same column since they share similar feature settings with few (if any) exceptions. Keep in mind though, that the actual configuration storage area for each interface is unique and that updates & changes to factory defaults can be made at any time without notice.

Table 2. Factory Default Settings

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
IMAGING FEATURES					
Image Format	00 (horizon-tal)	00 (horizon-tal)	00 (horizontal	00 (horizontal	00 (horizontal
Image Format	00 (JPG)	00 (JPG)	00 (JPG)	00 (JPG)	00 (JPG)
Image Size	00 (VGA)	00 (VGA)	00 (VGA)	00 (VGA)	00 (VGA)
Image Bright-ness	Level 0	Level 0	Level 0	Level 0	Level 0
Image Con-trast	Level 0	Level 0	Level 0	Level 0	Level 0
Image Com-pression	Level 100	Level 100	Level 100	Level 100	Level 100
Region of Interest (ROI)	Default (1119 x 1359)	Default (1119 x 1359)	Default (1119 x 1359)	Default (1119 x 1359)	Default (1119 x 1359)
GENERAL SCANNER AND SCALE FEATURES					
1D Double Read Timeout	28 (400ms)	28 (400ms)	28 (400ms)	28 (400ms)	28 (400ms)
2D Double Read Timeout	46 (700ms)	46 (700ms)	46 (700ms)	46 (700ms)	46 (700ms)
Label Gone Timeout	0C (12 ms)	0C (12 ms)	0C (12 ms)	0C (12 ms)	0C (12 ms)
Sleep Mode Timer	5 minutes	5 minutes	5 minutes	5 minutes	5 minutes

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
1D Inverse Read Control	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
2D Inverse Read Control	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
2D Contrast Improvement	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Illumination Control	01(enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Good Read LED Idle State	02 (on dim)	02 (on dim)	02 (on dim)	02 (on dim)	02 (on dim)
Scanner Control Button Options	01 (Volume and Tone)	01 (Volume and Tone)	01 (Volume and Tone)	01 (Volume and Tone)	01 (Volume and Tone)
Power-up Tone Control	01 (1 beep)	01 (1 beep)	01 (1 beep)	01 (1 beep)	01 (1 beep)
Good Read Beep Control	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Good Read Beep Frequency	01 (med.)	01 (med.)	01 (med.)	01 (med.)	01 (med.)
Good Read Beep Length	008 (80ms)	008 (80ms)	008 (80ms)	008 (80ms)	008 (80ms)
Good Read Beep Volume	03 (high)	03 (high)	03 (high)	03 (high)	03 (high)
Good Read When to Indicate	00 (after decode)	00 (after decode)	00 (after decode)	00 (after decode)	00 (after decode)
Handheld Host Download Timeout	01 5 15 seconds				
EAS FEATURES					
ERI Active State	00 (low)	00 (low)	00 (low)	00 (low)	00 (low)
ERI Timeout	02 (20ms)	02 (20ms)	02 (20ms)	02 (20ms)	02 (20ms)
INTERFACE RELATED FEATURES					
USB OEM Scanner Device Type	00 (table top)				00 (table top)
RS-232 Baud Rate	01 (9600)	01 (9600)	01 (9600)		
RS-232 Number of Data Bits	01 (8 data bits)	01 (8 data bits)	01 (8 data bits)		
RS-232 Number of Stop Bits	00 (1 stop bit)	00 (1 stop bit)	00 (1 stop bit)		
RS-232 Parity	00 (none)	00 (none)	02 (odd)		

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
RS-232 Hard-ware Control	00 (disable)	00 (disable)	01 (enable CTS flow con-trol)		
RS-232 Soft-ware Flow Control	00 (disable)	00 (disable)	00 (disable)		
RS-232 Ignore Host Commands	00 (don't ignore)	00 (don't ignore)	00 (don't ignore)	00 (don't ignore)	00 (don't ignore)
RS-232 TTL	00 (normal)	00 (normal)	00 (normal)		
RS-232 TTL Invert	00 (disable)	00 (disable)	00 (disable)		
RS-232 Beep on ASCII BEL	00 (disable)	00 (disable)	00 (disable)		
Beep on Not on File	00 (disable)	00 (disable)	00 (disable)		
Beep on Not on File	01 (low vol)	01 (low vol)	01 (low vol)		01 (low vol)
RS-232 ACK NAK Features	00 (disable)	00 (disable)	00 (disable)		
RS-232 ACK Character	06 (ACK)	06 (ACK)	06 (ACK)		
RS-232 NAK Character	15 (NAK)	15 (NAK)	15 (NAK)		
RS-232 Retry on ACK NAK Timeout	01 (enable)	01 (enable)	01 (enable)		
RS-232 ACK NAK Retry Count	03 (3 retries)	03 (3 retries)	03 (3 retries)		
RS-232 ACK NAK Error Handling	00 (ignore)	00 (ignore)	00 (ignore)		
RS-232 Indi-cate Trans-mission Failure	01 (enable)	01 (enable)	01 (enable)		
USB KEYBOARD AND KEYBOARD WEDGE FEATURES					
USB Key-board and Keyboard Wedge Inter-character Delay	00 (0 ms)			00 (0 ms)	
USB Key-board and Keyboard Wedge Coun-try Mode	USA			USA	
DATA EDITING					

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
Case Conversion	00 (no case convers'n)	00 (no case convers'n)	00 (no case convers'n)	00 (no case convers'n)	00 (no case convers'n)
Character Conversion	FFFFFFFFFFFFFFFFF (no char. convers'n)	FFFFFFFFFFFFFFFFF (no char. convers'n)	FFFFFFFFFFFFFFFFF (no char. convers'n)	FFFFFFFFFFFFFFFFF (no char. convers'n)	FFFFFFFFFFFFFFFFF (no char. convers'n)
Global Prefix	00 (no prefix)	00 (no prefix)	00 (no prefix)	00 (no prefix)	00 (no prefix)
Global Suffix	0D00 (CR)	0D00 (CR)	0D00 (CR)	0D00 (CR)	0D00 (CR)
2D Symbologies	00 (disable)	00 (disable)	00 (disable)	00 (disable)	
Label ID Control	01 (Enable as prefix)	01 (Enable as prefix)	01 (Enable as prefix)	00 (disable)	
SETTING LABEL ID					
Global Mid-Label ID	00 (No Global Mid Label ID)	00 (No Global Mid Label ID)	00 (No Global Mid Label ID)	00 (No Global Mid Label ID)	00 (No Global Mid Label ID)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
1D SYMBOLOGY PROGRAMMING					
Coupon Control Enable	02 (Enable Databar Coupon, Disable UPC-A Coupon)	02 (Enable Databar Coupon, Disable UPC-A Coupon)	02 (Enable Databar Coupon, Disable UPC-A Coupon)	02 (Enable Databar Coupon, Disable UPC-A Coupon)	02 (Enable Databar Coupon, Disable UPC-A Coupon)
Coupon Label Priority Timer	14 (0.2 Seconds)	14 (0.2 Seconds)	14 (0.2 Seconds)	14 (0.2 Seconds)	14 (0.2 Seconds)
UPC-A					
UPC-A Enable	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
UPC-A Number System Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
UPC-A Check Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
UPC-A Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
Expand UPC-A to EAN-13	00 (disable)	00 (disable)	01 (enable)	00 (disable)	00 (disable)
UPC-E					
UPC-E Number System Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
UPC-E Check Character Transmission	01 (enable)	01 (enable)	00 (disable)	01 (enable)	01 (enable)
Expand UPC-E to UPC-A	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Expand UPC-E to EAN-13	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
UPC-E Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
EAN-13 Enable	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
EAN-13 First Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
EAN-13 Check Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
EAN-13 ISBN Conversion Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-13 Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
EAN-8 Enable	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
EAN-8 Check Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Expand EAN-8 to EAN-13	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8 Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
EAN-8 Guard Insertion	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8 Guard Substitution	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8/Jan-8 Both Guards Substitution	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8 Stitch Exact Label Halves	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8 Stitch Unlike Label Halves	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8 Minimum Segment Length	08 (8 characters)	08 (8 characters)	08 (8 characters)	08 (8 characters)	08 (8 characters)
EAN-8 Decoding Levels	01 (Very Conservative)	01 (Very Conservative)	01 (Very Conservative)	01 (Very Conservative)	01 (Very Conservative)
In-Store Printed Label Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
UPC/EAN Correlation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8 Guard Substitution	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8 Stitch Exact Label Halves	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN-8 Stitch Unlike Label Halves	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
UPC/EAN Minimum Segment Length	05 (5 char.)	05 (5 char.)	05 (5 char.)	05 (5 char.)	05 (5 char.)
Price Weight Check	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Enable EAN Two Label	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
EAN Two Label Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
EAN Two Label Combined Transmission	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Addons	disable all	disable all	disable all	disable all	disable all
P2 Addon Minimum Read — continued	02 (2 reads)	02 (2 reads)	02 (2 reads)	02 (2 reads)	02 (2 reads)
P5 Addon Minimum Read — continued	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
GTIN Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	
DataBar Omnidirectional Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
DataBar Omnidirectional/EAN-128 Emulation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
DataBar Omnidirectional 2D Component Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
DataBar Omnidirectional Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
DataBar Omnidirectional Double Read Timeout	32 (2.5 seconds)	32 (2.5 seconds)	32 (2.5 seconds)	32 (2.5 seconds)	32 (2.5 seconds)
DataBar Limited 2D Component Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
DataBar Limited EAN128 Emulation Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
DataBar Expanded Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
DataBar Expanded EAN-128 Emulation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
DataBar Expanded 2D Component Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
DataBar Expanded Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
DataBar Expanded Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
DataBar Expanded Length 1	01	01	01	01	01
DataBar Expanded Length 2	74	74	74	74	74
DataBar Expanded Reverse Retry	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Codabar Enable	01 (enable)	01 (enable)	00 (disable)	01 (enable)	01 (enable)
Code 32 Start Stop Character Transmission	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 39 Check Character Calculation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 39 Check Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Code 39 Full ASCII	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 39 Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
Code 39 Correlation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 39 Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
Code 39 Length 1	02	02	02	02	02
Code 39 Length 2	50	50	50	50	50
Code 39 Stitching	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
Code 39 Require Margins	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 32 Italian Pharmacode	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 32 Start Stop Character Transmission	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 32 Check Character Transmission	00 (disable)	00 (disable)	00 (disable)	00 (disable)	
Code 128	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Code 128 Transmit Function Characters	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Expand Code128 to Code 39	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 128 Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
Code 128 Correlation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 128 Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
Code 128 Length 1	01	01	01	01	01
Code 128 Length 2	80	80	80	80	80
Code 128 Stitching	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
EAN-128 Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Interleaved 2 of 5 (I 2 OF 5) Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
I 2 of 5 Check Character Calculation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
I 2 of 5 Check Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
I 2 of 5 Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
I 2 of 5 Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
I 2 of 5 Length 1	06	06	06	06	06
I 2 of 5 Length 2	50	50	50	50	50
I 2 of 5 Stitching	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Codabar	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Codabar Start Stop Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Codabar Start Stop Character Set	03 (abcd/abcd)	03 (abcd/abcd	03 (abcd/abcd	03 (abcd/abcd	03 (abcd/abcd
Codabar Start Stop Character Match	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Codabar Check Character Calculation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Codabar Check Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Codabar Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
Codabar Correlation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Codabar Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
Codabar Length 1	03	03	03	03	03
Codabar Length 2	32	32	32	32	32
Codabar Stitching	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Codabar Require Margins	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 93 Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 93 Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
Code 93 Correlation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Code 93 Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
Code 93 Length 1	01	01	01	01	01
Code 93 Length 2	50	50	50	50	50
Code 93 Stitching	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Standard 2 of 5 Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Standard 2 of 5 Check Character Calculation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Standard 2 of 5 Check Character Transmission	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)
Standard 2 of 5 Minimum Read	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)	01 (1 read)
Standard 2 of 5 Correlation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
I 2 of 5 Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
Standard 2 of 5 Length 1	08	08	08	08	08
Standard 2 of 5 Length 2	32	32	32	32	32
Standard 2 of 5 Stitching	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
2D SYMBOLOGY PROGRAMMING					
Data Matrix Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Data Matrix Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
Data Matrix Length 1, Length 2 Programming Instructions	0001	0001	0001	0001	0001
Data Matrix Length 1, Length 2 Programming Instructions	0320	0320	0320	0320	0320
GS1 Datamatrix Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
PDF 417 Enable	01 (enable)	01 (enable)	01 (enable)	01 (enable)	01 (enable)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
PDF 417 Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
PDF 417 Length 1, Length 2 Programming Instructions	0001	0001	0001	0001	0001
PDF 417 Length 1, Length 2 Programming Instructions	0A96	0A96	0A96	0A96	0A96
PDF 417 Read Option	00 (none)	00 (none)	00 (none)	00 (none)	00 (none)
Micro PDF 417 Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Micro PDF 417 Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
Micro PDF 417 Length 1, Length 2 Programming Instructions	0001	0001	0001	0001	0001
Micro PDF 417 Length 1, Length 2 Programming Instructions	016E	016E	016E	016E	016E
Micro PDF 417 128 Emulation	00 (Micro PDF 417 AIM ID & label type)	00 (Micro PDF 417 AIM ID & label type)	00 (Micro PDF 417 AIM ID & label type)	00 (Micro PDF 417 AIM ID & label type)	00 (Micro PDF 417 AIM ID & label type)
QR Code Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
QR Code Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
QR Code Length 1, Length 2 Programming Instructions	0001	0001	0001	0001	0001
QR Code Length 1, Length 2 Programming Instructions	0A96	0A96	0A96	0A96	0A96
GS1 QR Code Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
QR Code URL Link Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
Micro QR Code Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Micro QR Code Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
Micro QR Code Length 1, Length 2 Programming Instructions	0001	0001	0001	0001	0001
Micro QR Code Length 1, Length 2 Programming Instructions	0E74	0E74	0E74	0E74	0E74
Aztec Code	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Aztec Length Control	00 (variable)	00 (variable)	00 (variable)	00 (variable)	00 (variable)
Aztec Length 1, Length 2 Programming Instructions	0001	0001	0001	0001	0001
Aztec Length 1, Length 2 Programming Instructions	0E74	0E74	0E74	0E74	0E74
GS1 Digital Link	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Set Monitoring Timeout for GS1 Digital Link	19 (250 ms)	19 (250 ms)	19 (250 ms)	19 (250 ms)	19 (250 ms)
GS1 Digital Link Set Double Read Timeout	46 (700ms)	46 (700ms)	46 (700ms)	46 (700ms)	46 (700ms)
GS1 Digital Link Label Set ID	246E0000 ($n)	246E0000 ($n)	246E0000 ($n)	246E0000 ($n)	246E0000 ($n)
OTHER SYMBOLOGIES					
Digital Watermark (Digimarc) Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Digital Watermark (Digimarc) Double Read Timeout	32 (500ms)	32 (500ms)	32 (500ms)	32 (500ms)	32 (500ms)

FEATURE	DEFAULT MASTER	RS-232	RS-232 WINCOR-NIXDORF	KEY-BOARD	USB OEM
Digital Watermark (Digimarc) Data Format	00 (compatibility mode)	00 (compatibility mode)	00 (compatibility mode)	00 (compatibility mode)	00 (compatibility mode)
Postnet Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Postnet Check Character Calculation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Planet Code Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Planet Check Character Calculation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Royal Mail Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Royal Mail Check Character Calculation	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Kix Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Australian Post Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Japan Post Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
IMB Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Sweden Post Enable	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)
Portugal Post Enatble	00 (disable)	00 (disable)	00 (disable)	00 (disable)	00 (disable)

APPENDIX H
HANDHELD DATA FORMAT REQUIREMENTS

This appendix provides application notes to describe the general format of data that can be accepted by the scanner through the auxiliary port as transmitted from a handheld scanner.

HANDHELD DATA FORMAT REQUIREMENTS GENERAL

- RS232 - 9600 bps, 8 data bits, 1 stop bit, no parity.
- RS-232 RTS is used to “bracket” the data received from the handheld: RTS must be asserted high during data transmission, and de-asserted after label transmission is complete.
  No other flow control mechanisms are required or supported.
  There must be a delay of at least 2 bit cell times (approximately 208 microseconds) following the transmission of the last character before de-assertion of the RTS signal.
  The de-assertion of the RTS signal must happen in less than 50 milliseconds after the last character is transmitted.
- USB handhelds enumerate as a CDC ACM serial device.
- USB devices should also bracket the data with the RTS equivalent.
- The time between character transmission can be no longer than 50 milliseconds.
- Symbologies requiring fixed lengths (UPC/EAN) will enforce length requirements for validation of the label.
- Handheld will be required to transmit start and stop characters for Codabar and Code39 labels.
- Appropriate industrial length requirements will be enforced (if configured) for validation of the label.
- Maximum label lengths will be enforced for label validation (i.e. labels longer than the maximum label size will not be validated).
- Standard Datalogic formats generally use a single prefix character. see specific formats section.
- Maximum label size allowed including identifiers is 2714 bytes
- Recommendations:
  - Handheld should not be configured for audible label read indication.
  - Handheld should not be configured for visual label read indication.
  - Handheld should not be configured for continuous label read mode.

Datalogic Handheld Data Format Requirements

The following sections describe label transmission formats that are typically observed in factory configurations of Datalogic handheld scanners.

UPC-A

- Number system must be included in label data
- Check digit must be included in label data and is assumed to be correct
- Prefix must be an ASCII character ‘A’ - total length including prefix must be 13
- Example: ‘A060992011187’

UPC-A with 2-Digit Supplemental

- Number system must be included in label data
- Check digit must be included in label data and is assumed to be correct
- Supplemental data is appended to base label
- Prefix must be an ASCII character ‘A’ - total length including prefix must be 15
- Example: ‘A06099201118712’

UPC-A with 5-Digit Supplemental

- Number system must be included in label data
- Check digit must be included in label data and is assumed to be correct
- Prefix must be an ASCII character ‘A’ - total length including prefix must be 18
- Example: ‘A060992011187123 45’

UPC-A with Code128 Supplemental

- Number system must be included in label data
- Check digit must be included in label data and is assumed to be correct
- Supplemental data is appended to base label
- Prefix must be an ASCII character ‘A’ - total length including prefix must be greater or equal to 19 (code 128 supplemental codes are variable length having a minimum of 2 data characters)
- Characters immediately following base label must be of the form ‘8100’, ‘8101’ or ‘8102’
- Example: ‘A0609920111878100000951’

UPC-E

- Number system must be included in label data
- Check digit must be included in label data and is assumed to be correct
- Prefix must be an ASCII character ‘E’ - total length including prefix must be 9
- Example: ‘E09988750’

UPC-E with 2-Digit Supplemental

- Number system must be included in label data
- Check digit must be included in label data and is assumed to be correct
- Supplemental data is appended to base label
- Prefix must be an ASCII character ‘E’ - total length including prefix must be 11
- Example: ‘E0998875012’

UPC-E with 5-Digit Supplemental

- Number system must be included in label data
- Check digit must be included in label data and is assumed to be correct
- Prefix must be an ASCII character ‘E’ - total length including prefix must be 14
- Example: ‘E0998875012345’

UPC-E with Code128 Supplemental

- Number system must be included in label data
- Check digit must be included in label data and is assumed to be correct
- Supplemental data is appended to base label
- Prefix must be an ASCII character ‘E’ - total length including prefix must be greater or equal to 15 (code 128 supplemental codes are variable length having a minimum of 2 data characters)
- Characters immediately following base label must be of the form ‘8100’, ‘8101’ or ‘8102’
- Example: ‘E099887508101000951’

EAN8

- Check digit must be included in label data and is assumed to be correct
- Prefix must be an ASCII characters ‘FF’ - total length including prefix must be 10
- Example: ‘FF00210126’

EAN8 with 2-Digit Supplemental

- Check digit must be included in label data and is assumed to be correct
- Supplemental data is appended to base label
- Prefix must be an ASCII characters ‘FF’ - total length including prefix must be 12
- Example: ‘FF0021012612’

EAN8 with 5-Digit Supplemental

- Check digit must be included in label data and is assumed to be correct
- Prefix must be an ASCII characters ‘FF’ - total length including prefix must be 15
- Example: ‘FF0021012612345’

EAN8 with Code128 Supplemental

- Check digit must be included in label data and is assumed to be correct
- Supplemental data is appended to base label
- Prefix must be an ASCII characters ‘FF’ - total length including prefix must be greater than 16 (code 128 supplemental codes are variable length having a minimum of 2 data characters)
- Characters immediately following base label must be of the form ‘8100’, ‘8101’ or ‘8102’
- Example: ‘FF002101268102000951’

EAN13

- Check digit must be included in label data and is assumed to be correct
- Prefix must be an ASCII character ‘F’- total length including prefix must be 14
- Example: ‘F1101234567891’

EAN13 with 2-Digit Supplemental

- Check digit must be included in label data and is assumed to be correct
- Supplemental data is appended to base label
- Prefix must be an ASCII character ‘F’- total length including prefix must be 16
- Example: ‘F110123456789112’

EAN13 with 5-Digit Supplemental

- Check digit must be included in label data and is assumed to be correct
- Prefix must be an ASCII character ‘F’- total length including prefix must be 19
- Example: ‘F110123456789112345’

EAN13 with Code128 Supplemental

- Check digit must be included in label data and is assumed to be correct
- Supplemental data is appended to base label
- Prefix must be an ASCII character ‘F’- total length including prefix must be greater or equal to 20 (code 128 supplemental codes are variable length having a minimum of 2 data characters)
- Characters immediately following base label must be of the form ‘8100’, ‘8101’ or ‘8102’
- Example: ‘F11012345678918100000951’

Code 39

- Check character must be included in label data
- Label length including start, stop and check characters and excluding prefix character must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- Start and stop characters “*” must be included in label
- Prefix must be an ASCII character ‘*’
- Example: ‘**CODE39.TEST*’

Code 39-Pharmacode (Code 32)

- Check character must be included in label data
- Label length including start, stop and check characters and excluding prefix character must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- Start and stop characters “*” must be included in label
- Prefix must be an ASCII character ‘p’
- Example: ‘p*123456789*’

Interleaved 2 of 5 (I 2 of 5)

- Check character must be included in label data
- Label length including check characters and excluding prefix character must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- Prefix must be an ASCII character ‘i’
- Example: ‘*i0123456789’

Codabar

- Check character must be included in label data
- Label length including check character and excluding prefix character must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Prefix must be an ASCII character '%'
- Start stop character sets must meet the matching requirement set forth by the scanner configuration item CI_CBAR_START_STOP_CHAR_MATCH
- Start stop character sets s must be of the form ABCD/ABCD and must be included in the label
- Example: '%s$99.95s'

Code 128

- Prefix must be an ASCII character '#'
- Label length excluding prefix character must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Function characters may be transmitted as a hexadecimal value 8x. Where x correlates to function characters 1 thru 4 as follows:
  - x80 = function code 1
  - x81 = function code 2
  - x82 = function code 3
  - x83 = function code 4
- For Code128 programming labels the format is of the general form '#/82nnnnn/r ' - /82 is hexadecimal 82 and /r is carriage return
- Example: '#Code_128.Test'

MSI Plessey

- Check character must be included in label data
- Label length including check character and excluding prefix character must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Prefix must be an ASCII character '@'
- Example: '@144769254'

Code 93

- Prefix must be an ASCII character '&'
- Label length excluding prefix character must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Example: '&Code93-test'

GS1 DataBar Omnidirectional

- Prefix must be ASCII characters 'R4'
- Check character must be included in label
- Application identifier "01" must follow the prefix and precede the base label
- Label length excluding prefix characters must be 16 characters.
- Example: 'R40101044123456789'

GS1 DataBar Expanded

- Prefix must be ASCII characters ‘R4’
- Label length excluding prefix characters must be at least 1 character. Maximum length is the maximum label size supported by the scanner.
- The format of the label must not be of the same format as RSS-14 (application id ‘01’ & length equal to 16)
- Example: ‘R4002900123456789083103001750’

Standard 2 of 5 (S 2 of 5)

- Prefix must be ASCII character ‘s’
- Label length excluding prefix character must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- Example ‘s1234567890’

PDF 417

- Prefix must be ASCII character ‘P’
- Label length excluding prefix character cannot exceed 2714 characters +3, or 2717 characters. In addition to this, label length excluding prefix character must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- Example: ‘Ppdf test label’

AIM Formats

AIM specifies a 3-character string that is attached as a prefix to the label data for transmission. Because AIM specifies one identifier for UPCA, UPCE and EAN13 labels, UPCA, UPCE and EAN13 will be received from the handheld and transmitted by the scanner as EAN13. The ‘]’ character must be the first character received in the label transmission from the handheld.

The following sections describe the prefix strings and identify what specific label characteristics can be supported.

UPC-A

- AIM does not specify UPCA as a separate symbology using this transmission format - labels will be transmitted as EAN13 (refer to section 8.5.4.3).
- Examples: ‘]E00060992011187’ or ‘]E30060992011187’

UPC-E

- AIM does not specify UPCE as a separate symbology using this transmission format - labels will be transmitted as EAN13 (refer to section 8.5.4.3).
- Examples: ‘]E00000000998875’ or ‘]E30000000998875’

EAN13

- Check digit must be included in label data and is assumed to be correct.
- Prefix must be ASCII characters ‘]E0’ or ']E3'.
- Total length including prefix must be 16.
- Examples: ‘]E01101234567891’ or ‘]E31101234567891’.

EAN8

- Check digit must be included in label data and is assumed to be correct.
- Prefix must be ASCII characters ‘]E4’.
- Total length including prefix must be 11.
- Example: ‘]E400210126’

2-Digit Add-on

- Add-on data is appended to the end of an EAN base label.
- If the main label has an AIM Id prefix with the ASCII characters ']E0', the add-on data must have an AIM Id prefix with the ASCII characters ‘]E1’.
- If the add-on data has an AIM Id prefix, the length of add-on data including AIM Id prefix must be 5.
- If the main label has an AIM Id prefix with the ASCII characters ']E3', the add-on data does not have an AIM Id prefix.
- If the add-on data does not have an AIM Id prefix, the length of add-on data must be 2.
- Examples: add-on portion is highlighted data is underlined

UPC-A 2-digit add-on	‘]E00060992011187**]E112**’
UPC-E 2-digit add-on	‘]E00000000998875**]E112**’
EAN8 2-digit add-on	‘]E400210126**]E112**’
EAN13 2-digit add-on	‘]E01101234567891**]E112**’
UPC-A 2-digit add-on	']E3006099201118712’
UPC-E 2-digit add-on	‘]E3000000099887512’
EAN13 2-digit add-on	‘]E3110123456789112’

5-Digit Add-on

- Add-on data is appended to the end of an EAN base label.
- If the main label has an AIM Id prefix with the ASCII characters ']E0', the add-on data must have an AIM Id prefix with the ASCII characters ‘]E2’.
- If the add-on data has an AIM Id prefix, the length of add-on data including AIM Id prefix must be 8.
- If the main label has an AIM Id prefix with the ASCII characters ']E3', the add-on data does not have an AIM Id prefix.
- If the add-on data does not have an AIM Id prefix, the length of add-on data must be 5.
- Examples: add-on portion is highlighted data is underlined

UPC-A 5-digit add-on	‘]E00060992011187**]E212345**’
UPC-E 5-digit add-on	‘]E00000000998875**]E212345**’
EAN8 5-digit add-on	‘]E400210126**]E212345**’
EAN13 5-digit add-on	‘]E01101234567891**]E212345**’
UPC-A 5-digit add-on	‘]E3006099201118712345’
UPC-E 5-digit add-on	']E3000000099887512345’
EAN13 5-digit add-on	‘]E3110123456789112345’

Code128 Add-on

Code 128 add-on is not supported in the AIM format.

Bookland

- The 'Bookland' / ISBN code will be formatted as a vendor specific AIM label.
- Prefix must be ASCII characters ']X0'
- Length of label data including prefix is 13.
- Examples: ']X01234567890'

Code 39

- Check character must be included in label data
- Label length including start, stop and check characters and excluding prefix characters must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Start and stop characters "*" must be included in label
- Prefix must be ASCII characters ']A0' or ']A1'
- Example: ']A0*CODE39.TEST*'

Codabar

- Check character must be included in label data
- Label length including check character and excluding prefix characters must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Prefix must be ASCII characters ']F0'
- Start stop character sets must meet the matching requirement set forth by the scanner configuration item CI_CBAR_START_STOP_CHAR_MATCH
- Start stop character sets s must be of the form ABCD/ABCD and must be included in the label
- Example: ']F0s$99.95s'

MSI Plessey

- Check character must be included in label data
- Label length including check character and excluding prefix characters must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Prefix must be ASCII characters ']M0'
- Example: ']M0144769254'

Code 93

- Prefix must be ASCII characters ']G0'
- Label length excluding prefix characters must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Example: ']G0Code93-test'

GS1 DataBar Omnidirectional

- Prefix must be ASCII characters ']e0'
- Check character must be included in label
- Application identifier "01" must follow the prefix and precede the base label
- Label length excluding prefix characters must be 16 characters.
- Example: ']e00101044123456789'

GS1 DataBar Expanded

- Prefix must be ASCII characters ‘]e0’
- Label length excluding prefix characters must be at least 1 character. Maximum length is the maximum label size supported by the scanner.
- The format of the label must not be of the same format as RSS-14 (application id & length equal to 16)
- Example: ‘]e0029001234567890831030017 50’

Interleaved 2 of 5 (I 2 of 5)

- Check character must be included in label data
- Label length including check characters and excluding prefix characters must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- Prefix must be an ASCII character ‘]I1’ (other prefixes specify different check character properties which are not supported).
- Example: ‘]I10123456789’

Code 128 / EAN 128

- Prefix must be either ASCII characters ‘]C0’, ‘]C1’ or ‘]C2’
- Label length excluding prefix character must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- If CI_EAN128_ENABLED is TRUE and prefix is ‘]C1’, label will be identified as an EAN128 otherwise it is identified as a Code 128.
- A prefix of ‘]C0’ designates that no function code is present in the 1st or 2nd character position
- A prefix of ‘]C2’ designates that a function code 1 is present in the 2nd character.
- Example: ‘]C0Code_128.Test’

Standard 2 of 5 (S 2 of 5)

- Prefix must be ASCII characters ‘]S0’
- Label length excluding prefix characters must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- Example: ‘]S01234567890’

PDF 417

- Prefix must be ASCII characters ‘]L0’ thru ']L5' ('0' thru '5' inclusive)
- Label length excluding prefix character must meet requirements imposed by the main scanner’s fixed or variable label length control for this symbology type.
- Example: ‘]L0pdf_test_label’

Data Matrix

- Prefix must be ASCII characters `]d0' thru ']d6' ('0' thru '6' inclusive)
- Label length excluding prefix character must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Example: `]d0dm_label_test'

Aztec

- Prefix must be ASCII characters `]z0' thru ']zC' ('0' thru 'C' inclusive 0-9,A-C)
- Label length excluding prefix character must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- Example: `]z0aztec_label_test'

QR Code

- Prefix must be ASCII characters `]Q0' thru ']Q6' ('0' thru '6' inclusive)
- Label length excluding prefix character must meet requirements imposed by the main scanner's fixed or variable label length control for this symbology type.
- AIM does not distinguish QR from micor QR so devices may read microQR but transmit and be interpreted as QR.
- Example: `]Q0QR_label_test'

Labels with an "unknown" AIM Id (an AIM Id not specified above)

- If a label is received that does not have an AIM Id specified above, and the first 3 label characters qualify as follows:
  - the first characters is a ']'
  - the second character is a capital or small letter
  - the third character is a digit
  - then the label type is set to GENERIC_DATA and the "unknown"AIM Id is left appended to the beginning of the label data.

APPENDIX I
COLOR VIDEO CAMERA - UVC STREAMING

SET UP UVC STREAMING

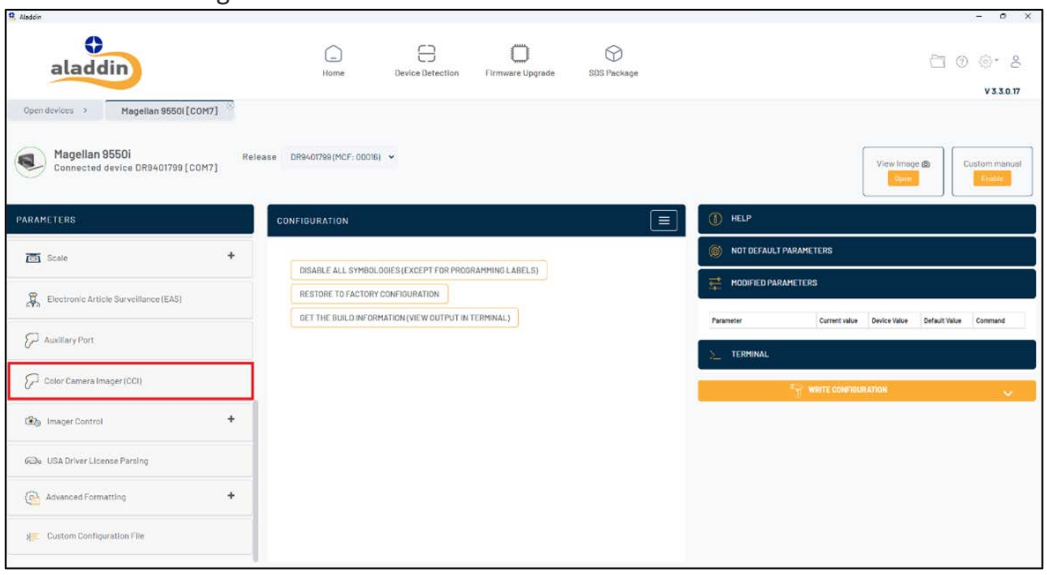
The UVC Streaming requires the presence of the Color Video Camera imager (CCI). The CCI is available in the following models:

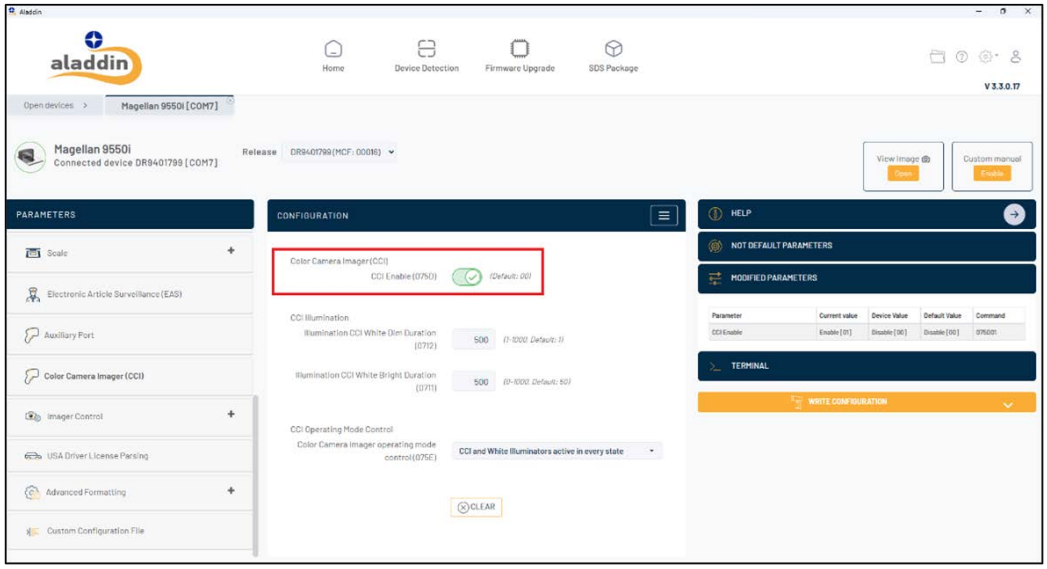
- Magellan 3670VSi

To use the Color Video Camera and enable UVC Streaming, the Color Video Port must be connected to a downstream USB host port, by means a standard USB Type-B female port (e.g., Datalogic P/N 007100195):

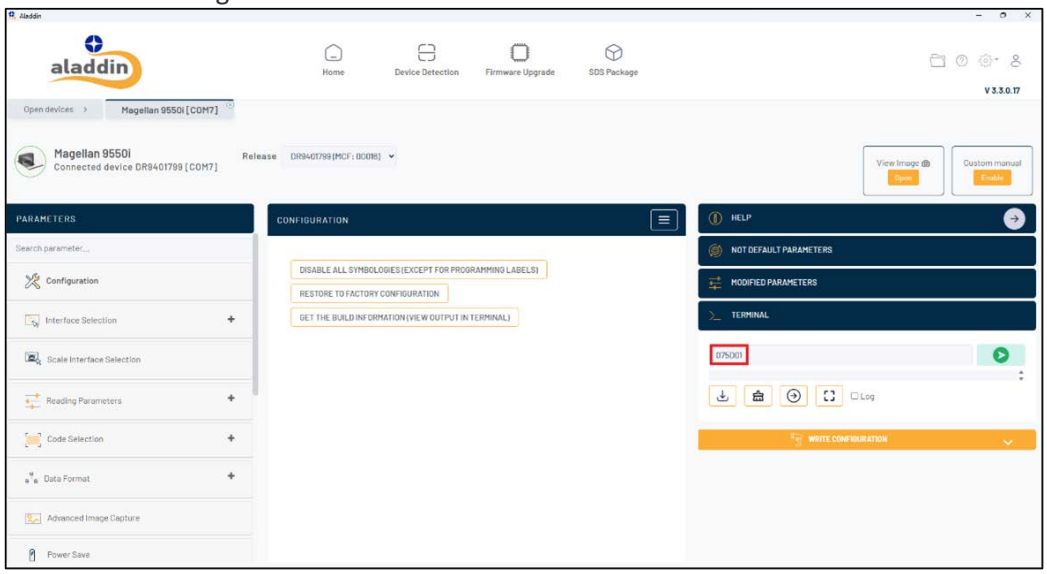


Once the Magellan 3600i has been connected to the host, if you would like UVC streaming to automatically start on power-up, set it to UVC streaming mode in the Aladdin™ tool. You can set UVC Streaming through the drop-down menus that correspond to the Color Camera Imager.



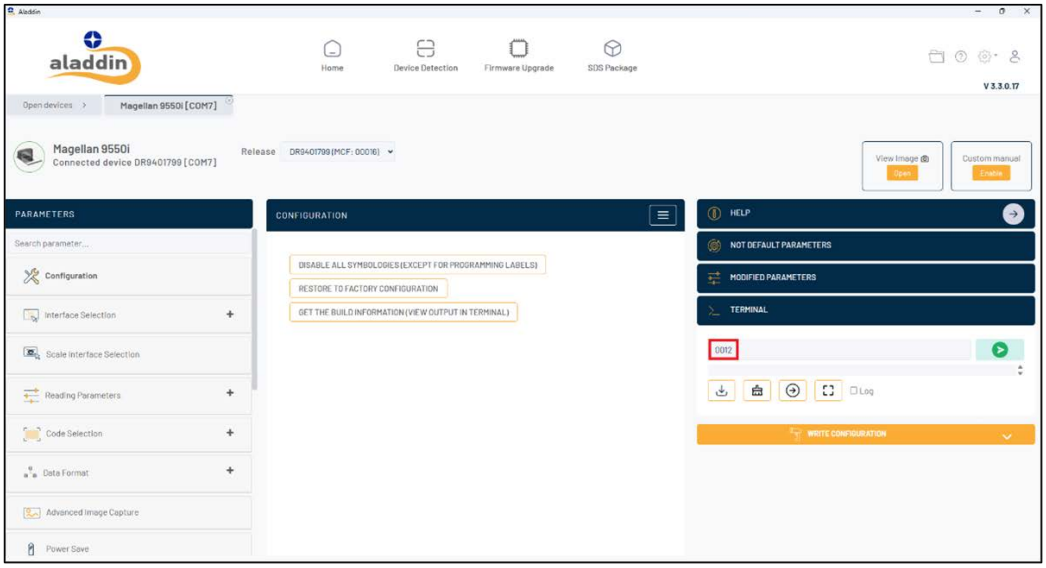


Alternatively, you can set it to UVC streaming with terminal command.
Enter the following command: 075D01



And then after the correct CCI command enter these two as well:

1. 0012 to save the configuration
2. 001a to restart the scanner



Once the scanner reboots, UVC streaming should be enabled.

For your convenience, here below the barcodes' sequence to be read by the scanner to enable your CCI.

1. Enter Configuration

2. CCI Enable

3. Exit Configuration

HOW TO USE UVC STREAMING

Once your CCI is set up for UVC streaming, plug the CCI's USB cable into your computer or POS system. Now you should be able to use any software you would typically use for a webcam.

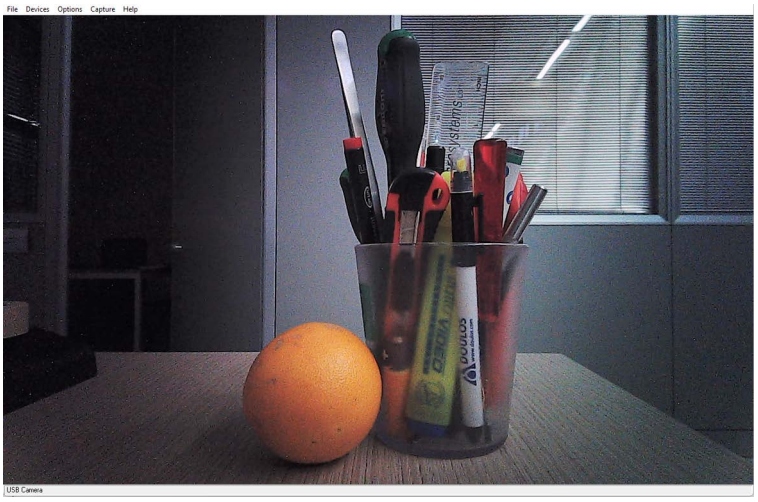
In the example below, after connecting the USB cable to a Windows PC, the Device Manager shows the CCI as a UVC Camera named "DL Magellan 3600i/3700i CCI":



Any webcam viewing software (e.g., Amcap, ManyCam, OBS Studio) should be able to access the UVC stream at this point. Once you have installed your preferred one, open it and select "DL Magellan 3600i/3700i CCI" as source of the video stream in the video source list.

The examples below show a couple of screenshots from a standard camera application on a Windows PC:





These are the main key points of the Magellan 3600i's internal Color Camera Imager:

•Resolution	1280 x 800 pixels (total 1 Megapixels)
•Format	1/4-inch
•Shutter	Electronic global shutter
•Frame Rate	40 frames per second
•Video Compression	MJPEG, H.264
•Illuminator	White LEDs
•USB Speed	High Speed

APPENDIX J
ASCII CHARACTER SET

ASCII Char.	Hex No.	ASCII Char.	Hex No.	ASCII Char.	Hex No.	ASCII Char.	Hex No.
NUL	00	SP	20	@	40	‘	60
SOH	01	!	21	A	41	a	61
STX	02	“	22	B	42	b	62
ETX	03	#	23	C	43	c	63
EOT	04	$	24	D	44	d	64
ENQ	05	%	25	E	45	e	65
ACK	06	&	26	F	46	f	66
BEL	07	’	27	G	47	g	67
BS	08	(	28	H	48	h	68
HT	09	)	29	I	49	i	69
LF	0A	*	2A	J	4A	j	6A
VT	0B	+	2B	K	4B	k	6B
FF	0C	,	2C	L	4C	l	6C
CR	0D	-	2D	M	4D	m	6D
SO	0E	.	2E	N	4E	n	6E
SI	0F	/	2F	O	4F	o	6F
DLE	10	0	30	P	50	p	70
DC1	11	1	31	Q	51	q	71
DC2	12	2	32	R	52	r	72
DC3	13	3	33	S	53	s	73
DC4	14	4	34	T	54	t	74
NAK	15	5	35	U	55	u	75
SYN	16	6	36	V	56	v	76
ETB	17	7	37	W	57	w	77
CAN	18	8	38	X	58	x	78
EM	19	9	39	Y	59	y	79
SUB	1A	:	3A	Z	5A	z	7A
ESC	1B	;	3B	[	5B	{	7B
FS	1C	<	3C	\	5C	|	7C
GS	1D	=	3D	]	5D	}	7D
RS	1E	>	3E	^	5E	~	7E
US	1F	?	3F	_	5F	DEL	7F

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DATALOGIC

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