



# Advanced Data Formatting (ADF)

72E-69680-07

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**PROGRAMMER GUIDE**





# **ADVANCED DATA FORMATTING PROGRAMMER GUIDE**

72E-69680-07

Revision A

June 2019

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## Warranty

For the complete Zebra hardware product warranty statement, go to:

<http://www.zebra.com/warranty>.

## Revision History

Changes to the original manual are listed below:

Change	Date	Description
-01 Rev. A	10/2004	Initial release.
-01 Rev. B	5/2006	Correct rule setup instruction.
-02 Rev. A	4/2009	Motorola rebranding, add beeper indications, add new imager-supported symbology bar codes, add specific string search and new move cursor options bar codes.
-03 Rev. A	4/2011	Add Korean 3 of 5, RFID, and Parsed Driver's License code type criteria bar codes.
-04 Rev. A	4/2015	Add Han Xin, OCR, GS1 DataMatrix and GS1 QR type bar codes; add Bar Code Encoding Scheme (Code Page) action bar codes; Zebra rebranding.
-05 Rev. A	12/2015	Add Multicode parameter; add Code Length Compare criteria; add String Criteria; add Send Custom Key action.
-06 Rev. A	7/2016	Remove Send Custom Key action; remove Sending GUI Characters; remove Send Alt-F; remove Send CTRL-W.
-07 Rev. A	6/2019	- Added Parsed UID code type criteria bar codes. - Updated copyright statement.



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# ABOUT THIS GUIDE

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## Introduction

The *Advanced Data Formatting Guide* provides bar codes that allow advanced programming of a Zebra scanner, and instructions for using them.

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## Chapter Descriptions

- [Chapter 1, Chapter Title](#) (ADF) describes how to customize scanned data before transmitting to the host.
- [Chapter 2, ADF Bar Codes](#) contains the bar codes for advanced data formatting.

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## Notational Conventions

The following conventions are used in this document:

- Bullets (•) indicate:
  - action items
  - lists of alternatives
  - lists of required steps that are not necessarily sequential.
- Sequential lists (e.g., those that describe step-by-step procedures) appear as numbered lists.



**NOTE** This symbol indicates something of special interest or importance to the reader. Failure to read the note will not result in physical harm to the reader, equipment or data.



**CAUTION** This symbol indicates that if this information is ignored, the possibility of data or material damage may occur.

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## Related Documents

The *Quick Reference Guide* and *Product Reference Guide* for Zebra scanners provide general information to help get started and use the scanner. They include basic set up, connection, and operation instructions.

For the latest version of this guide and all Zebra guides, go to: <http://www.zebra.com/support>.

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## Service Information

If you have a problem using the equipment, contact your facility's technical or systems support. If there is a problem with the equipment, they will contact the Zebra Technologies Global Customer Support Center at: <http://www.zebra.com/support>.

When contacting Zebra Technologies support, please have the following information available:

- Serial number of the unit
- Model number or product name
- Software type and version number.

Zebra responds to calls by e-mail, telephone or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Technologies support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your business product from a Zebra Technologies business partner, contact that business partner for support.

# CHAPTER 1 CHAPTER TITLE

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## Introduction

Advanced Data Formatting (ADF) is a means of customizing data before transmission to the host device. Use ADF to edit scan data to suit requirements.

Implement ADF by scanning a related series of bar codes in [Chapter 2, ADF Bar Codes](#), or by installing the 123Scan utility (see the scanner's *Product Reference Guide*) which allows programming the device with ADF rules.

Avoid using ADF formatting with bar codes containing more than 60 characters. To add a prefix or suffix value for such bar codes, use the **Add Prefix/Suffix** setting from the scanner's *Product Reference Guide*. Using ADF with longer bar codes transmits the bar code in segments of length 252 or less (depending on the host selected), and applies the rule to each segment.

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## Rules: Criteria Linked to Actions

ADF uses **rules** to customize data. These rules perform detailed actions when the data meets certain criteria. One rule may consist of single or multiple criteria applied to single or multiple actions.

For instance, a data formatting rule could be:

**Criteria:** *When scan data is Code 39, length 12, and data at the start position is the string "129",*  
**Actions:** *pad all sends with zeros to length 8,  
send all data up to X,  
send a space.*

Scanning a Code 39 bar code of 1299X1559828 transmits the following: 00001299<space>. If you scan a Code 39 bar code of 1299X15598, this rule is ignored because the bar code didn't meet the length criteria.

The rule specifies the editing conditions and requirements before data transmission occurs.

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### Using ADF Bar Codes

When programming a rule, make sure the rule is logically correct. Plan ahead before scanning.

To program each data formatting rule:

- **Start the Rule.** Scan the [Begin New Rule bar code on page 2-3](#).
- **Specify Criteria.** Scan the bar codes for all pertinent criteria. Criteria can include code type (e.g., Code 128), code length, or data that contains a specific character string (e.g., the digits “129”). See [Criteria on page 2-10](#).
- **Select Actions.** Scan all actions related to, or affecting, these criteria. The actions of a rule specify how to format the data for transmission. See [Actions on page 2-68](#).
- **Save the Rule.** Scan the [Save Rule bar code on page 2-4](#). This places the rule in the “top” position in the rule buffer.
- Use special-purpose bar codes to correct errors during this process. Erase criteria, actions, and entire rules by scanning the appropriate bar code starting on [page 2-4](#).

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### ADF Bar Code Menu Example

This section provides an example of how to enter ADF rules for scan data.

An auto parts distribution center wants to encode manufacturer ID, part number, and destination code into their own Code 128 bar codes. The distribution center also has products that carry UPC bar codes, placed there by the manufacturer. The Code 128 bar codes have the following format:

MMMMMPPPPD

Where:     M = Manufacturer ID  
           P = Part Number  
           D = Destination Code

The distribution center uses a PC with dedicated control characters for manufacturer ID <CTRL M>, part number <CTRL P>, and destination code <CTRL D>. At this center the UPC data is treated as manufacturer ID code.

The following rules must be entered:

When scanning data of code type Code 128, send the next 5 characters, send the manufacturer ID key <CTRL M>, send the next 5 characters, send the part number key <CTRL P>, send the next 2 characters, send the destination code key <CTRL D>.

When scanning data of code type UPC/EAN, send all data, send the manufacturer ID key <CTRL M>.

To enter these rules, use the following steps:

## Rule 1: The Code 128 Scanning Rule

Step	Bar Code	On Page	Beep Indication
1	Begin New Rule	<a href="#">2-3</a>	High High
2	Code 128	<a href="#">2-12</a>	High High
3	Send next 5 characters	<a href="#">2-71</a>	High High
4	Send <CTRL M>	<a href="#">2-139</a>	High High
5	Send next 5 characters	<a href="#">2-71</a>	High High
6	Send <CTRL P>	<a href="#">2-141</a>	High High
7	Send next 2 characters	<a href="#">2-69</a>	High High
8	Send <CTRL D>	<a href="#">2-135</a>	High High
9	Save Rule	<a href="#">2-4</a>	High Low High Low

## Rule 2: The UPC Scanning Rule

Step	Bar Code	On Page	Beep Indication
1	Begin New Rule	<a href="#">2-3</a>	High High
2	UPC/EAN	<a href="#">2-15</a>	High High
3	Send all remaining data	<a href="#">2-68</a>	High High
4	Send <CTRL M>	<a href="#">2-139</a>	High High
5	Save Rule	<a href="#">2-4</a>	High Low High Low

To correct any errors made while entering this rule, scan the [Quit Entering Rules bar code on page 2-6](#). If you already saved the rule, scan the [Erase Previously Saved Rule bar code on page 2-5](#).

## Alternate Rule Sets

Group ADF rules into one of four alternate sets which you can turn on and off when needed. This is useful to format the same message in different ways. For example, a Code 128 bar code contains the following information:

Class (2 digits), Stock Number (8) digits, Price (5 digits)

The bar code might look like this:

245671243701500

where:

Class = 24

Stock Number = 56712437

Price = 01500

Ordinarily, data transmits as follows:

24 (class key)

56712437 (stock key)

01500 (enter key)

But, when there is a sale, send only the following:

24 (class key)

56712437 (stock key)

and the cashier keys the price manually.

To implement this, first enter an ADF rule that applies to the normal situation, such as:

Scan Rule Belongs to Set 1. When scanning a bar code of length 15, send the next 2 characters, send the class key, send the next 8 characters, send the stock key, send the data that remains, send the Enter key.

The “sale” rule may look like this:

Scan Rule Belongs to Set 2. When scanning a bar code of length 15, send the next 2 characters, send the class key, send the next 8 characters, send the stock key.

To switch between the two sets of rules, program a “switching rule” that specifies the type of bar code to be scanned to switch between the rule sets. For example, in the case of the “sale” rule above, the rule programmer wants the cashier to scan the bar code “M” before a sale. To do this, enter the following rule:

When scanning a bar code of length 1 that begins with “M”, select rule set number 1.

Program another rule to switch back.

When scanning a bar code of length 1 that begins with “N”, turn off rule set number 1.

Or include the switching back rules in the “sale” rule:

When scanning a bar code of length 15, send the next 2 characters, send the class key, send the next 8 characters, send the stock key, turn off rule set 1.

For optimal results, scan the [Disable All Rule Sets bar code on page 2-9](#) after programming a rule belonging to an alternate rule set.

In addition to enabling and disabling rule sets within the rules, enable or disable them by scanning the appropriate bar codes on [page 2-7](#).

### Rules Hierarchy (in Bar Codes)

The order of programming individual rules is important. Program the most general rule first.

All programmed rules are stored in a buffer. As they are programmed, they are stored at the “top” of a rules list. If you create three rules, the list is configured as follows:

Third Rule  
Second Rule  
First Rule

When you scan data, the rules list is checked from top to bottom to determine if the criteria matches (and therefore, if the actions occur). Input is modified into the data format specified by the first matching set of criteria it finds. Be sure to program the most general rule first.

For example, if the THIRD rule states:

When scanning a bar code of any length, send all data, then send the ENTER key.

and the SECOND rule states:

When scanning a Code 128 bar code of length 12, send the first four characters, then send the ENTER key, then send all remaining data.

and you scan a Code 128 bar code of length 12, the THIRD rule applies and the SECOND rule appears to not function.

Note that using the standard data editing functions also creates ADF rules. Scan options are entered as ADF rules, and the previous hierarchy also applies to them. For the device, this applies to prefix/suffix programming in the **Scan Data Transmission Format** parameter in the scanner *Product Reference Guide*.

These rules reside in the same “rule list” as ADF rules, so the order of their creation is also important.

## Default Rules

Every unit has a default rule to send all scan data. Units with custom software can have one or more default rules burned in. The rules hierarchy checks user programmable rules first, then the default rules. Disable default rules by entering the following general rule in the user programmable buffer:

When receiving scan data, send all data.

Since this rule always applies, ADF never enters the default rules.

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## Beeper Indications

The decoding device emits the beeps indicated in [Table 1-1](#) during ADF programming. Indications may vary depending on the device.

**Table 1-1** *ADF Programming Beeper Indications*

Beeper Sequence	Indication
High/low beeps	Enter another digit. Add leading zeros to the front if necessary.
Low/low beeps	Enter another alphabetic character or scan the End of Message bar code.
High/high beeps	Enter another criterion or action, or scan the Save Rule bar code.
High/low/high/low beeps	Rule saved. Rule entry mode exited.
High/low/low beeps	All criteria or actions cleared for current rule, continue entering rule.
Low beep	Delete last saved rule. The current rule is left intact.
Low/high/high beeps	All rules are deleted.
Low/high/low/high beeps	Out of rule memory. Erase some existing rules, then try to save rule again.
Low/high/low beeps	Cancel rule entry. Rule entry mode exited because of an error or the user asked to exit rule entry.
Low/high beeps	Entry error, wrong bar code scanned, or criteria/action list is too long for a rule. Re-enter criterion or action.





# CHAPTER 2 ADF BAR CODES

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## ADF Bar Code Reference Table

*Table 2-1* lists the bar codes available through ADF.

**Table 2-1** *ADF Bar Codes*

Parameter	Page Number
<i>Special Commands</i>	2-3
<i>Pause Duration</i>	2-3
<i>Begin New Rule</i>	2-3
<i>Save Rule</i>	2-4
<i>Erase</i>	2-4
<i>Quit Entering Rules</i>	2-6
<i>Disable Rule Set</i>	2-7
<i>Criteria</i>	2-10
<i>Code Types</i>	2-10
<i>Code Lengths</i>	2-39
<i>Code Length Compare</i>	2-54
<i>Specific String at Start</i>	2-57
<i>Specific String, Any Location</i>	2-58
<i>Specific String Search (not supported by all devices)</i>	2-58
<i>Specific Criteria</i>	2-58
<i>Any Message OK</i>	2-59
<i>Numeric Keypad</i>	2-60
<i>Rule Belongs To Set</i>	2-66

**Table 2-1** ADF Bar Codes (Continued)

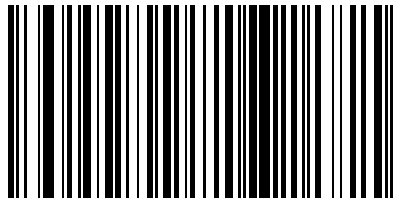
<b>Parameter</b>	<b>Page Number</b>
<i>Actions</i>	2-68
<i>Send Data</i>	2-68
<i>Send Data Up To Character</i>	2-68
<i>Send All Data That Remains</i>	2-68
<i>Send Next Character</i>	2-69
<i>Setup Field(s)</i>	2-79
<i>Move Cursor</i>	2-80
<i>Send Pause</i>	2-84
<i>Skip Ahead</i>	2-85
<i>Skip Back</i>	2-90
<i>Send Preset Value</i>	2-95
<i>Modify Data</i>	2-96
<i>Remove All Spaces</i>	2-96
<i>Crunch All Spaces</i>	2-96
<i>Stop Space Removal</i>	2-97
<i>Remove Leading Zeros</i>	2-97
<i>Stop Zero Removal</i>	2-98
<i>Pad Data with Spaces</i>	2-99
<i>Pad Data with Zeros</i>	2-115
<i>Beeps</i>	2-131
<i>Send Keystroke (Control Characters and Keyboard Characters)</i>	2-133
<i>Keyboard Characters</i>	2-149
<i>Send ALT Characters</i>	2-197
<i>Send Keypad Characters</i>	2-213
<i>Send Function Key</i>	2-231
<i>Send Right Control Key</i>	2-258
<i>Turn On/Off Rule Sets</i>	2-284
<i>Bar Code Encoding Scheme Specification (Code Pages)</i>	2-259
<i>Alphanumeric Keyboard</i>	2-288
<i>End of Message</i>	2-321

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## Special Commands

### Pause Duration

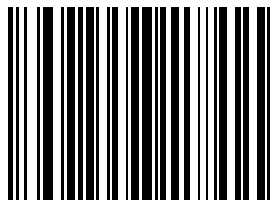
This parameter, along with [Send Pause on page 2-84](#), inserts a pause in the data transmission. Set the pause by scanning a two-digit number (i.e., two bar codes) representing a 0.1 second interval in the range of 0.1 to 9.9. For example, scan bar codes **0** and **1** to insert a 0.1 second pause; **0** and **5** to insert a 0.5 second delay. The default is 1 second. See [Numeric Keypad on page 2-60](#). To correct an error or change a selection, scan [Cancel on page 2-65](#).



Pause Duration

### Begin New Rule

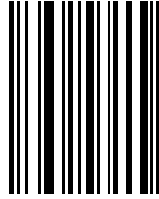
Scan the bar code below to start entering a new rule.



Begin New Rule

## Save Rule

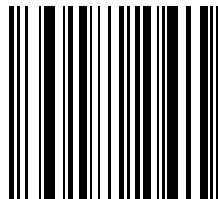
Scan the bar code below to save the rule.



**Save Rule**

## Erase

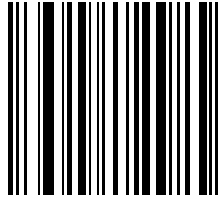
Use these bar codes to erase criteria, actions, or rules.



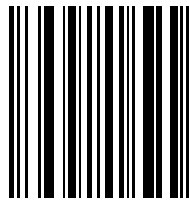
**Erase Criteria And Start Again**

## Erase (continued)

Use these bar codes to erase criteria, actions, or rules.



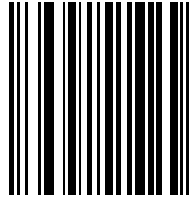
**Erase Actions And Start Again**



**Erase Previously Saved Rule**

## Erase (continued)

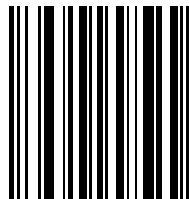
Use these bar codes to erase criteria, actions, or rules.



**Erase All Rules**

## Quit Entering Rules

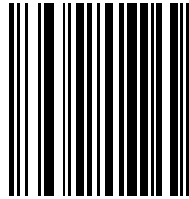
Scan the bar code below to quit entering rules.



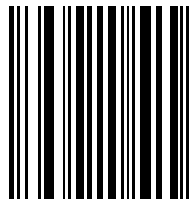
**Quit Entering Rules**

## Disable Rule Set

Use these bar codes to disable rule sets.



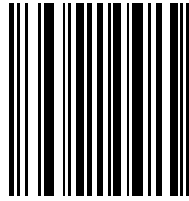
**Disable Rule Set 1**



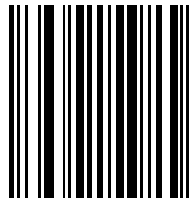
**Disable Rule Set 2**

### Disable Rule Set (continued)

Use these bar codes to disable rule sets.



**Disable Rule Set 3**

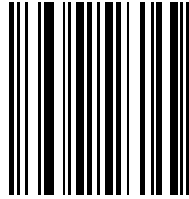


**Disable Rule Set 4**



## Disable Rule Set (continued)

Use these bar codes to disable rule sets.



**Disable All Rule Sets**

---

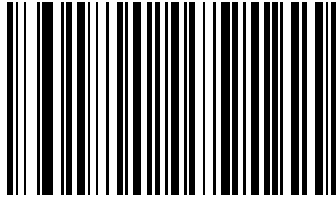
## Criteria

### Code Types

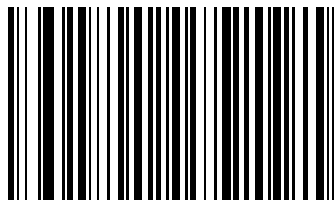
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



Code 39



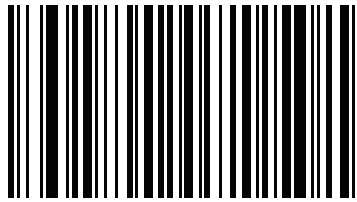
Codabar

## Code Types (continued)

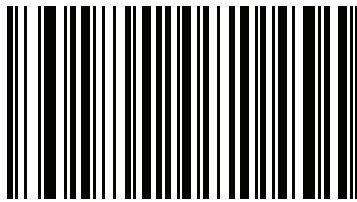
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**GS1 DataBar-14**



**GS1 DataBar Limited**

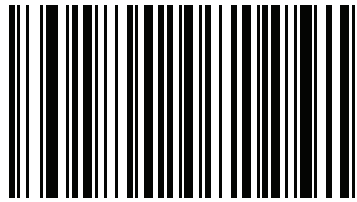
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

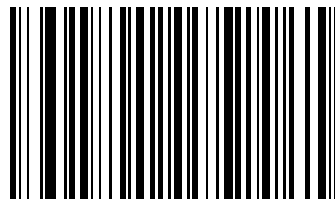


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**GS1 DataBar Expanded**



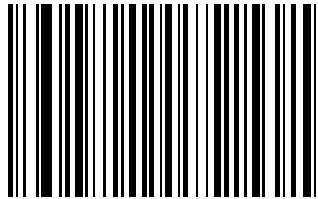
**Code 128**

## Code Types (continued)

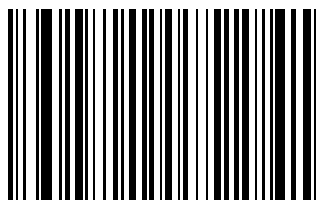
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Discrete 2 OF 5**



**IATA 2 of 5**

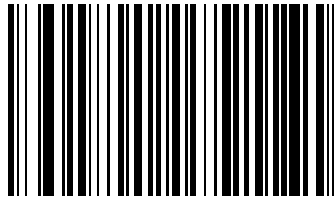
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

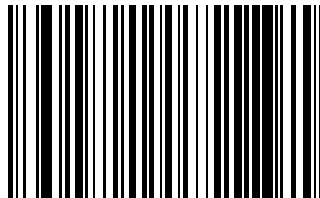


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Interleaved 2 of 5**



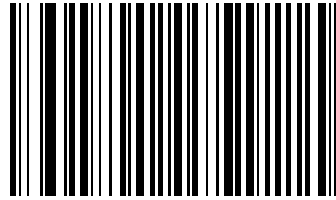
**Code 93**

## Code Types (continued)

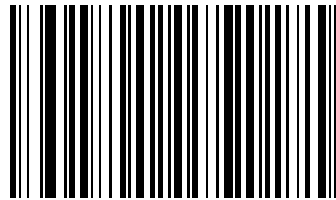
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



UPC-A



UPC-E

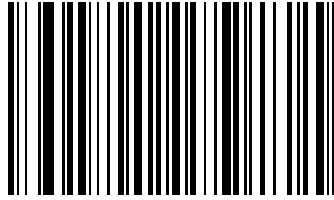
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

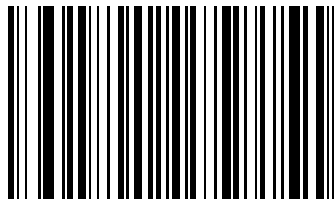


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**EAN-8**



**EAN-13**

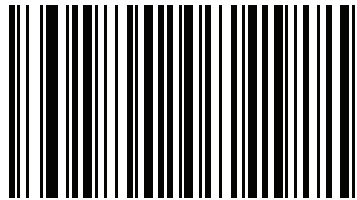


## Code Types (continued)

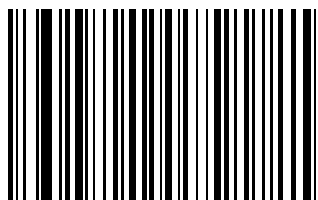
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



ISSN



MSI

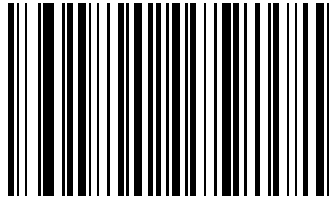
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

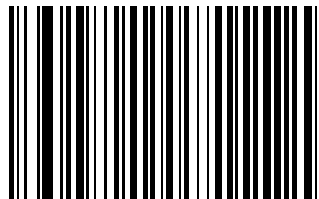


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**GS1-128**



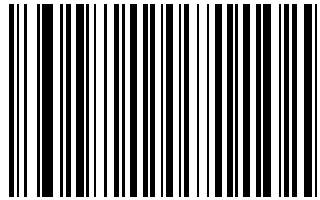
**UPC-E1**

## Code Types (continued)

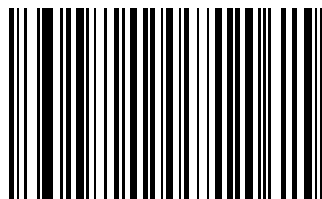
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Bookland EAN**



**Trioptic Code 39**

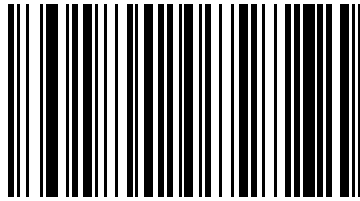
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

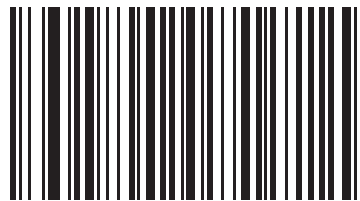


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



Code 11



Code 32

## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**ISBT 128**



**Coupon Code**

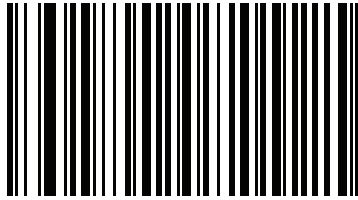
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

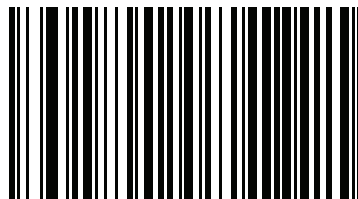


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Chinese 2 of 5**



**Matrix 2 of 5**

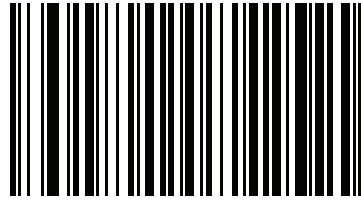
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*



**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Korean 3 of 5**

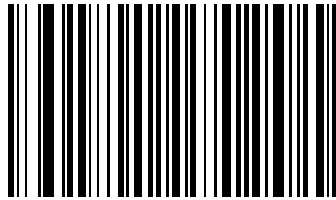
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

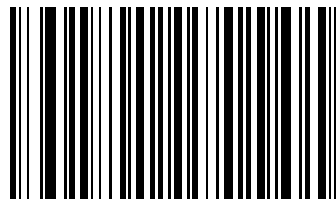


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**US Postnet**



**US Planet**



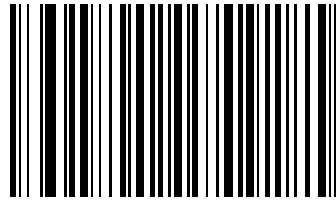
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

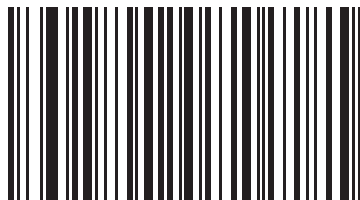


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



UK Postal



Japan Postal

## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

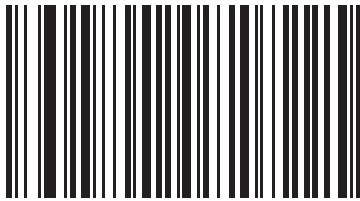


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Australian Postal**



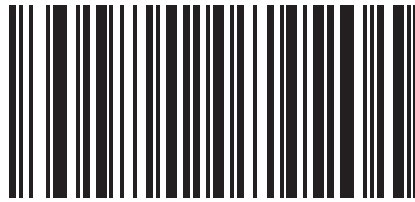
**Netherlands KIX Code**

## Code Types (continued)

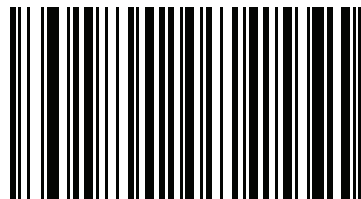
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**USPS 4CB/One Code/Intelligent Mail**



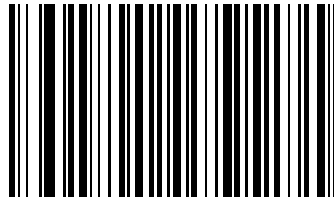
**UPU FICS Postal**

## Code Types (continued)

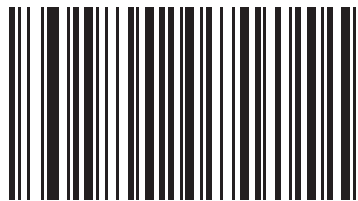
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



PDF417



MicroPDF

## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Macro PDF**



**Macro MicroPDF**

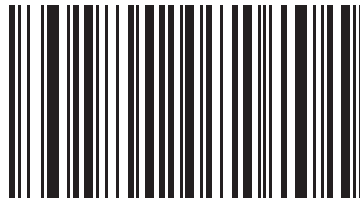
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*



**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**MaxiCode**



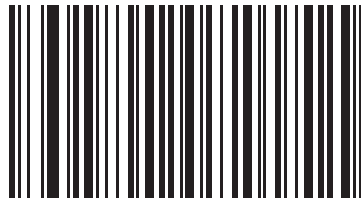
**Data Matrix**

## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



QR Code



MicroQR

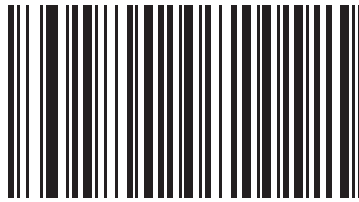
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

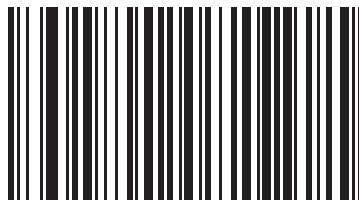


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



TLC 39



UPC/EAN Composites



## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**GS1 DataBar and EAN128 Composites**



**Aztec**

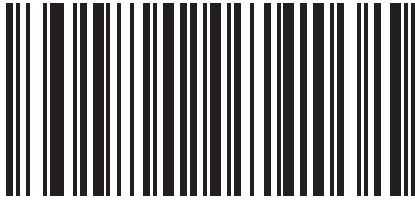
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

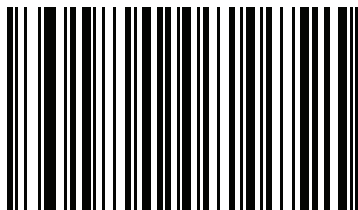


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Aztec Rune**



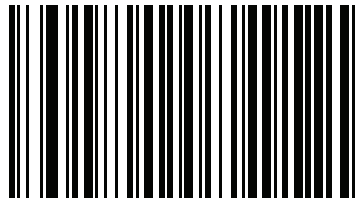
**Han Xin**

## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

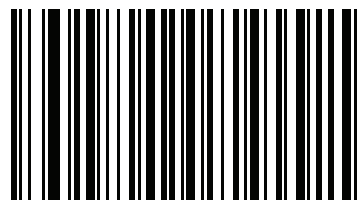
✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**Parsed Driver's License**

✓ **NOTE** Only use this bar code to create rules on parsed driver's license data when configured for Embedded Driver's License Parsing.



**OCR**

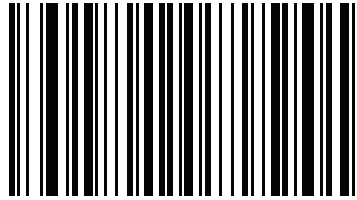
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

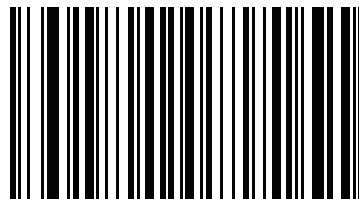


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**RFID Raw**



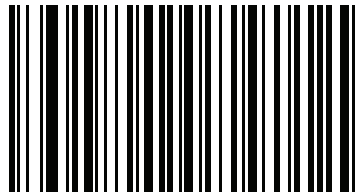
**RFID URI**

## Code Types (continued)

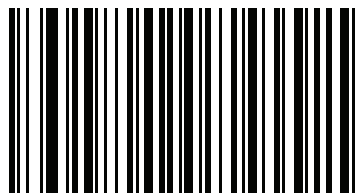
Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

✓ **NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



**GS1 QR**



**GS1 Datamatrix**

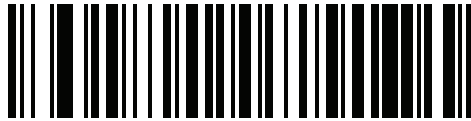
## Code Types (continued)

Select all code types to be affected by the rule. Scan all selected codes in succession, before selecting other criteria. *To select all code types, do not scan any code type.*

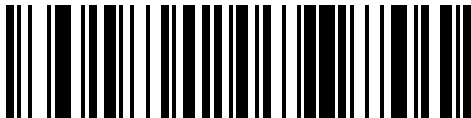


**NOTE** Not all code types are supported by every product.

When selecting composite bar codes, enable AIM IDs if parsing UPC or EAN composite data, or data from an application that uses symbol separators.



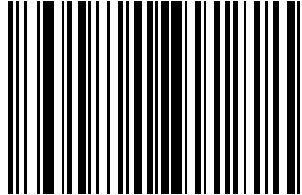
**Multicode**



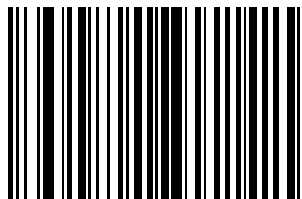
**Parsed UID**

## Code Lengths

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



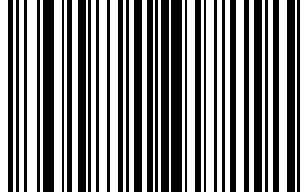
1 Character



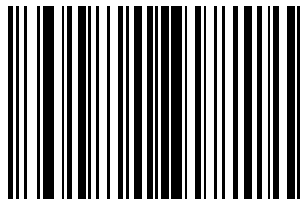
2 Characters

### Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



**3 Characters**

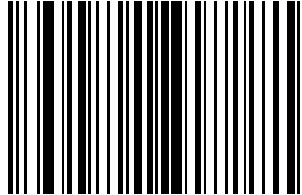


**4 Characters**

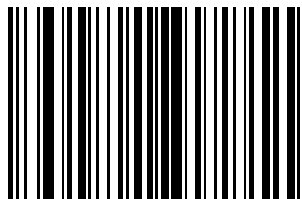


## Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



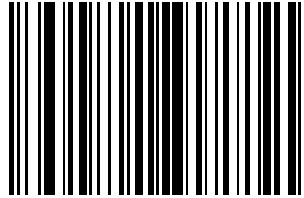
**5 Characters**



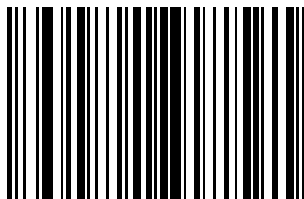
**6 Characters**

### Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



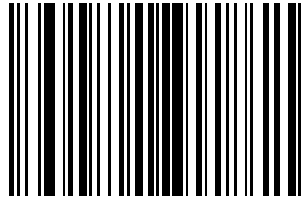
**7 Characters**



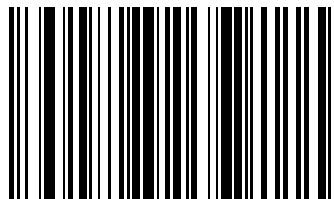
**8 Characters**

## Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



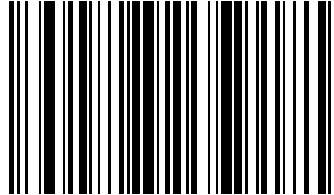
**9 Characters**



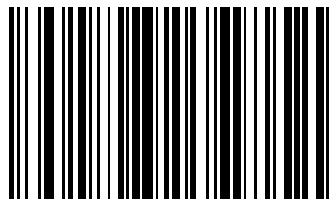
**10 Characters**

### Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



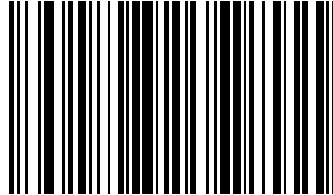
11 Characters



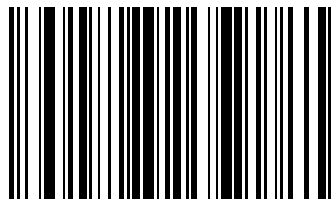
12 Characters

## Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



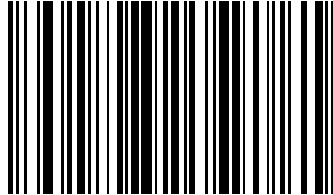
**13 Characters**



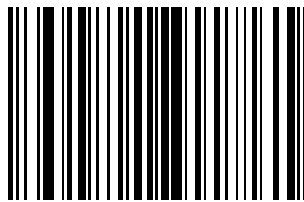
**14 Characters**

### Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



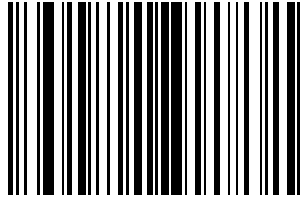
**15 Characters**



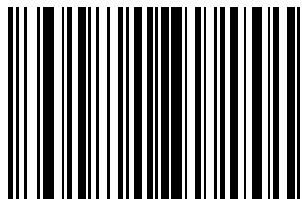
**16 Characters**

## Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



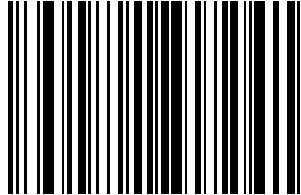
**17 Characters**



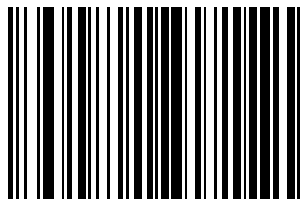
**18 Characters**

### Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



**19 Characters**

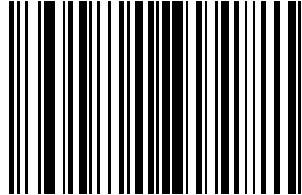


**20 Characters**



## Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



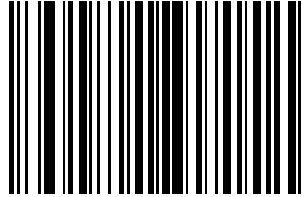
**21 Characters**



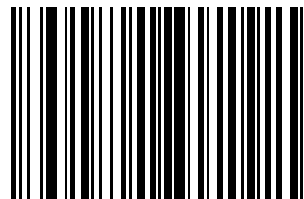
**22 Characters**

### Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



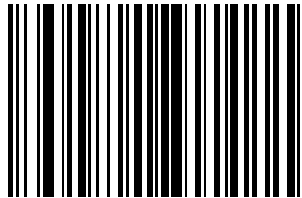
**23 Characters**



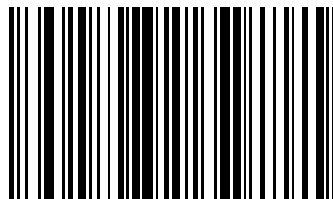
**24 Characters**

## Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



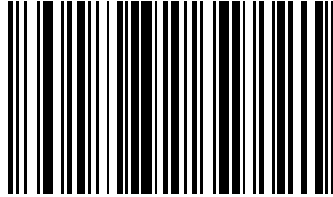
**25 Characters**



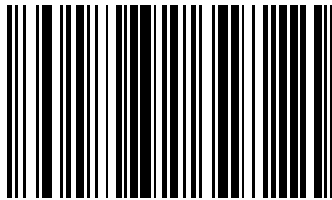
**26 Characters**

### Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



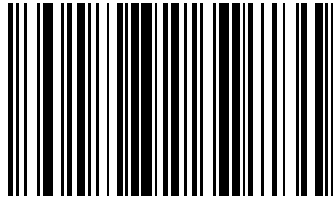
**27 Characters**



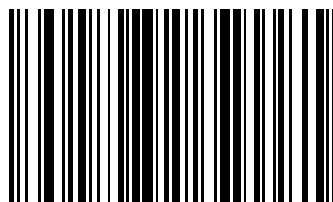
**28 Characters**

## Code Lengths (continued)

Scan these bar codes to define the number of characters the selected code type must contain. Select one length per rule only. *Do not select any code length to select code types of any length.*



**29 Characters**

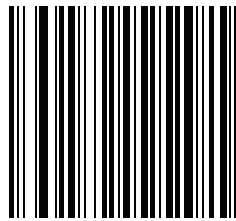


**30 Characters**

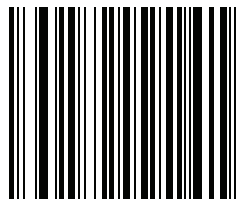
## Code Length Compare

Use this feature to specify a code length of:

- ≠
  - <
  - >
  - range
  - or
1. Scan one of the following bar codes to define the number of characters with which to compare the selected code type.
  2. Using the numeric keypad bar codes beginning on [2-60](#), enter the bar code length value by scanning 1, 2, or 3 two-digit numbers representing the length(s). If necessary, use a leading zero. Valid length value is 01 ~ 99.

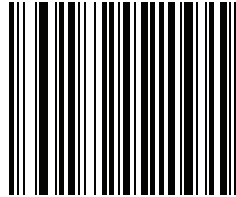


==

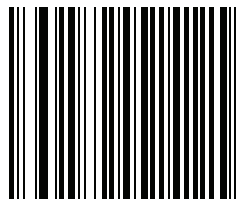


>

Code Lengths (continued)

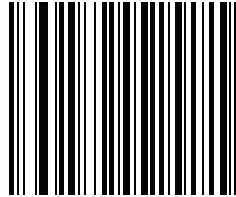


<



!=

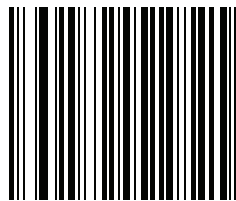
## Code Lengths (continued)



**>=and<=**



**NOTE** For example, 0409 for length range  $\geq 4$  and  $\leq 9$



**Up to 3 "=="**



**NOTE** For example, 080900 for length 8 or 9; 00 stands for empty value. Input valid value from left to right.



## Message Containing A Specific Data String

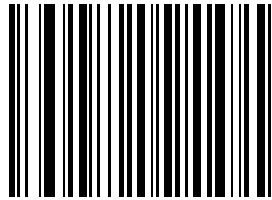
Use this feature to select whether the formatting affects data that begins with a specific character or data string, or contains a specific character or data string.

There are five features:

- Specific String at Start
- Specific String, Any Location
- Specific String Search (not supported by all devices)
- Any Message OK
- Rule Belongs to Set

### Specific String at Start

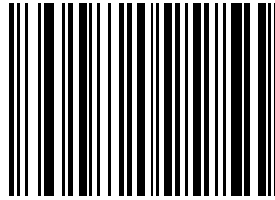
1. Scan the following bar code.
2. Scan the bar codes representing the desired character or characters (up to a total of 8) using the [Alphanumeric Keyboard on page 2-288](#).
3. Scan [End of Message on page 2-321](#).



**Specific String At Start**

### Specific String, Any Location

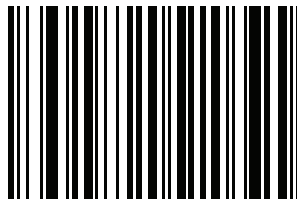
1. Scan the following bar code.
2. Enter a location by scanning a two-digit number representing the **position** (use a leading “zero” if necessary) using the [Numeric Keypad on page 2-60](#).
3. Scan the bar codes representing the desired character or characters (up to a total of 8) using the [Alphanumeric Keyboard on page 2-288](#).
4. Scan [End of Message bar code on page 2-321](#).



Specific String Any Location

### Specific String Search (not supported by all devices)

1. Scan the following bar code.
2. Scan the bar codes representing the desired character or characters (up to a total of 10) using the [Alphanumeric Keyboard on page 2-288](#).
3. Scan [End of Message bar code on page 2-321](#).

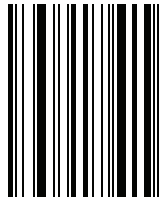


Specific String Search

### Specific Criteria

1. Select one of the following criteria: [Specific String at Start on page 2-57](#), [Specific String, Any Location on page 2-58](#), or [Specific String Search \(not supported by all devices\) on page 2-58](#).
2. Scan the bar codes representing the desired character or characters using the [Alphanumeric Keyboard on page 2-288](#)
3. Scan **String Delimiter** below, and repeat Step 2 above to input up to three strings.

✓ **NOTE** Input multiple string values, separated by String Delimiter.



**String Delimiter**

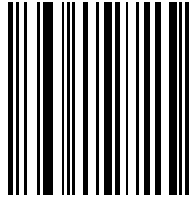
4. At the end of the string(s) input, scan the [End of Message bar code on page 2-321](#).

### Any Message OK

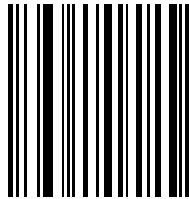
Do not scan a bar code to format all selected code types, regardless of information contained.

### **Numeric Keypad**

Do not confuse bar codes on this page with those on the alphanumeric keyboard.



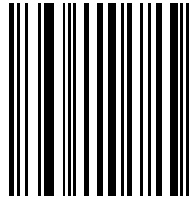
**0**



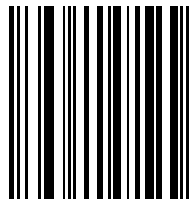
**1**

**Numeric Keypad (continued)**

Do not confuse bar codes on this page with those on the alphanumeric keyboard.



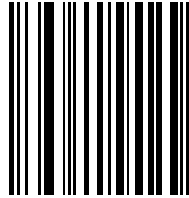
2



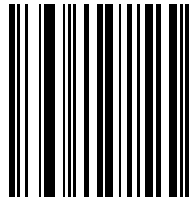
3

**Numeric Keypad (continued)**

Do not confuse bar codes on this page with those on the alphanumeric keyboard.



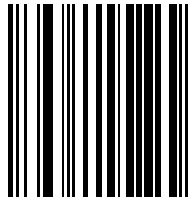
4



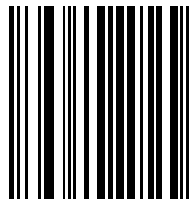
5

**Numeric Keypad (continued)**

Do not confuse bar codes on this page with those on the alphanumeric keyboard.



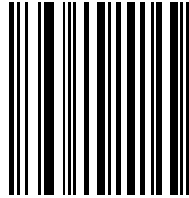
6



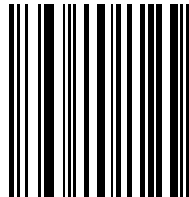
7

**Numeric Keypad (continued)**

Do not confuse bar codes on this page with those on the alphanumeric keyboard.



8

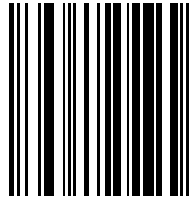


9



**Numeric Keypad (continued)**

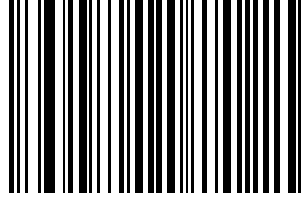
Do not confuse bar codes on this page with those on the alphanumeric keyboard.



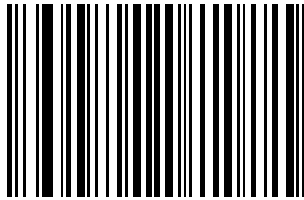
**Cancel**

### Rule Belongs To Set

Select the set to which a rule belongs. There are four possible rule sets. See [Alternate Rule Sets on page 1-3](#) for more information about rule sets.



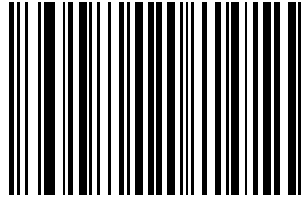
Rule Belongs To Set 1



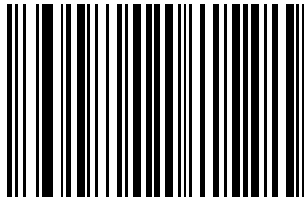
Rule Belongs To Set 2

**Rule Belongs To Set (continued)**

Select the set to which a rule belongs. There are four possible rule sets. See [Alternate Rule Sets on page 1-3](#) for more information about rule sets.



**Rule Belongs To Set 3**



**Rule Belongs To Set 4**

---

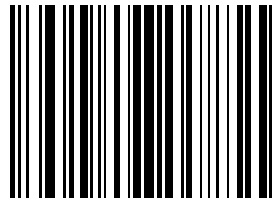
## Actions

Select how to format the data for transmission.

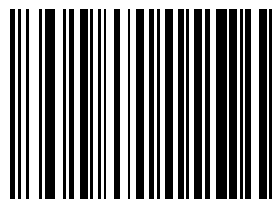
- ✓ **NOTE** If specifying a bar code encoding scheme in the ADF rule, ensure the encoding scheme is the first action in order to ensure the UTF-8 bar code is converted before the rules apply. See [Bar Code Encoding Scheme Specification \(Code Pages\) on page 2-259](#).

### Send Data

Send all data that follows, send all data up to a specific character selected from the [Alphanumeric Keyboard on page 2-288](#), or send the next *X* characters. Note that only bar codes for **Send Next 1 to 20** appear here, and can be scanned multiple times to send values greater than 20. For instance, to send the next 28 characters, scan **Send Next 20 Characters**, then **Send Next 8 Characters**.

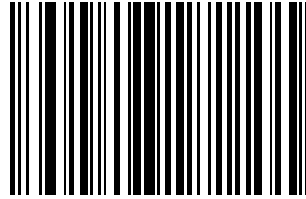


Send Data Up To Character

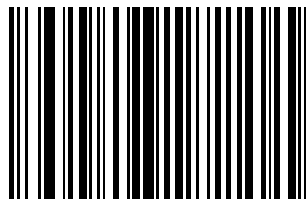


Send All Data That Remains

**Send Data (continued)**

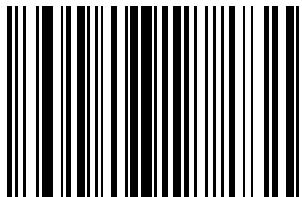


**Send Next Character**

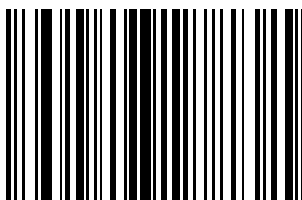


**Send Next 2 Characters**

## Send Data (continued)

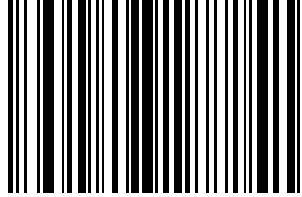


**Send Next 3 Characters**

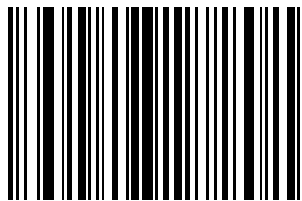


**Send Next 4 Characters**

**Send Data (continued)**

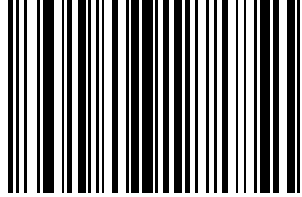


**Send Next 5 Characters**

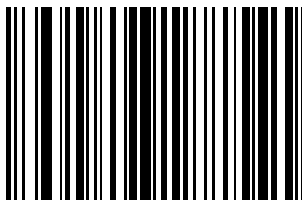


**Send Next 6 Characters**

## Send Data (continued)



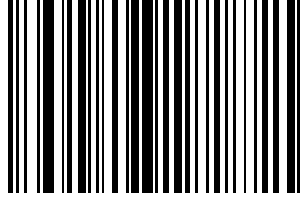
**Send Next 7 Characters**



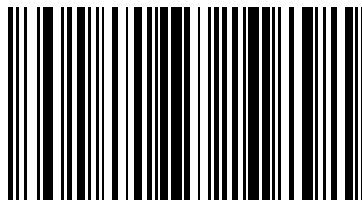
**Send Next 8 Characters**



**Send Data (continued)**

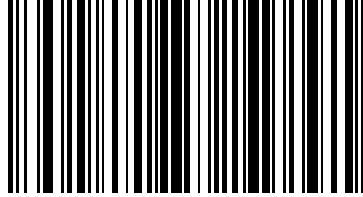


**Send Next 9 Characters**

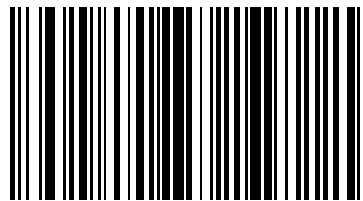


**Send Next 10 Characters**

## Send Data (continued)

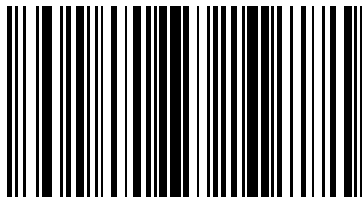


**Send Next 11 Characters**

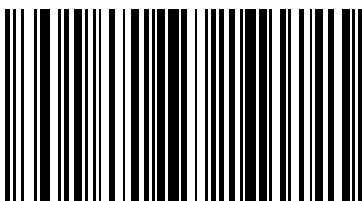


**Send Next 12 Characters**

**Send Data (continued)**

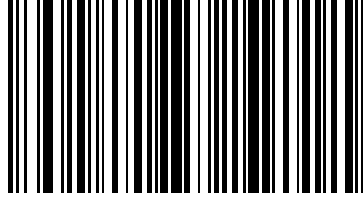


**Send Next 13 Characters**

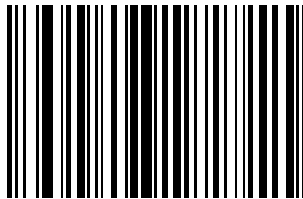


**Send Next 14 Characters**

## Send Data (continued)

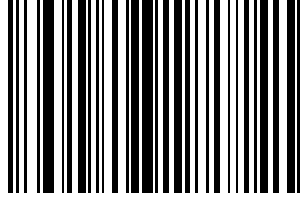


**Send Next 15 Characters**

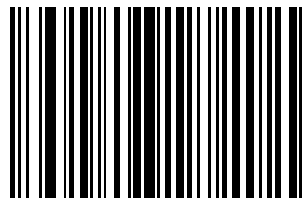


**Send Next 16 Characters**

**Send Data (continued)**

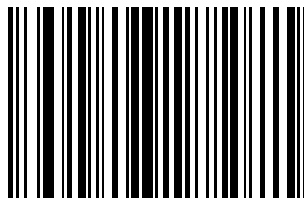


**Send Next 17 Characters**

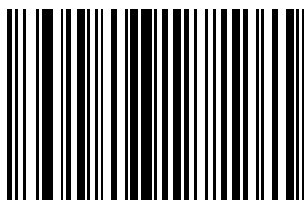


**Send Next 18 Characters**

## Send Data (continued)



**Send Next 19 Characters**



**Send Next 20 Characters**

## Setup Field(s)

Table 2-2 Setup Field(s) Definitions

Parameter	Description	Page
<b>Move Cursor</b>		
<b>Move Cursor To a Character</b>	Scan <i>Move Cursor To Character</i> , then any printable ASCII character from the <i>Alphanumeric Keyboard on page 2-288</i> . This moves the cursor to the position after the matching character. If the character is not there, the rule fails and ADF tries the next rule.	2-80
<b>Move Cursor to Start of Data</b>	Scan this bar code to move cursor to the beginning of the data.	2-81
<b>Move Cursor Past a Character</b>	This action moves the cursor past all sequential occurrences of a selected character. For example, if the selected character is 'A', then the cursor moves past 'A', 'AA', 'AAA', etc. Scan <i>Move Cursor Past Character</i> , then select a character from the <i>Alphanumeric Keyboard</i> . If the character is not there, the cursor does not move (i.e., has no effect).	2-81
<b>Move Cursor Past a Specific String*</b>	This action moves the cursor past the first occurrence of a selected string. Scan <i>Move Cursor Past Specific String (not supported by all devices)</i> , then select the character(s) (up to 10) using the <i>Alphanumeric Keyboard</i> . Scan the <i>End of Message bar code on page 2-321</i> .	2-82
<b>Move Cursor to Specific String and Replace*</b>	This action moves the cursor to the first occurrence of a selected string and replaces the string with another user-defined string. Scan <i>Move Cursor to Specific String and Replace (not supported by all devices)</i> , then enter an alphanumeric string representing the character(s) (up to 10) to match and delete using the <i>Alphanumeric Keyboard</i> . Scan the <i>End of Message bar code on page 2-321</i> . Enter another alphanumeric string representing the character(s) (up to 10) to insert using the <i>Alphanumeric Keyboard</i> . Scan <i>End of Message</i> .	2-82
<b>Move Cursor to Last Occurrence of String and Replace All*</b>	This action replaces all occurrences of a selected string with another user-defined string, and moves the cursor to the beginning of the last occurrence. Scan <i>Move Cursor to Last Occurrence of String and Replace All (not supported by all devices)</i> , then enter an alphanumeric string representing the character(s) (up to 10) to match and delete using the <i>Alphanumeric Keyboard</i> . Scan the <i>End of Message bar code on page 2-321</i> . Enter another alphanumeric string representing the character(s) (up to 10) to insert using the <i>Alphanumeric Keyboard</i> . Scan <i>End of Message</i> .	2-83
<b>Skip to End*</b>	Scan <i>Skip to End (not supported by all devices)</i> to move cursor to the end of the data.	2-83

\*Not supported by all devices.

**Table 2-2** Setup Field(s) Definitions (Continued)

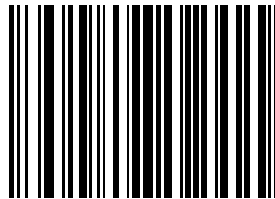
Parameter	Description	Page
<b>Skip Ahead “N” Characters</b>	Scan one of these bar codes to select the number of positions ahead to move the cursor.	<a href="#">2-85</a>
<b>Skip Back “N” Characters</b>	Scan one of these bar codes to select the number of positions back to move the cursor.	<a href="#">2-90</a>
<b>Send Preset Value</b>	Send Values 1 through 6 by scanning the appropriate bar code. Set these values using the prefix/suffix values in the scanner's <i>Product Reference Guide</i> . Value 1 = Scan Suffix Value 2 = Scan Prefix Values 3-6 are not applicable	<a href="#">2-90</a>

**\*Not supported by all devices.**

### Move Cursor

Scan one of the following bar codes to move the cursor in relation to a specified character. Then enter a character by scanning a bar code from the [Alphanumeric Keyboard on page 2-288](#).

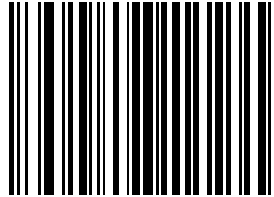
✓ **NOTE** If there is no match and the rule fails, the next rule is checked.



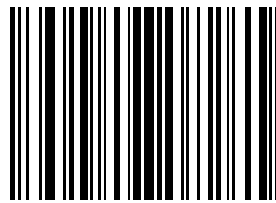
**Move Cursor To Character**



**Setup Field(s) (continued)**

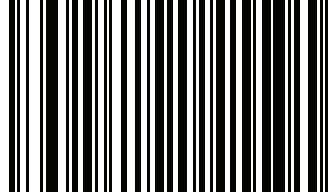


**Move Cursor To Start**

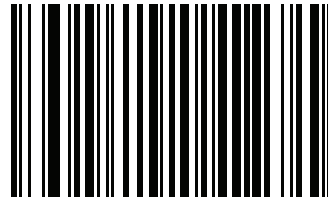


**Move Cursor Past Character**

## Setup Field(s) (continued)

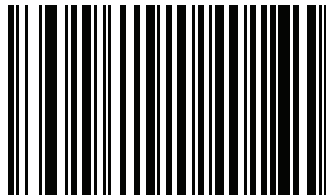


**Move Cursor Past Specific String**  
(not supported by all devices)

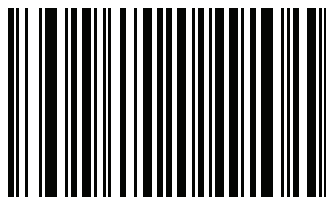


**Move Cursor to Specific String and Replace**  
(not supported by all devices)

## Setup Field(s) (continued)



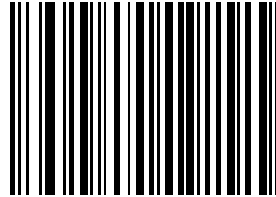
**Move Cursor to Last Occurrence  
of String and Replace All**  
(not supported by all devices)



**Skip to End**  
(not supported by all devices)

### Send Pause

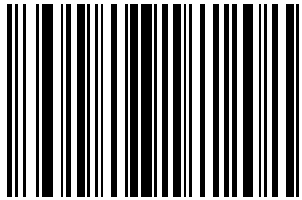
Scan the bar code below to insert a pause in the transmission of data. [Pause Duration on page 2-3](#) controls the length of this pause.



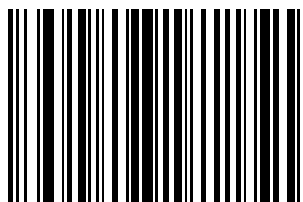
**Send Pause**

**Skip Ahead**

Use the following bar codes to skip ahead characters.



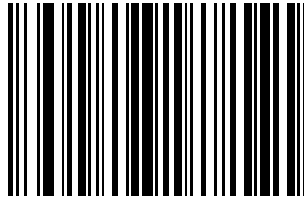
**Skip Ahead 1 Character**



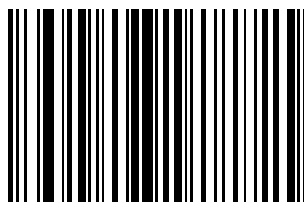
**Skip Ahead 2 Characters**

**Skip Ahead (continued)**

Use the following bar codes to skip ahead characters.



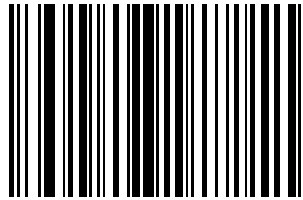
**Skip Ahead 3 Characters**



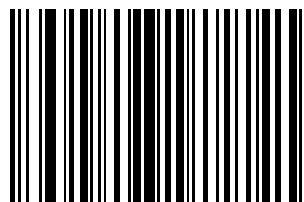
**Skip Ahead 4 Characters**

**Skip Ahead (continued)**

Use the following bar codes to skip ahead characters.



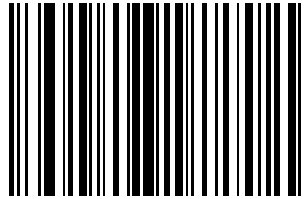
**Skip Ahead 5 Characters**



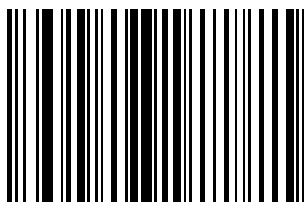
**Skip Ahead 6 Characters**

**Skip Ahead (continued)**

Use the following bar codes to skip ahead characters.



**Skip Ahead 7 Characters**

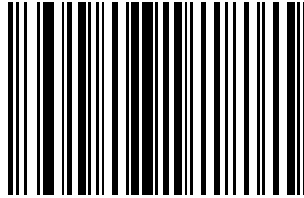


**Skip Ahead 8 Characters**

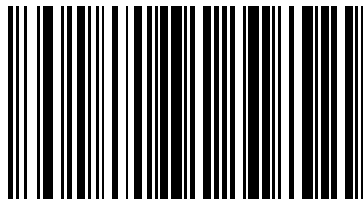


**Skip Ahead (continued)**

Use the following bar codes to skip ahead characters.



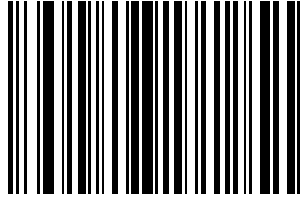
**Skip Ahead 9 Characters**



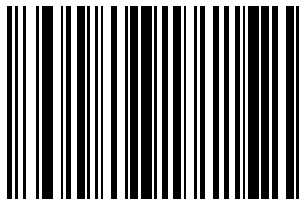
**Skip Ahead 10 Characters**

## Skip Back

Use the following bar codes to skip back characters.



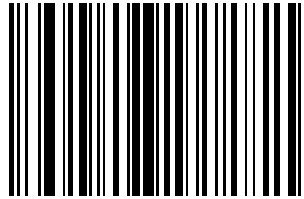
**Skip Back 1 Character**



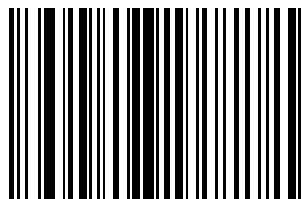
**Skip Back 2 Characters**

**Skip Back (continued)**

Use the following bar codes to skip back characters.



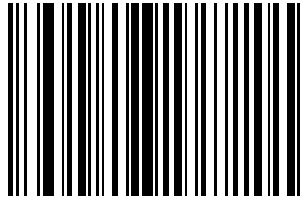
**Skip Back 3 Characters**



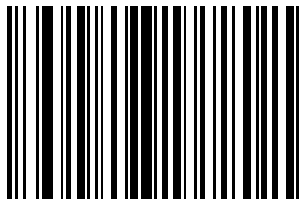
**Skip Back 4 Characters**

**Skip Back (continued)**

Use the following bar codes to skip back characters.



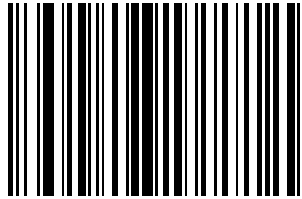
**Skip Back 5 Characters**



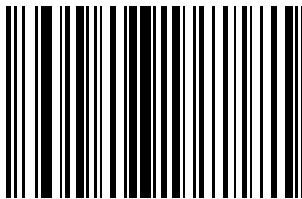
**Skip Back 6 Characters**

**Skip Back (continued)**

Use the following bar codes to skip back characters.



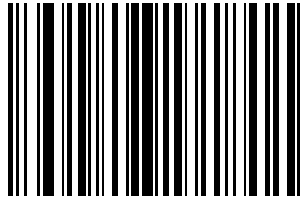
**Skip Back 7 Characters**



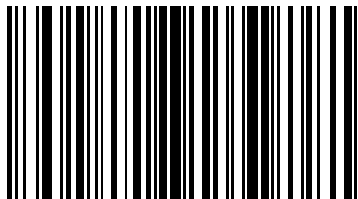
**Skip Back 8 Characters**

**Skip Back (continued)**

Use the following bar codes to skip back characters.



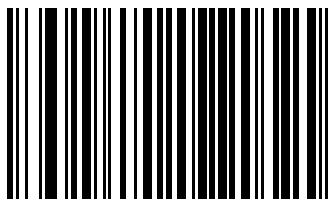
**Skip Back 9 Characters**



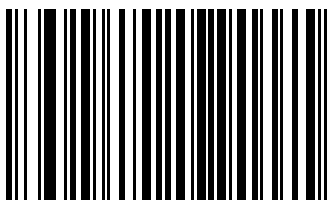
**Skip Back 10 Characters**

## Send Preset Value

Use these bar codes to send preset values. Set these values using the Scan Prefix and Scan Suffix bar codes on [page 2-95](#).



**Send Prefix**



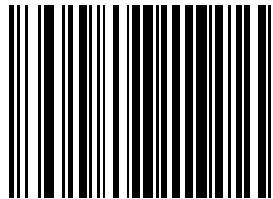
**Send Suffix**

## Modify Data

Modify data as described below. The following actions work for all send commands that follow it within a rule. Programming *pad zeros to length 6, send next 3 characters, stop padding, send next 5 characters* adds three zeros to the first send, and the next send is unaffected by the padding. These options do not apply to the **Send Keystroke** or **Send Preset Value** options.

### Remove All Spaces

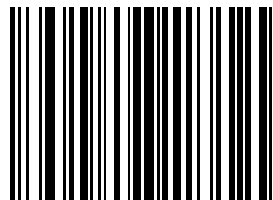
To remove all spaces in the send commands that follow, scan the bar code below.



**Remove All Spaces**

### Crunch All Spaces

To leave one space between words, scan the bar code below. This also removes all leading and trailing spaces.

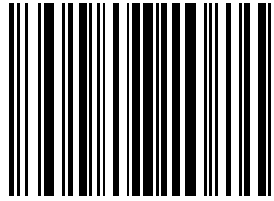


**Crunch All Spaces**



### Stop Space Removal

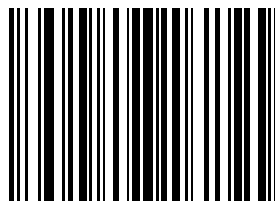
Scan the bar code below to disable space removal.



Stop Space Removal

### Remove Leading Zeros

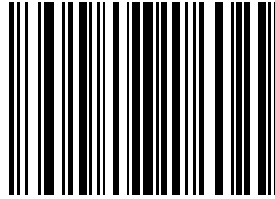
Scan the bar code below to remove all leading zeros.



Remove Leading Zeros

### **Stop Zero Removal**

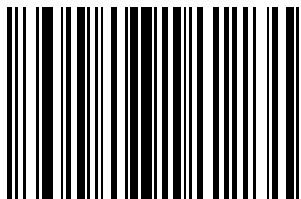
Scan the bar code below to disable the removal of zeros.



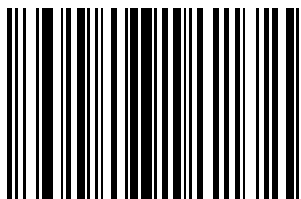
**Stop Zero Removal**

## Pad Data with Spaces

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



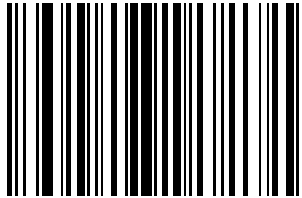
Pad Spaces To Length 1



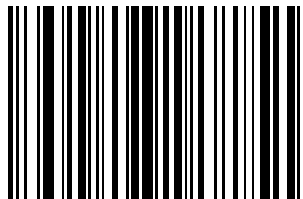
Pad Spaces To Length 2

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



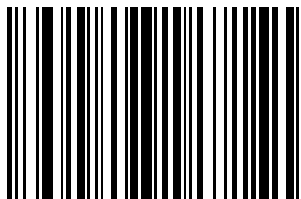
Pad Spaces To Length 3



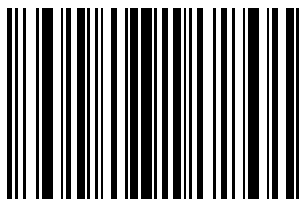
Pad Spaces To Length 4

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



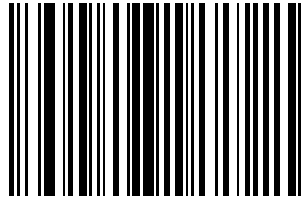
Pad Spaces To Length 5



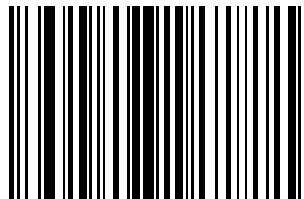
Pad Spaces To Length 6

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



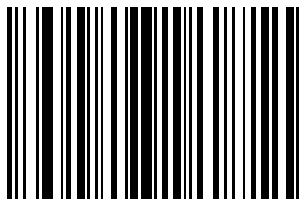
Pad Spaces To Length 7



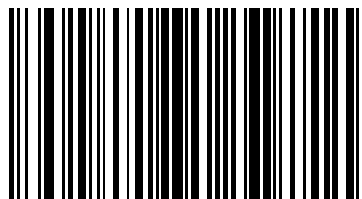
Pad Spaces To Length 8

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



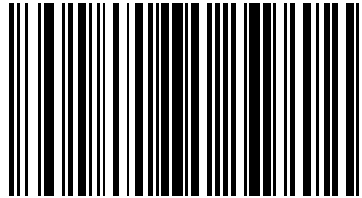
Pad Spaces To Length 9



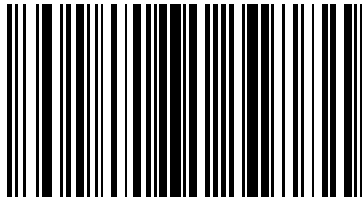
Pad Spaces To Length 10

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



Pad Spaces To Length 11

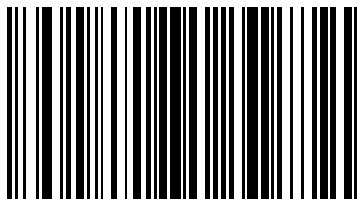


Pad Spaces To Length 12

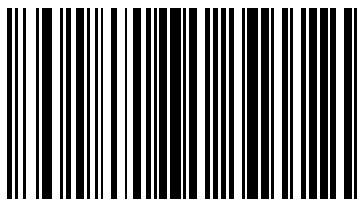


### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



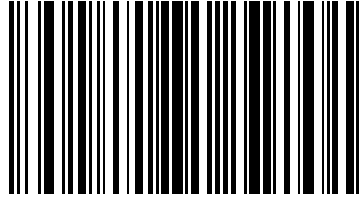
Pad Spaces To Length 13



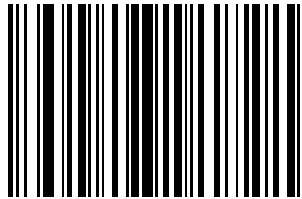
Pad Spaces To Length 14

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



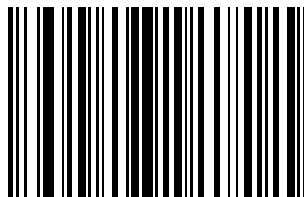
Pad Spaces To Length 15



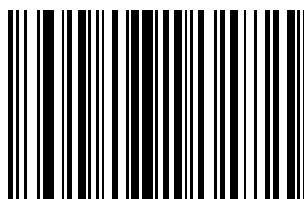
Pad Spaces To Length 16

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



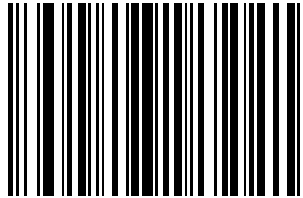
Pad Spaces To Length 17



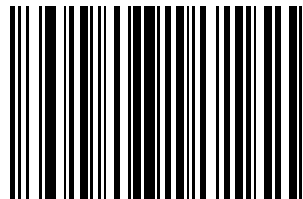
Pad Spaces To Length 18

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



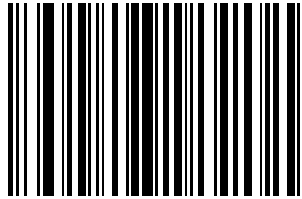
Pad Spaces To Length 19



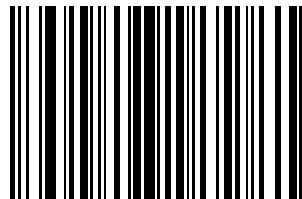
Pad Spaces To Length 20

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



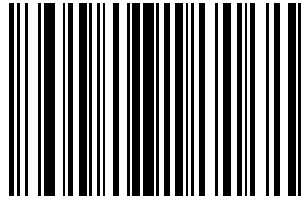
Pad Spaces To Length 21



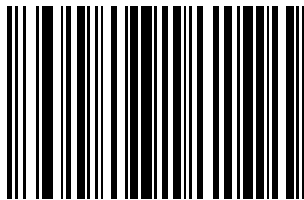
Pad Spaces To Length 22

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



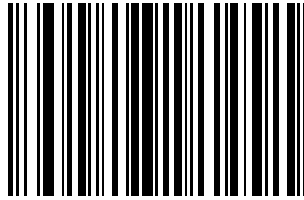
Pad Spaces To Length 23



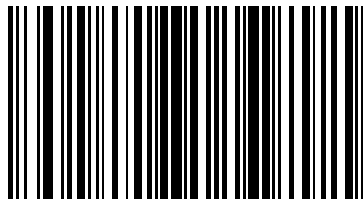
Pad Spaces To Length 24

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



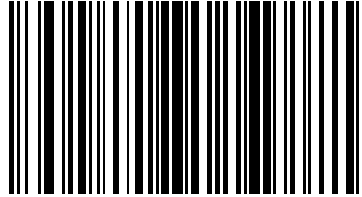
Pad Spaces To Length 25



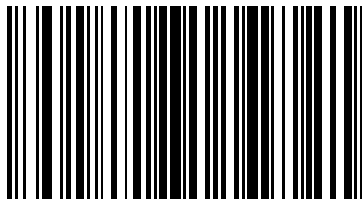
Pad Spaces To Length 26

### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



Pad Spaces To Length 27

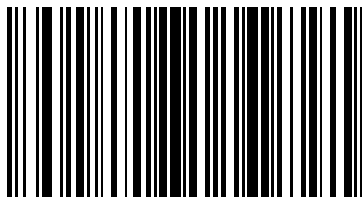


Pad Spaces To Length 28

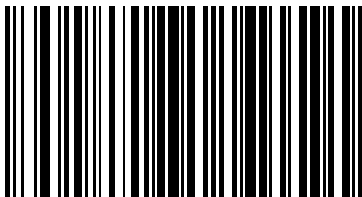


### Pad Data with Spaces (continued)

To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



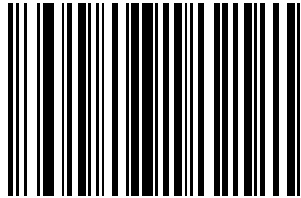
Pad Spaces To Length 29



Pad Spaces To Length 30

### Pad Data with Spaces (continued)

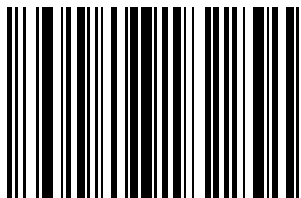
To pad data to the left, scan the bar code containing the desired number of spaces. **Send** commands activate this parameter.



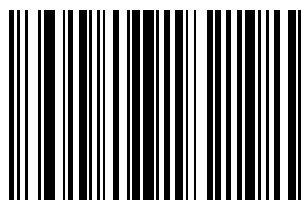
Stop Pad Spaces

## Pad Data with Zeros

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



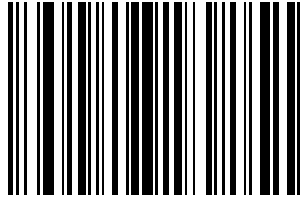
Pad Zeros To Length 1



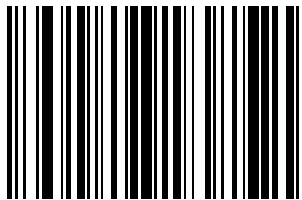
Pad Zeros To Length 2

### Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



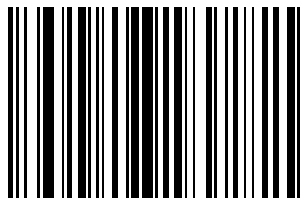
Pad Zeros To Length 3



Pad Zeros To Length 4

## Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



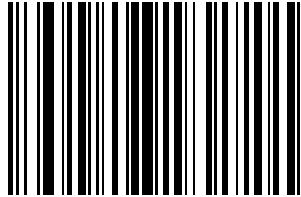
Pad Zeros To Length 5



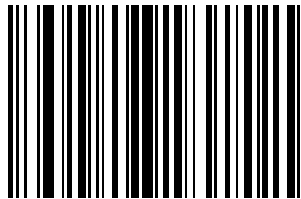
Pad Zeros To Length 6

### Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



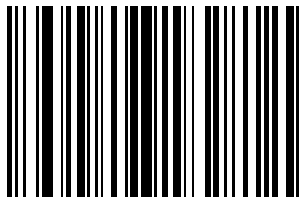
Pad Zeros To Length 7



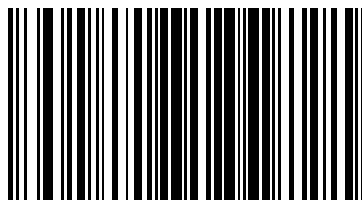
Pad Zeros To Length 8

## Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



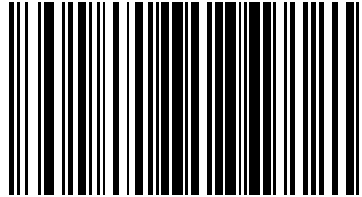
Pad Zeros To Length 9



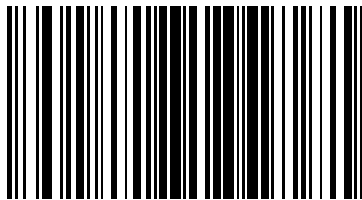
Pad Zeros To Length 10

### Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



Pad Zeros To Length 11

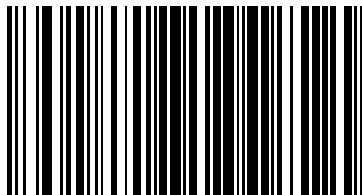


Pad Zeros To Length 12

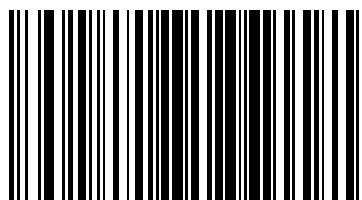


## Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



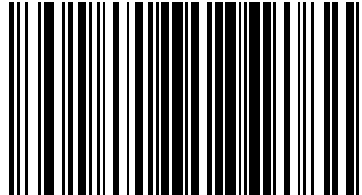
Pad Zeros To Length 13



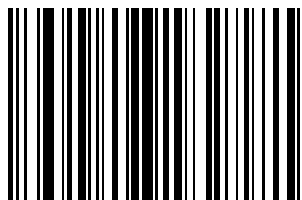
Pad Zeros To Length 14

### Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



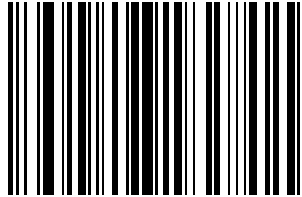
Pad Zeros To Length 15



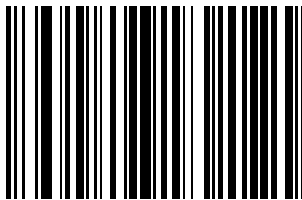
Pad Zeros To Length 16

## Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



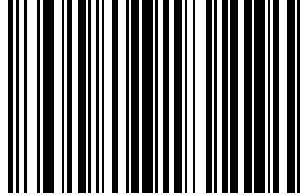
Pad Zeros To Length 17



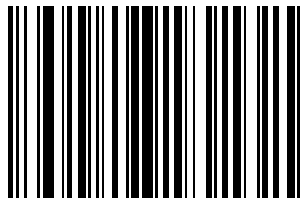
Pad Zeros To Length 18

### Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



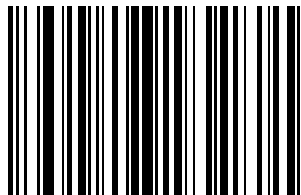
Pad Zeros To Length 19



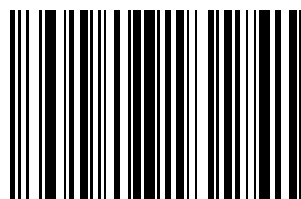
Pad Zeros To Length 20

## Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



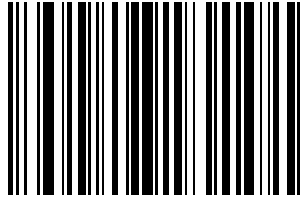
Pad Zeros To Length 21



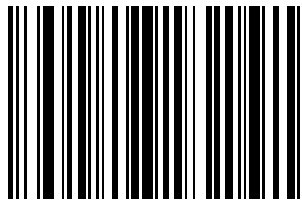
Pad Zeros To Length 22

### Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



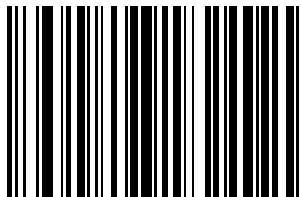
Pad Zeros To Length 23



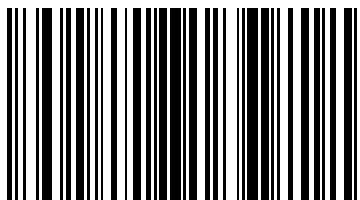
Pad Zeros To Length 24

## Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



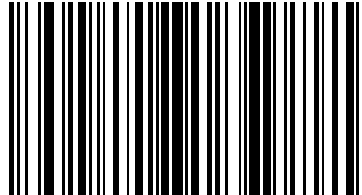
Pad Zeros To Length 25



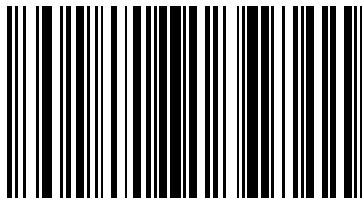
Pad Zeros To Length 26

### Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



Pad Zeros To Length 27

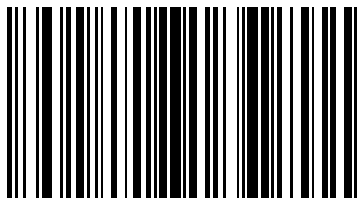


Pad Zeros To Length 28

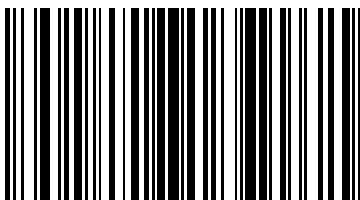


## Pad Data with Zeros (continued)

To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



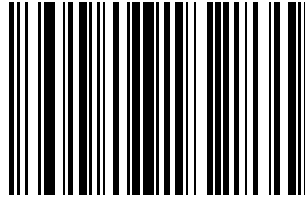
Pad Zeros To Length 29



Pad Zeros To Length 30

### Pad Data with Zeros (continued)

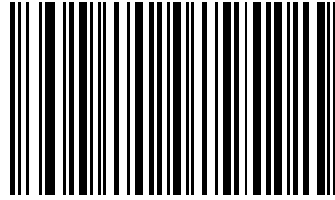
To pad data to the left, scan the bar code containing the desired number of zeros. **Send** commands activate this parameter.



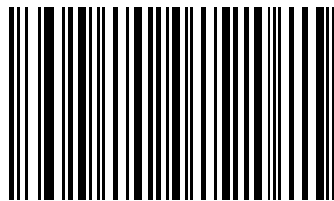
Stop Pad Zeros

## Beeps

Select a beep sequence for each ADF rule.



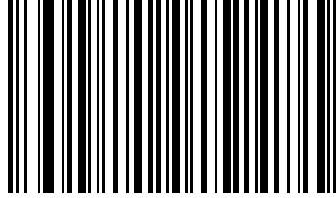
**Beep Once**



**Beep Twice**

## Beeps (continued)

Select a beep sequence for each ADF rule.

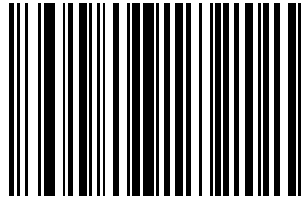


**Beep Three Times**

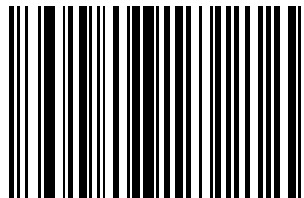
## Send Keystroke (Control Characters and Keyboard Characters)

### Control Characters

Scan a **Send** bar code for the keystroke to send.



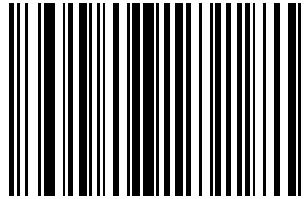
**Send Control 2**



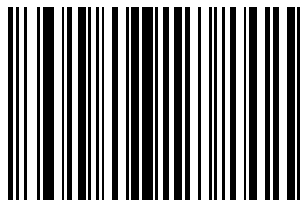
**Send Control A**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



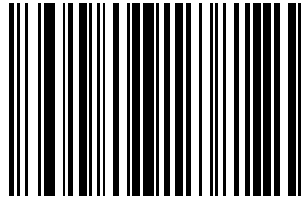
**Send Control B**



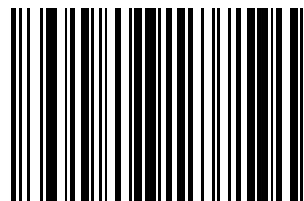
**Send Control C**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



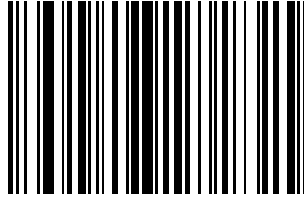
**Send Control D**



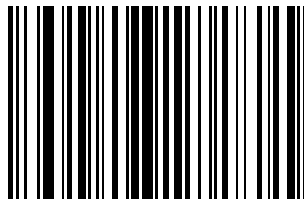
**Send Control E**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



**Send Control F**

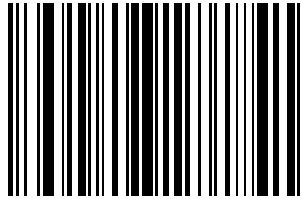


**Send Control G**



**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



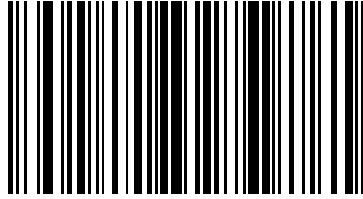
**Send Control H**



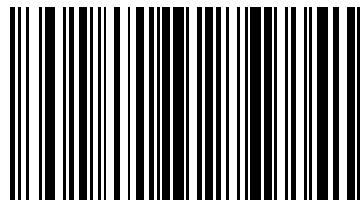
**Send Control I**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



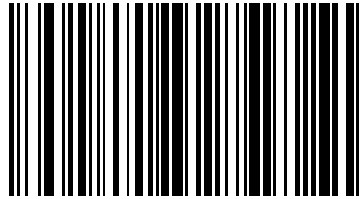
**Send Control J**



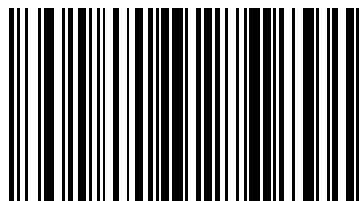
**Send Control K**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



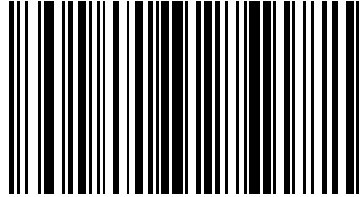
**Send Control L**



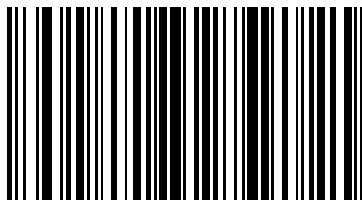
**Send Control M**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



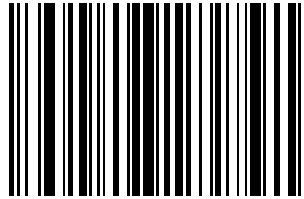
**Send Control N**



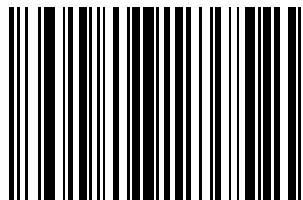
**Send Control O**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



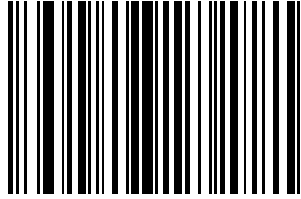
**Send Control P**



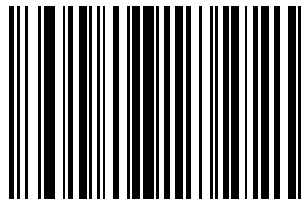
**Send Control Q**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



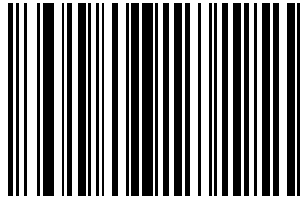
**Send Control R**



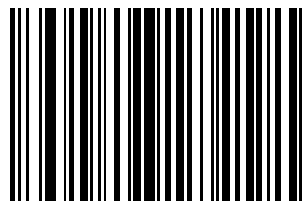
**Send Control S**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



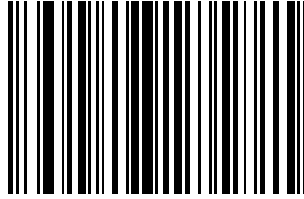
**Send Control T**



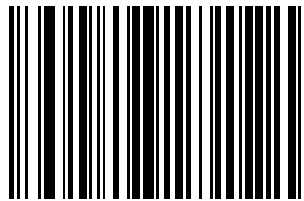
**Send Control U**

**Control Characters (continued)**

Scan a **Send** bar code for the keystroke to send.



**Send Control V**

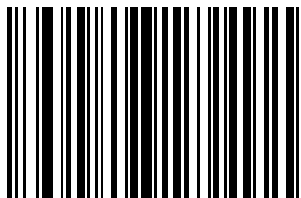


**Send Control X**

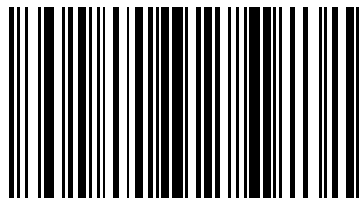


### Control Characters (continued)

Scan a **Send** bar code for the keystroke to send.



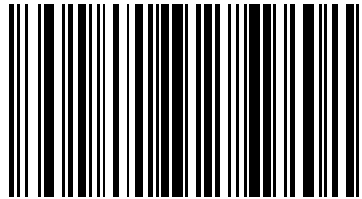
Send Control Y



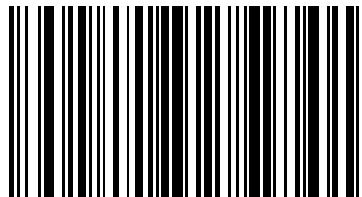
Send Control Z

### Control Characters (continued)

Scan a **Send** bar code for the keystroke to send.



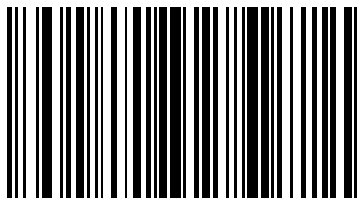
Send Control [



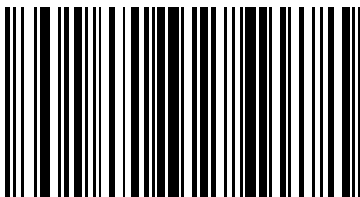
Send Control \

### Control Characters (continued)

Scan a **Send** bar code for the keystroke to send.



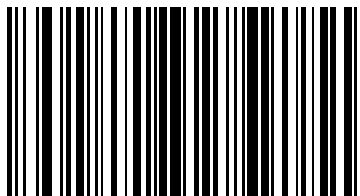
Send Control ]



Send Control 6

**Control Characters (continued)**

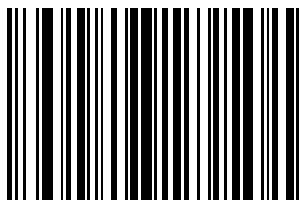
Scan a **Send** bar code for the keystroke to send.



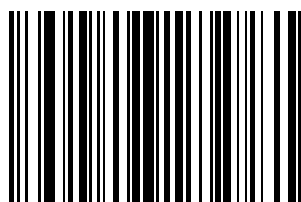
**Send Control -**

## Keyboard Characters

Scan a **Send** bar code for the keyboard characters to send.



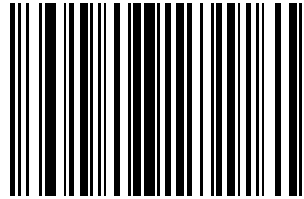
**Send Space**



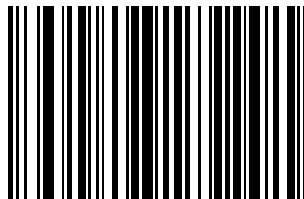
**Send !**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



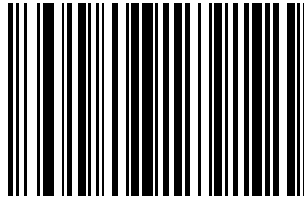
**Send “**



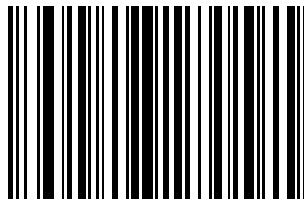
**Send #**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



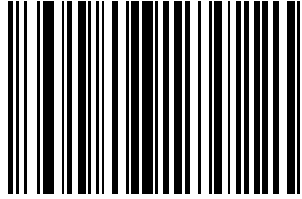
**Send \$**



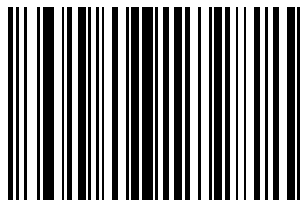
**Send %**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



**Send &**

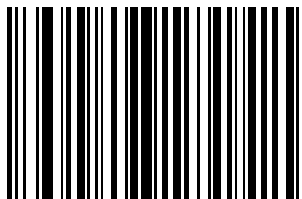


**Send '**

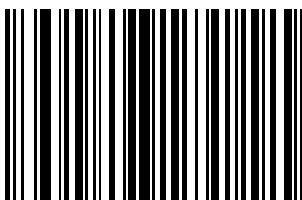


**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



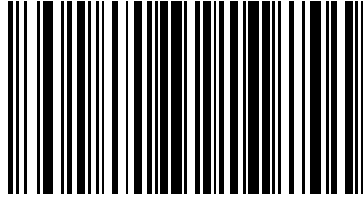
**Send (**



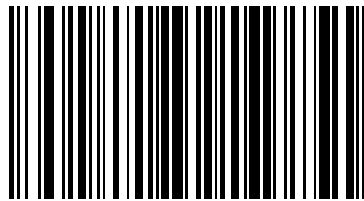
**Send )**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



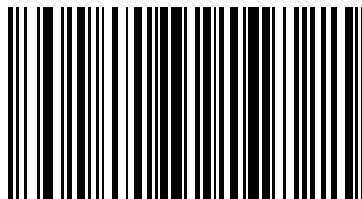
**Send \***



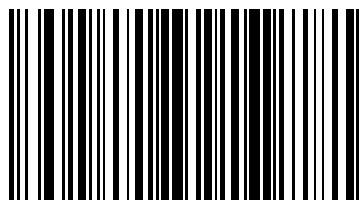
**Send +**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



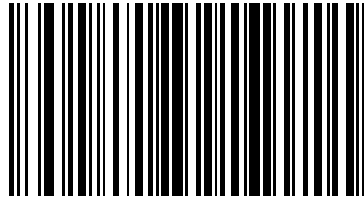
**Send ,**



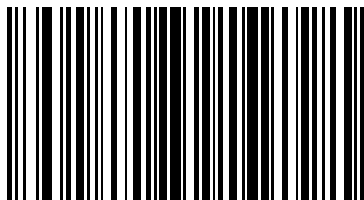
**Send -**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



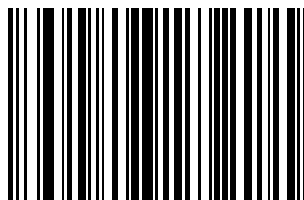
**Send .**



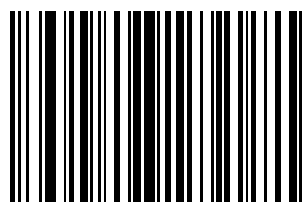
**Send /**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



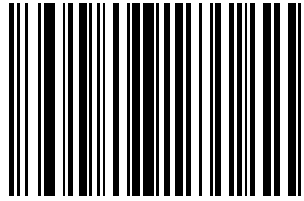
**Send 0**



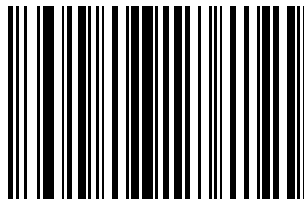
**Send 1**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



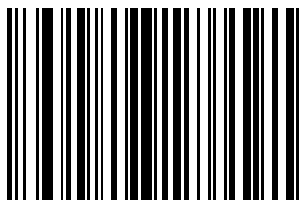
**Send 2**



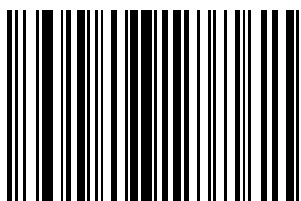
**Send 3**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



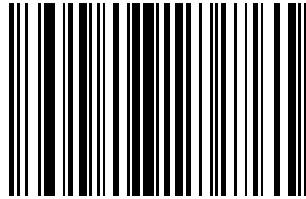
**Send 4**



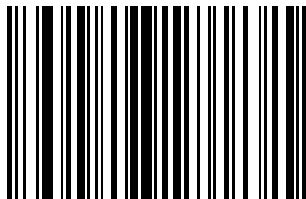
**Send 5**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



**Send 6**

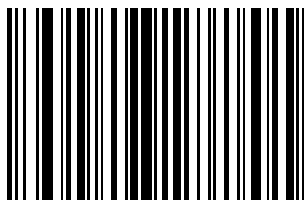


**Send 7**

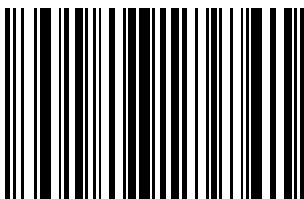


**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



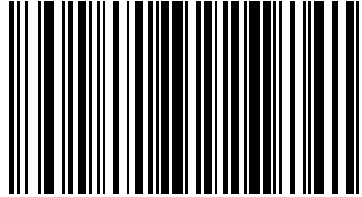
**Send 8**



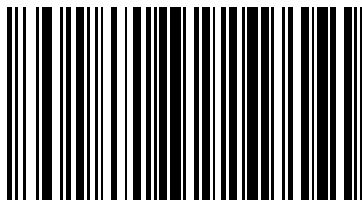
**Send 9**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



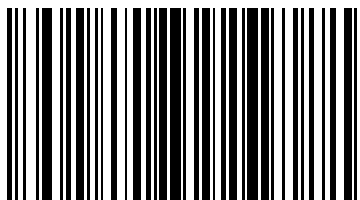
**Send :**



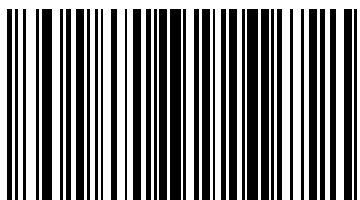
**Send ;**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



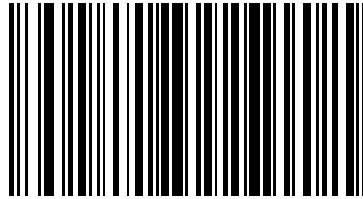
**Send <**



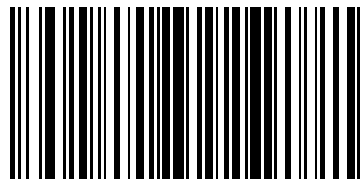
**Send =**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



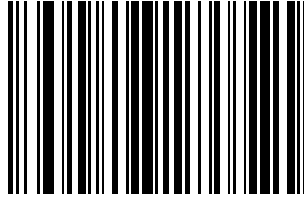
**Send >**



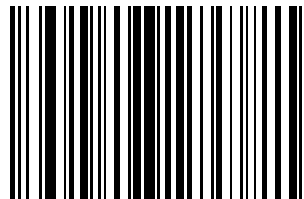
**Send ?**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



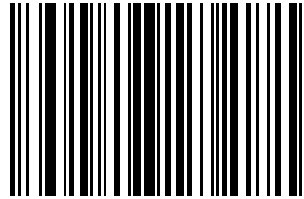
**Send @**



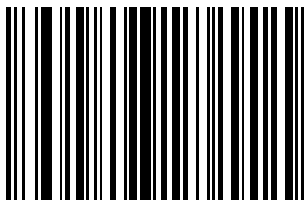
**Send A**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



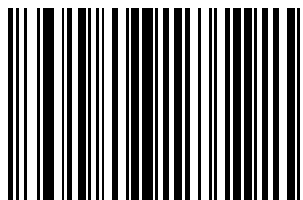
**Send B**



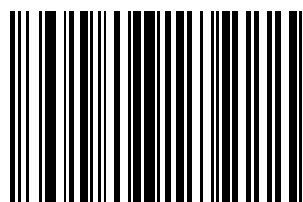
**Send C**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



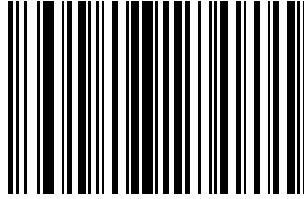
**Send D**



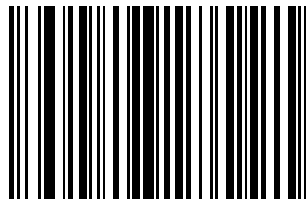
**Send E**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



**Send F**

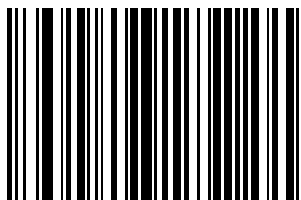


**Send G**

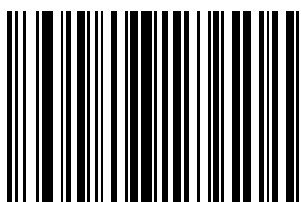


### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



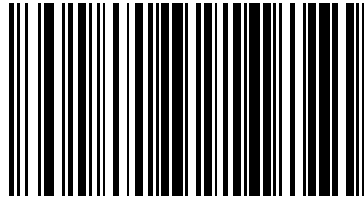
**Send H**



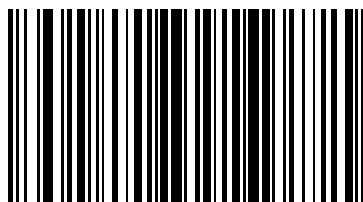
**Send I**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



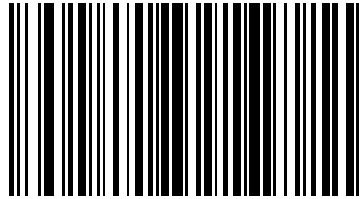
**Send J**



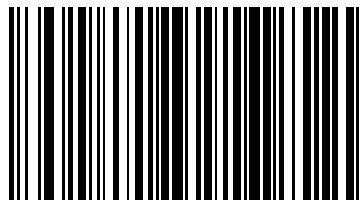
**Send K**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



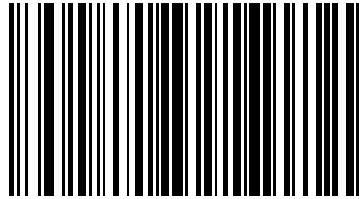
**Send L**



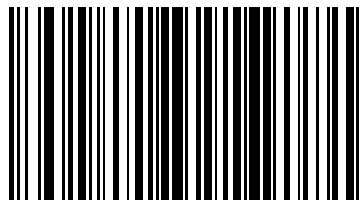
**Send M**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



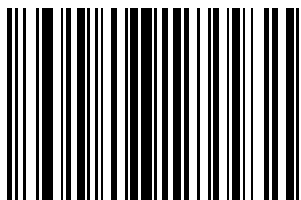
**Send N**



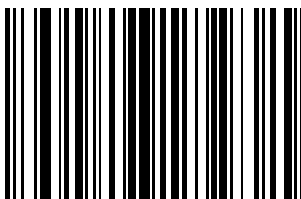
**Send O**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



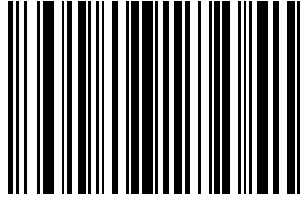
**Send P**



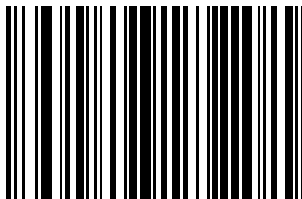
**Send Q**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



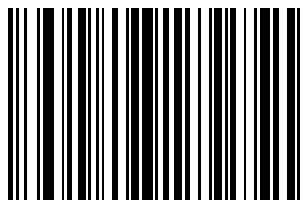
**Send R**



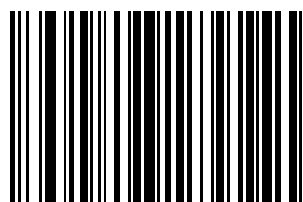
**Send S**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



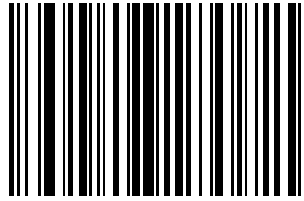
**Send T**



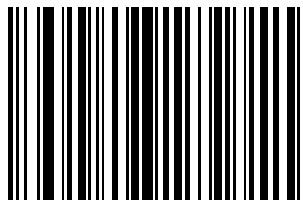
**Send U**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



**Send V**

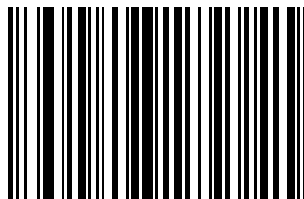


**Send W**

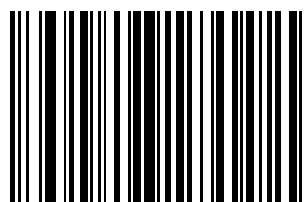


### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



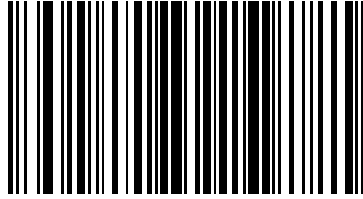
**Send X**



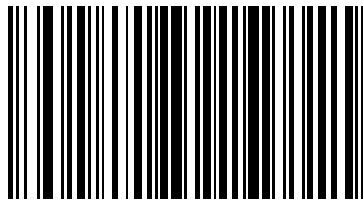
**Send Y**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



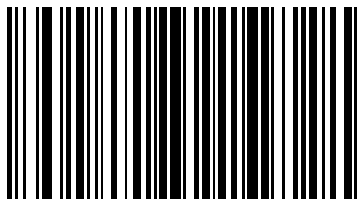
**Send Z**



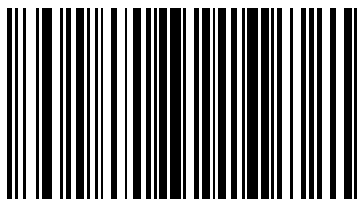
**Send [**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



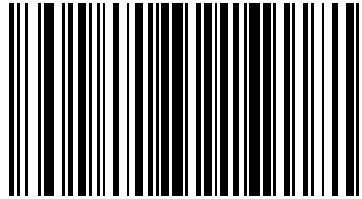
**Send \**



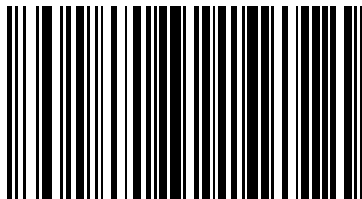
**Send ]**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



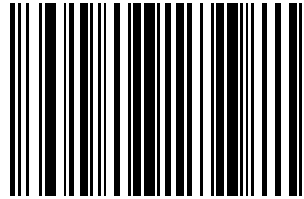
Send ^



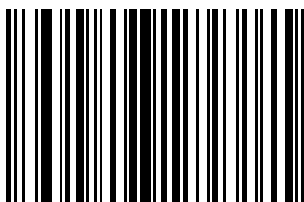
Send \_

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



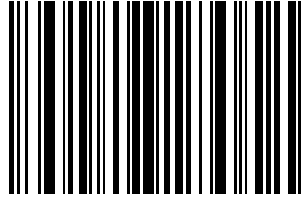
**Send `**



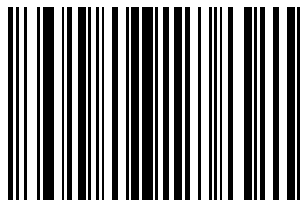
**Send a**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



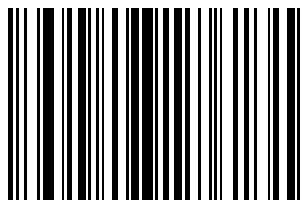
**Send b**



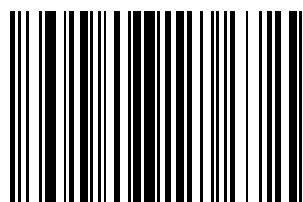
**Send c**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



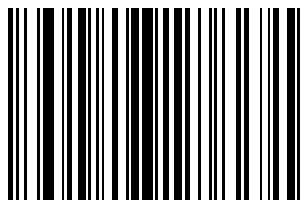
**Send d**



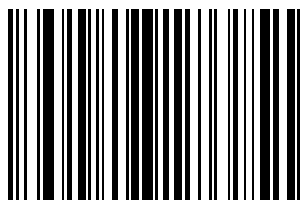
**Send e**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



**Send f**

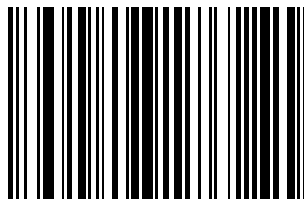


**Send g**

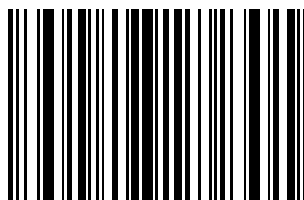


**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



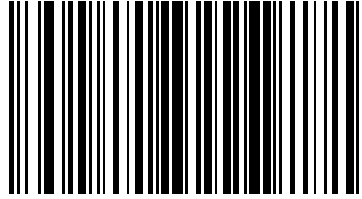
**Send h**



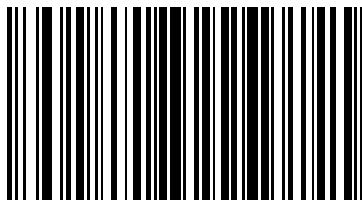
**Send i**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



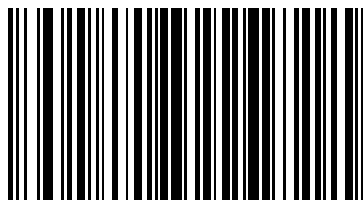
**Send j**



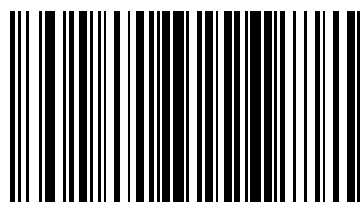
**Send k**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



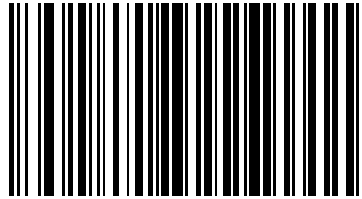
**Send l**



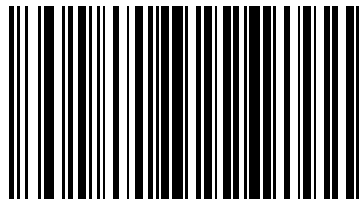
**Send m**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



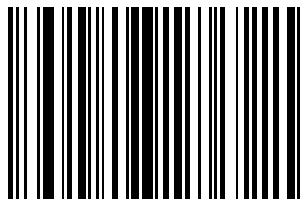
**Send n**



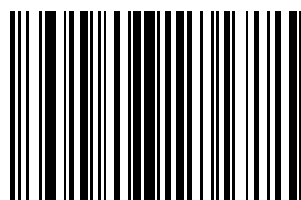
**Send o**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



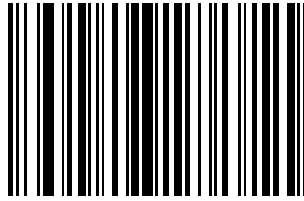
**Send p**



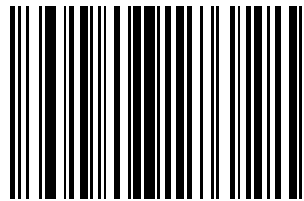
**Send q**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



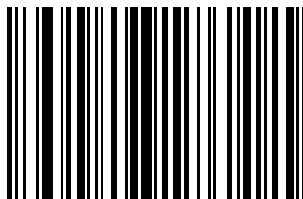
**Send r**



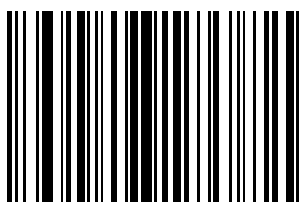
**Send s**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



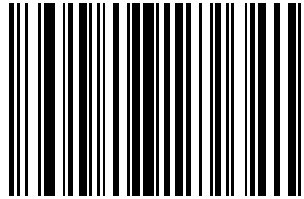
**Send t**



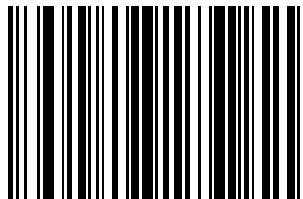
**Send u**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



**Send v**

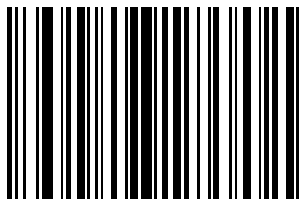


**Send w**

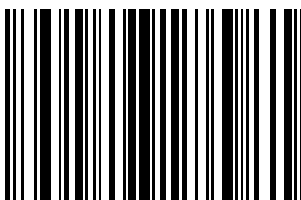


### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



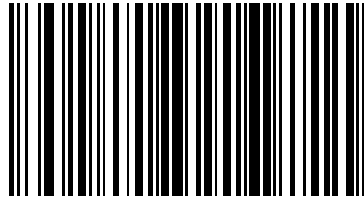
**Send x**



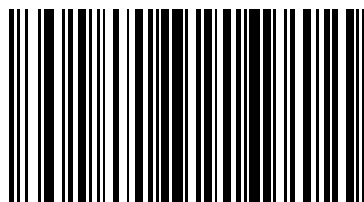
**Send y**

### Keyboard Characters (continued)

Scan a **Send** bar code for the keyboard characters to send.



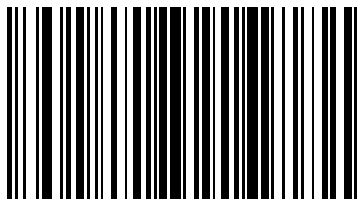
**Send z**



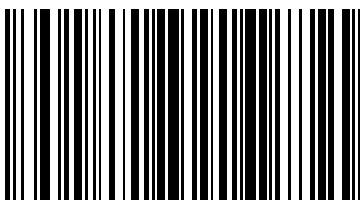
**Send {**

**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.



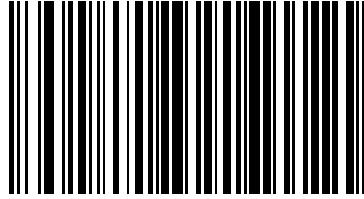
**Send |**



**Send }**

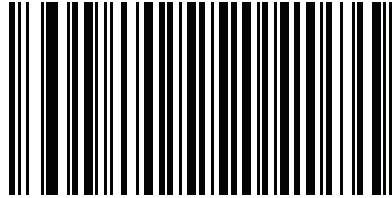
**Keyboard Characters (continued)**

Scan a **Send** bar code for the keyboard characters to send.

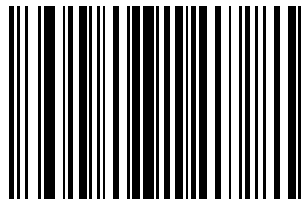


**Send ~**

**Send ALT Characters**

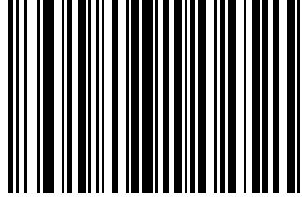


**Send Alt 2**

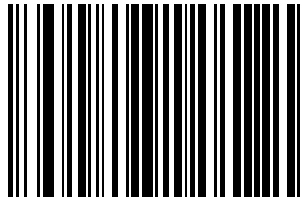


**Send Alt A**

**Send ALT Characters (continued)**

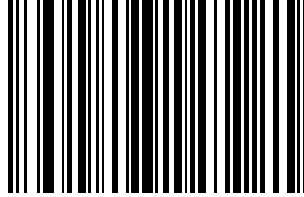


**Send Alt B**

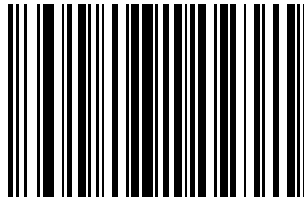


**Send Alt C**

**Send ALT Characters (continued)**

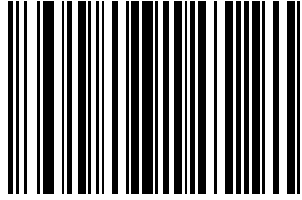


**Send Alt D**

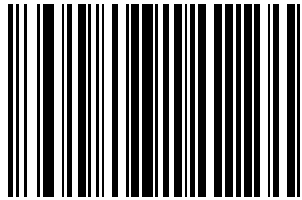


**Send Alt E**

**Send ALT Characters (continued)**



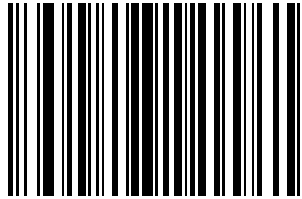
**Send Alt G**



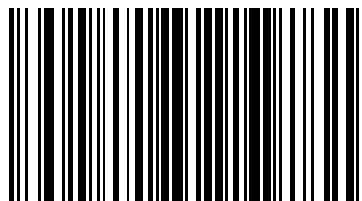
**Send Alt H**



**Send ALT Characters (continued)**

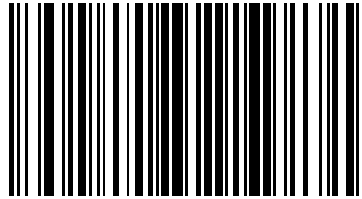


**Send Alt I**

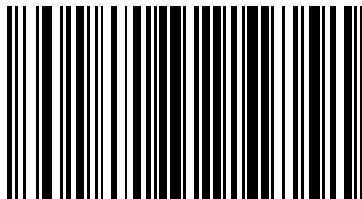


**Send Alt J**

**Send ALT Characters (continued)**

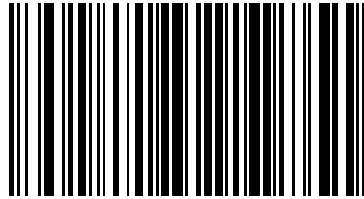


**Send Alt K**

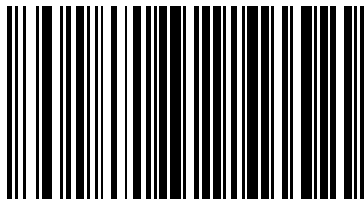


**Send Alt L**

**Send ALT Characters (continued)**

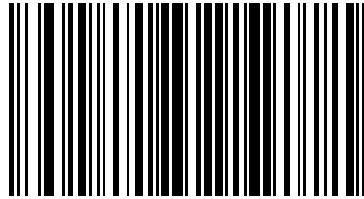


**Send Alt M**

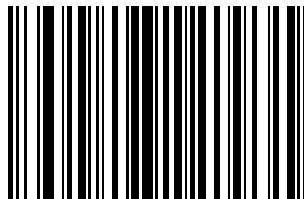


**Send Alt N**

**Send ALT Characters (continued)**

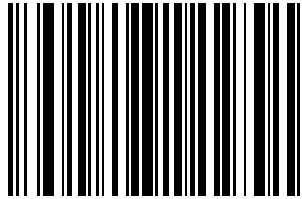


**Send Alt O**

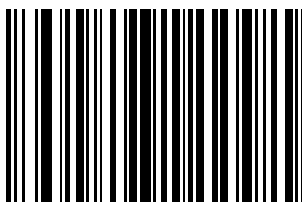


**Send Alt P**

**Send ALT Characters (continued)**

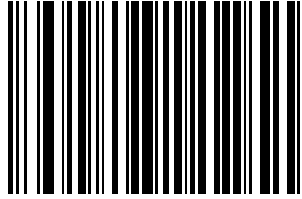


**Send Alt Q**

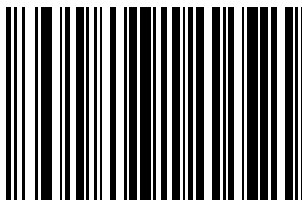


**Send Alt R**

**Send ALT Characters (continued)**

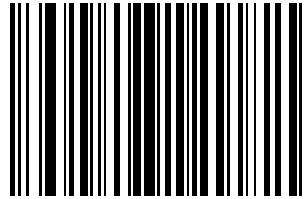


**Send Alt S**



**Send Alt T**

**Send ALT Characters (continued)**

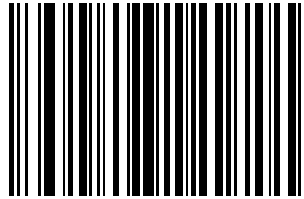


**Send Alt U**

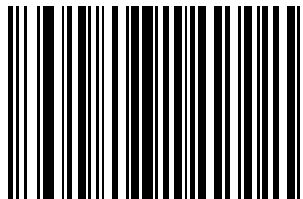


**Send Alt V**

**Send ALT Characters (continued)**



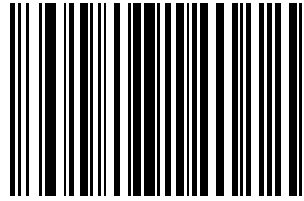
**Send Alt W**



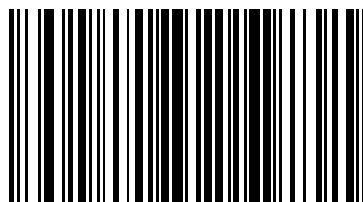
**Send Alt X**



**Send ALT Characters (continued)**

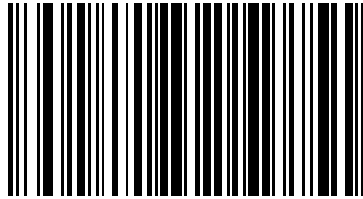


**Send Alt Y**

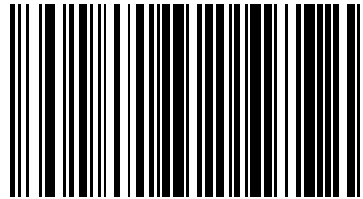


**Send Alt Z**

**Send ALT Characters (continued)**

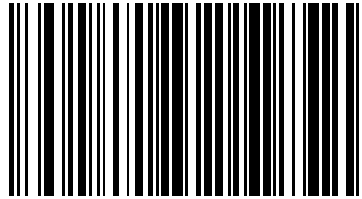


**Send Alt [**

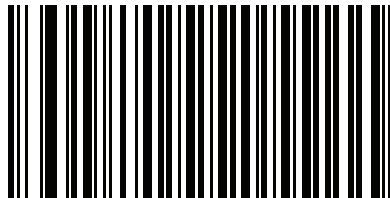


**Send Alt \**

**Send ALT Characters (continued)**

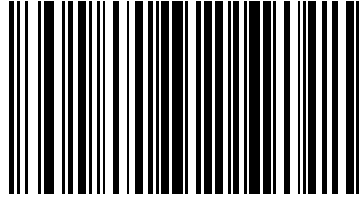


**Send Alt ]**



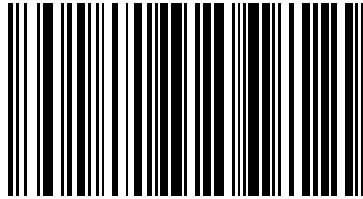
**Send Alt @**

**Send ALT Characters (continued)**

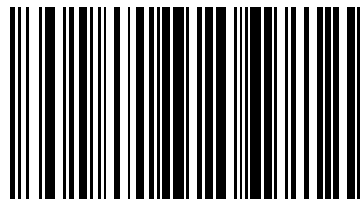


**Send Alt -**

## Send Keypad Characters

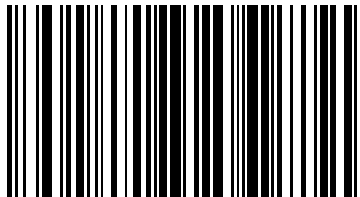


Send Keypad \*

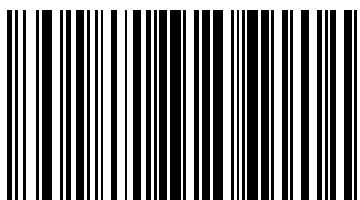


Send Keypad +

**Send Keypad Characters (continued)**

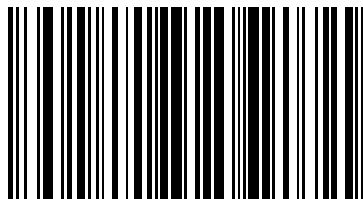


**Send Keypad -**

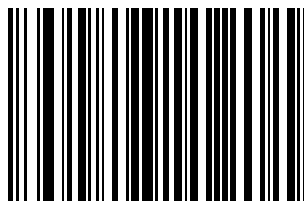


**Send Keypad .**

**Send Keypad Characters (continued)**

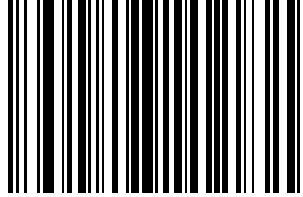


**Send Keypad /**

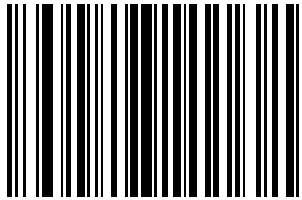


**Send Keypad 0**

**Send Keypad Characters (continued)**



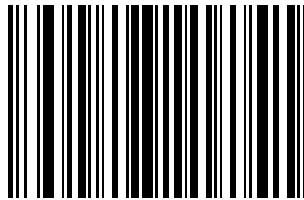
**Send Keypad 1**



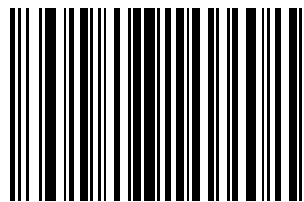
**Send Keypad 2**



**Send Keypad Characters (continued)**

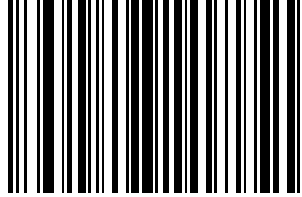


**Send Keypad 3**

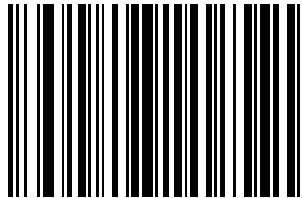


**Send Keypad 4**

**Send Keypad Characters (continued)**

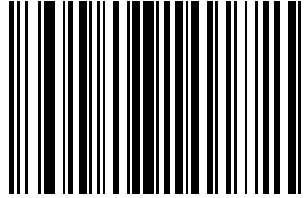


**Send Keypad 5**

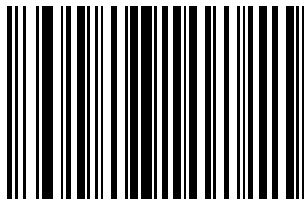


**Send Keypad 6**

**Send Keypad Characters (continued)**

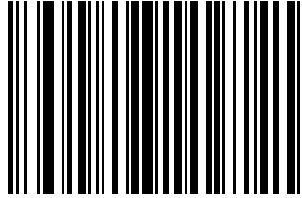


**Send Keypad 7**

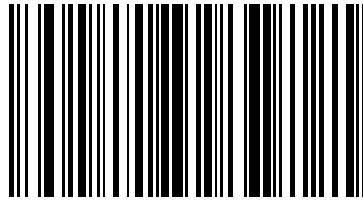


**Send Keypad 8**

**Send Keypad Characters (continued)**

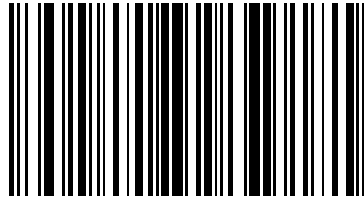


**Send Keypad 9**

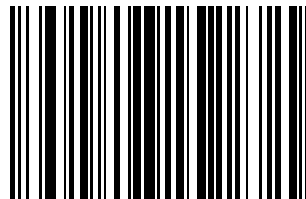


**Send Keypad Enter**

**Send Keypad Characters (continued)**

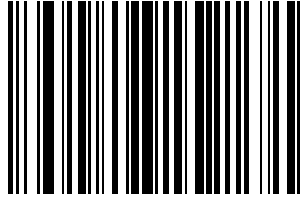


**Send Keypad Numlock**

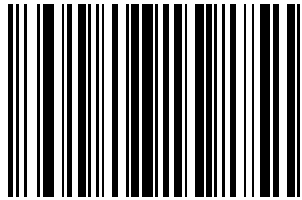


**Send Break Key**

**Send Keypad Characters (continued)**

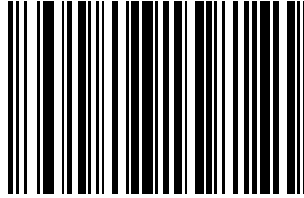


**Send Delete Key**

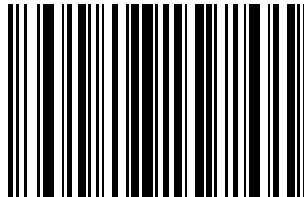


**Send Page Up Key**

**Send Keypad Characters (continued)**

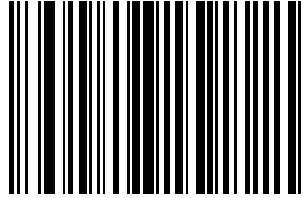


**Send End Key**

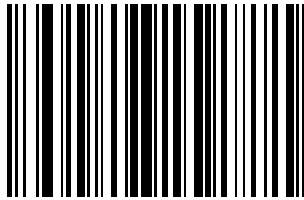


**Send Page Down Key**

**Send Keypad Characters (continued)**



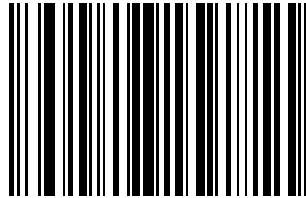
**Send Pause Key**



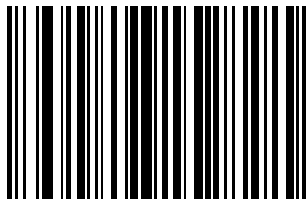
**Send Scroll Lock Key**



**Send Keypad Characters (continued)**

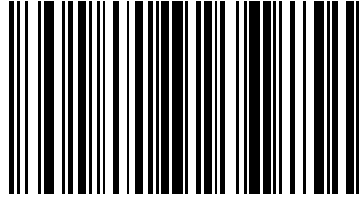


**Send Backspace Key**

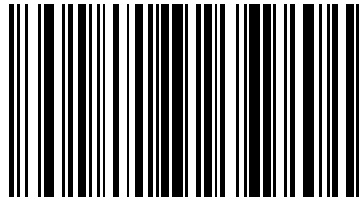


**Send Tab Key**

**Send Keypad Characters (continued)**

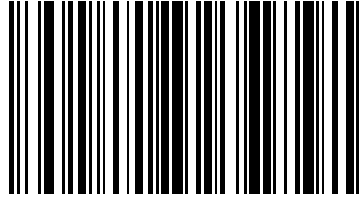


**Send Print Screen Key**

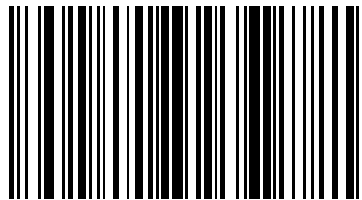


**Send Insert Key**

**Send Keypad Characters (continued)**

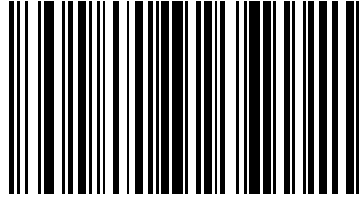


**Send Home Key**

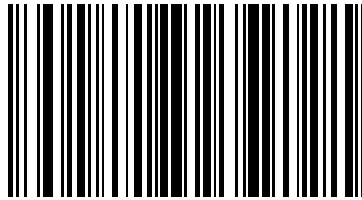


**Send Enter Key**

**Send Keypad Characters (continued)**

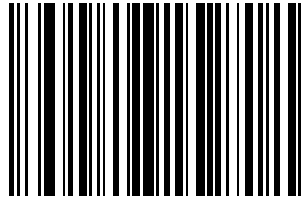


**Send Escape Key**

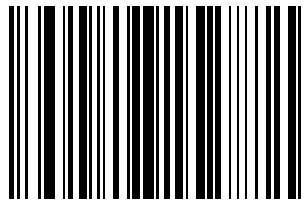


**Send Up Arrow Key**

**Send Keypad Characters (continued)**

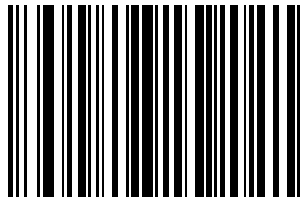


**Send Down Arrow Key**



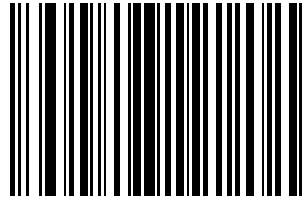
**Send Left Arrow Key**

**Send Keypad Characters (continued)**

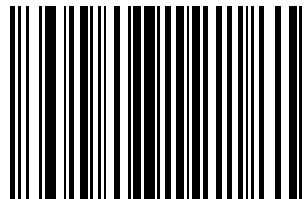


**Send Right Arrow Key**

**Send Function Key**

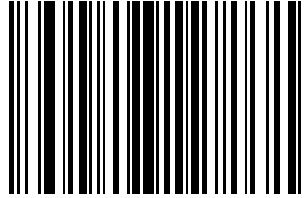


**Send F1 Key**

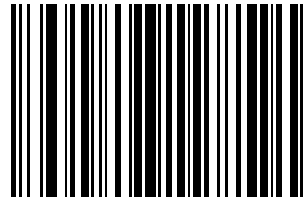


**Send F2 Key**

**Send Function Key (continued)**



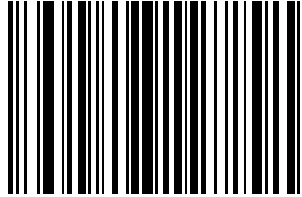
**Send F3 Key**



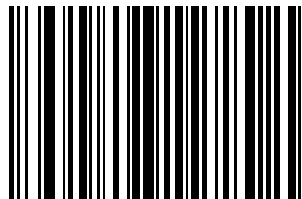
**Send F4 Key**



**Send Function Key (continued)**

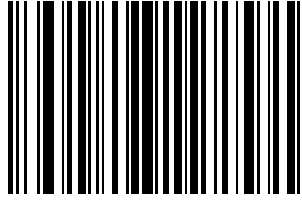


**Send F5 Key**

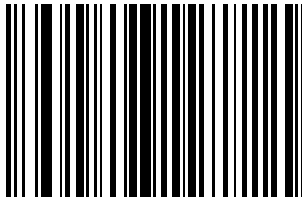


**Send F6 Key**

**Send Function Key (continued)**

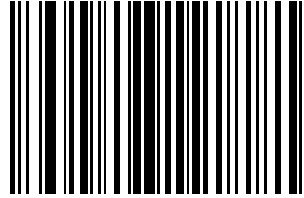


**Send F7 Key**

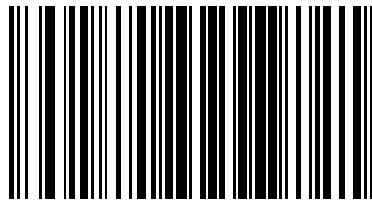


**Send F8 Key**

**Send Function Key (continued)**

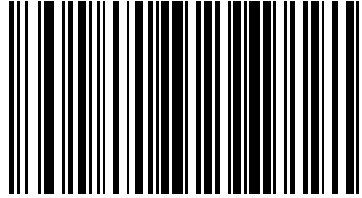


**Send F9 Key**

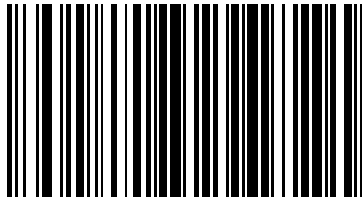


**Send F10 Key**

**Send Function Key (continued)**

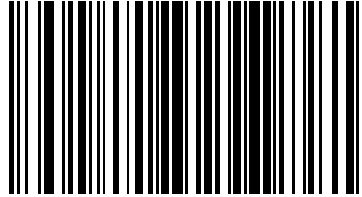


**Send F11 Key**

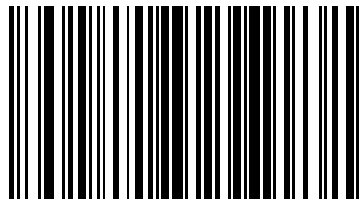


**Send F12 Key**

**Send Function Key (continued)**

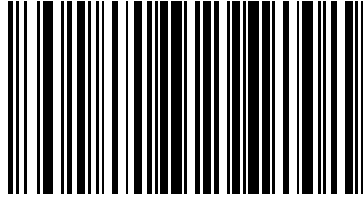


**Send F13 Key**

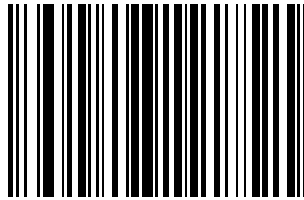


**Send F14 Key**

**Send Function Key (continued)**

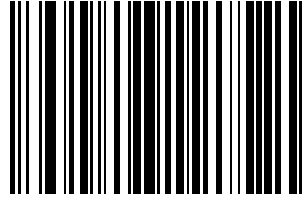


**Send F15 Key**

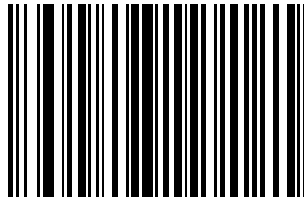


**Send F16 Key**

**Send Function Key (continued)**

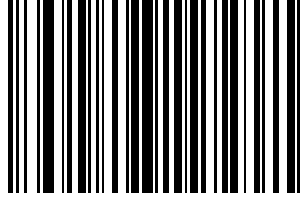


**Send F17 Key**

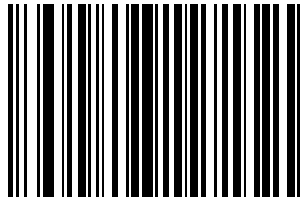


**Send F18 Key**

**Send Function Key (continued)**



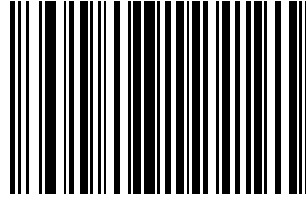
**Send F19 Key**



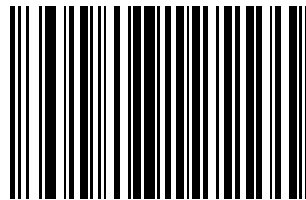
**Send F20 Key**



**Send Function Key (continued)**

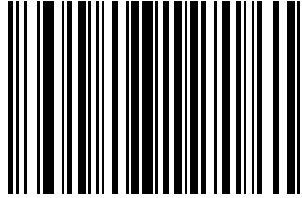


**Send F21 Key**

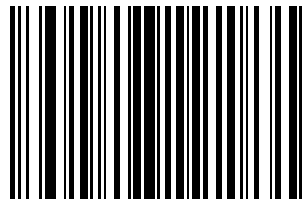


**Send F22 Key**

**Send Function Key (continued)**

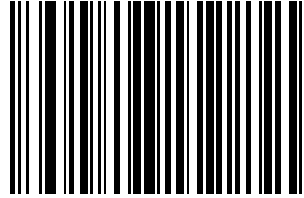


**Send F23 Key**

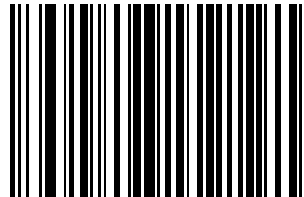


**Send F24 Key**

**Send Function Key (continued)**

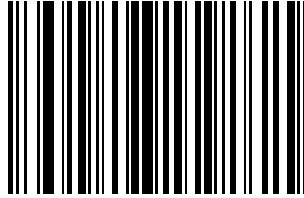


**Send PF1 Key**

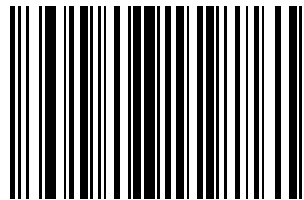


**Send PF2 Key**

**Send Function Key (continued)**

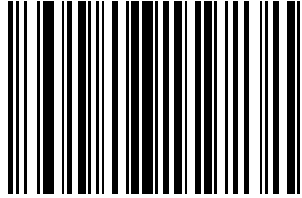


**Send PF3 Key**

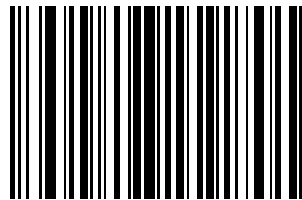


**Send PF4 Key**

**Send Function Key (continued)**

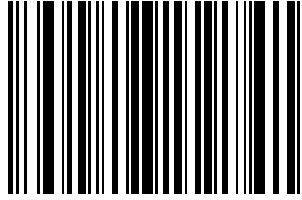


**Send PF5 Key**

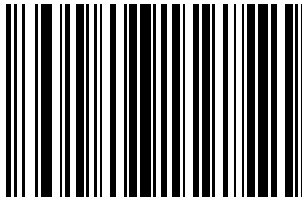


**Send PF6 Key**

**Send Function Key (continued)**

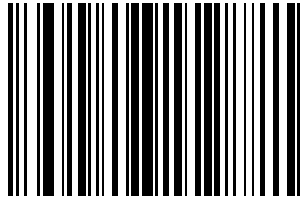


**Send PF7 Key**

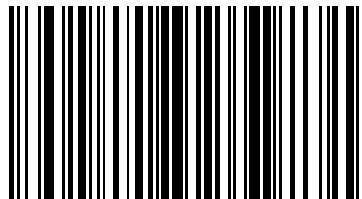


**Send PF8 Key**

**Send Function Key (continued)**

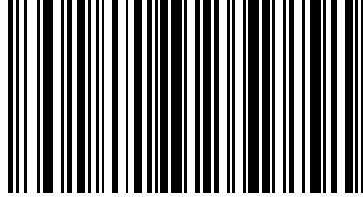


**Send PF9 Key**

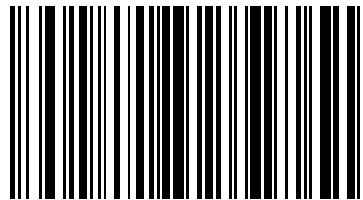


**Send PF10 Key**

**Send Function Key (continued)**



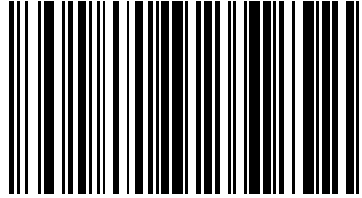
**Send PF11 Key**



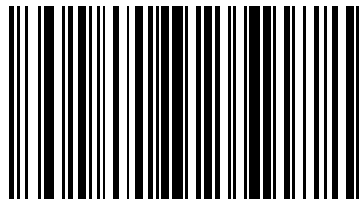
**Send PF12 Key**



**Send Function Key (continued)**

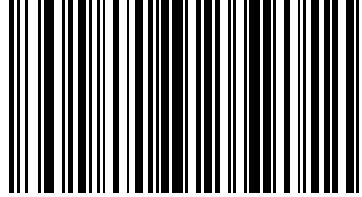


**Send PF13 Key**

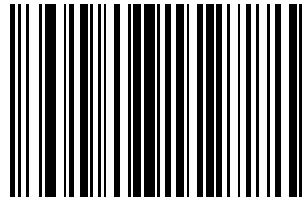


**Send PF14 Key**

**Send Function Key (continued)**

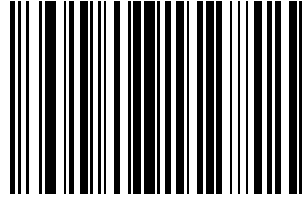


**Send PF15 Key**

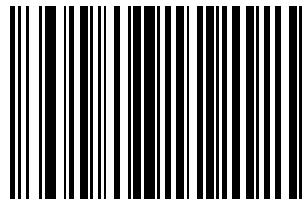


**Send PF16 Key**

**Send Function Key (continued)**

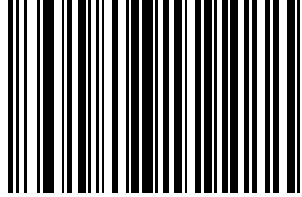


**Send PF17 Key**

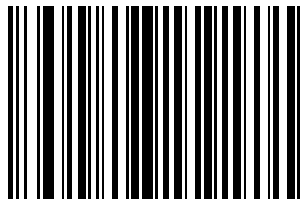


**Send PF18 Key**

**Send Function Key (continued)**

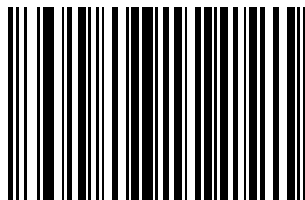


**Send PF19 Key**

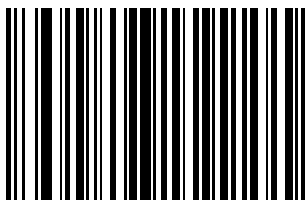


**Send PF20 Key**

**Send Function Key (continued)**

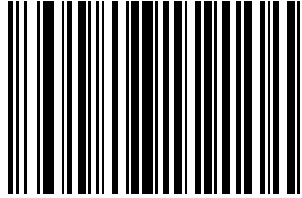


**Send PF21 Key**

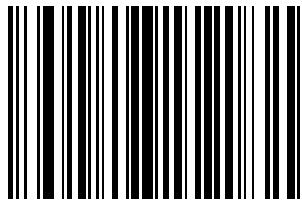


**Send PF22 Key**

**Send Function Key (continued)**

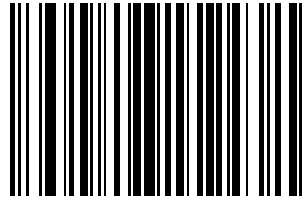


**Send PF23 Key**

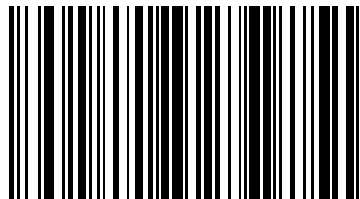


**Send PF24 Key**

**Send Function Key (continued)**

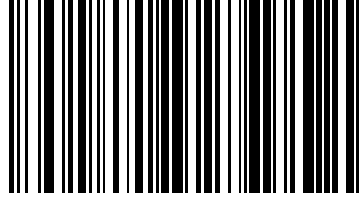


**Send PF25 Key**

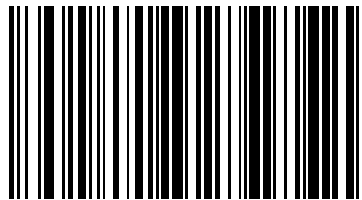


**Send PF26 Key**

**Send Function Key (continued)**



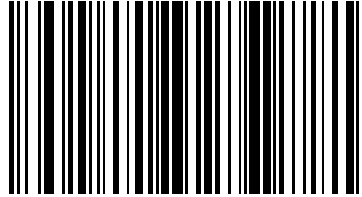
**Send PF27 Key**



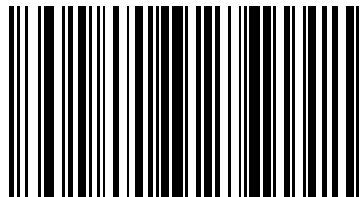
**Send PF28 Key**



**Send Function Key (continued)**



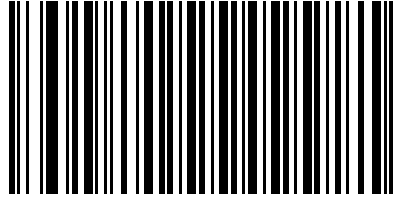
**Send PF29 Key**



**Send PF30 Key**

## Send Right Control Key

The **Send Right Control Key** action sends a tap (press and release) of the right Control key.



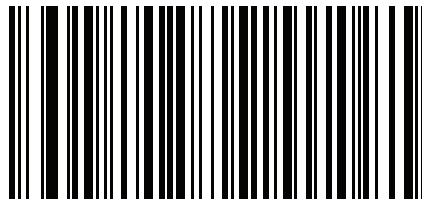
**Send Right Control Key**

## Bar Code Encoding Scheme Specification (Code Pages)

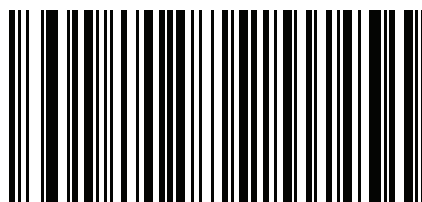
The following actions specify the decoded bar code character encoding scheme (code page) and output the appropriate characters to the host.



**NOTE** If specifying an encoding scheme, ensure it is the first action in the ADF rule to ensure the UTF-8 bar code is converted before the rules apply.

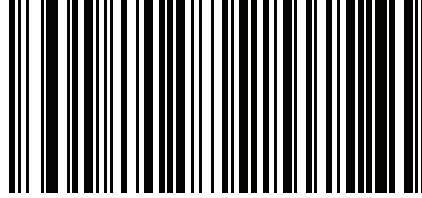


**Windows 1250**  
Latin 2, Central Europe

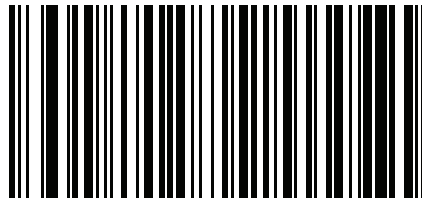


**Windows 1251**  
Cyrillic, Slavic

## Bar Code Encoding Scheme Specification (Code Pages) (continued)

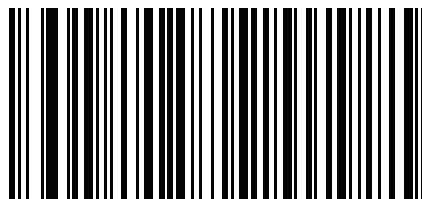


**Windows 1252**  
**Latin 1, Western European**

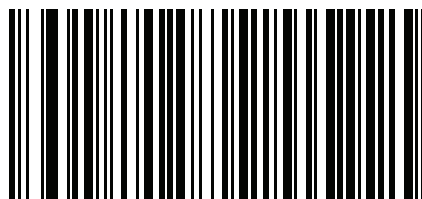


**Windows 1253**  
**Greek**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

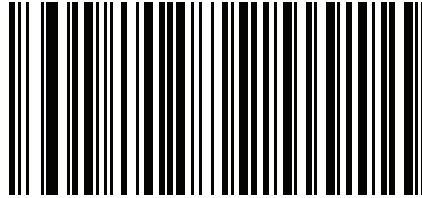


**Windows 1254  
Latin 5, Turkish**

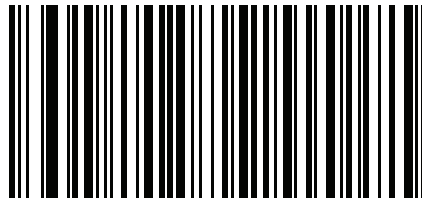


**Windows 1255  
Hebrew**

## Bar Code Encoding Scheme Specification (Code Pages) (continued)

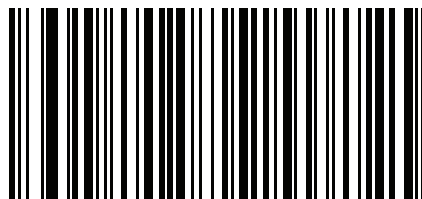


**Windows 1256**  
**Arabic**

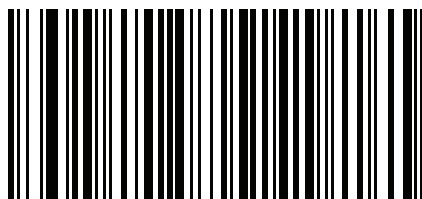


**Windows 1257**  
**Baltic**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

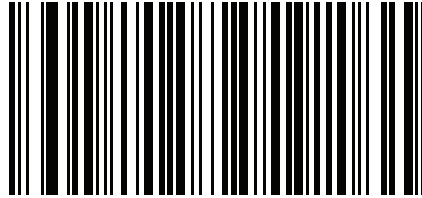


**Windows 1258  
Vietnamese**

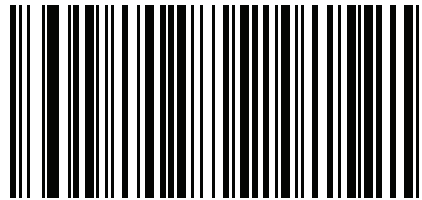


**Windows 874  
Thai**

## Bar Code Encoding Scheme Specification (Code Pages) (continued)



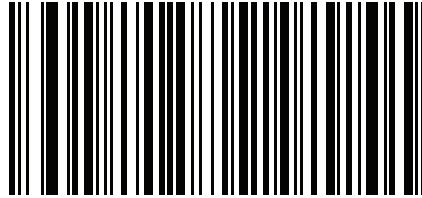
**Windows 20866  
Cyrillic KOI8-R**



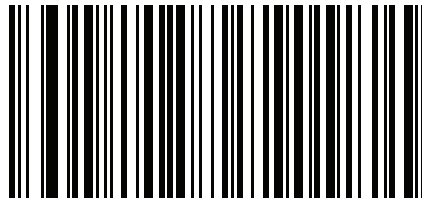
**Windows 932  
Japanese Shift-JIS**



**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

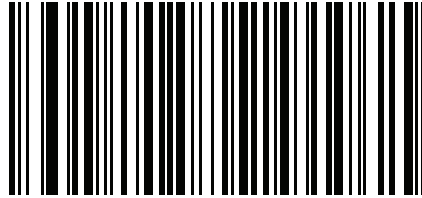


**Windows 936  
Simplified Chinese GBK**

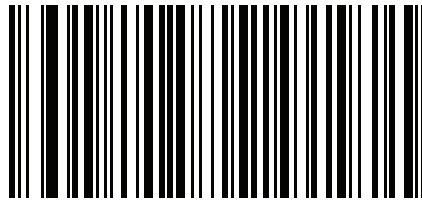


**Windows 54936  
Simplified Chinese GB18030**

## Bar Code Encoding Scheme Specification (Code Pages) (continued)

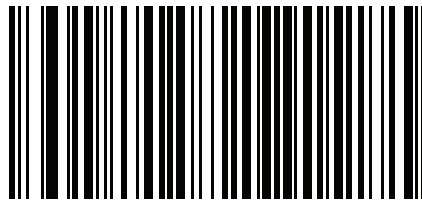


**Windows 949  
Korean Hangul**



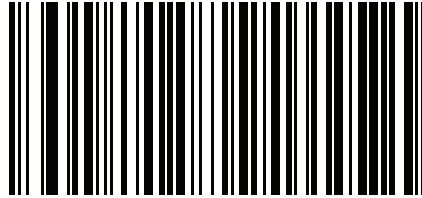
**Windows 950  
Traditional Chinese Big5**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

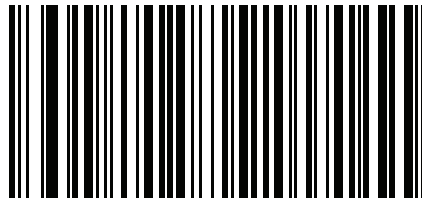


**Mac CP10000**  
**Mac Roman**

## Bar Code Encoding Scheme Specification (Code Pages) (continued)

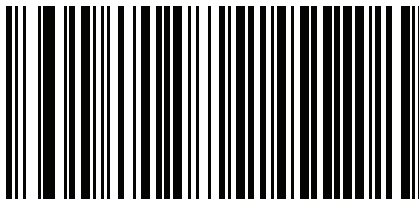


**MS-DOS 437**  
**Latin US**

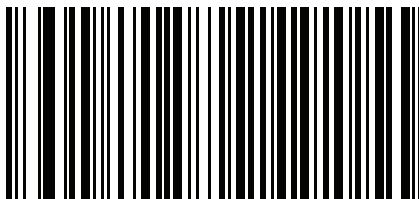


**MS-DOS 737**  
**Greek**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

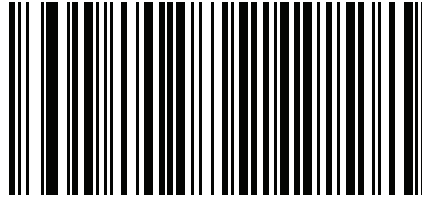


**MS-DOS 775**  
**Baltic**

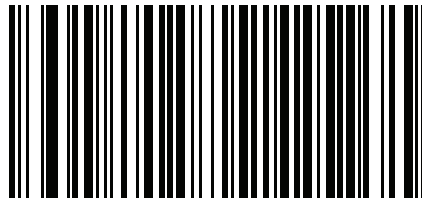


**MS-DOS 850**  
**Latin 1**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

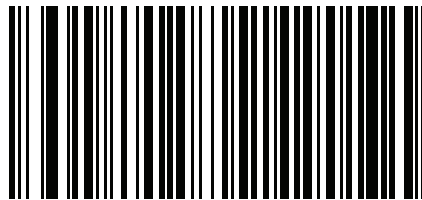


**MS-DOS 852**  
**Latin 2**

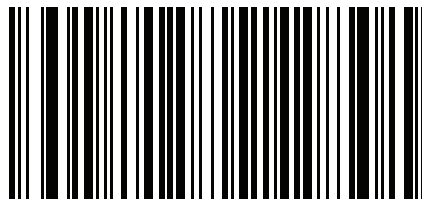


**MS-DOS 855**  
**Cyrillic**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

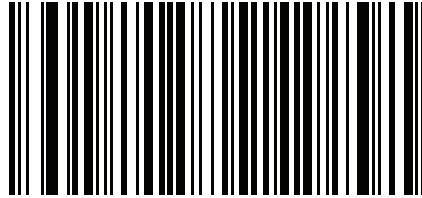


**MS-DOS 857  
Turkish**

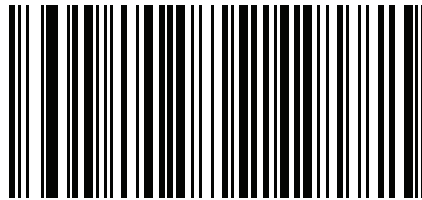


**MS-DOS 860  
Portuguese**

## Bar Code Encoding Scheme Specification (Code Pages) (continued)



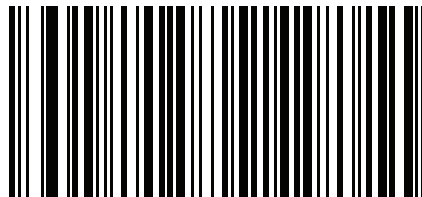
**MS-DOS 861**  
**Icelandic**



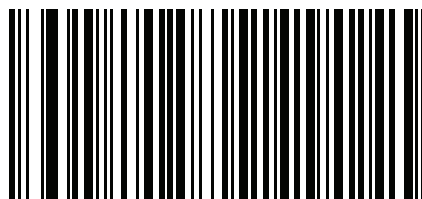
**MS-DOS 862**  
**Hebrew**



**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

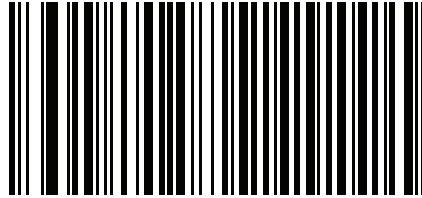


**MS-DOS 863  
French Canada**

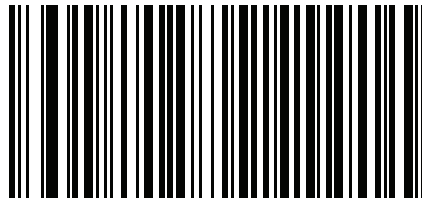


**MS-DOS 865  
Nordic**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

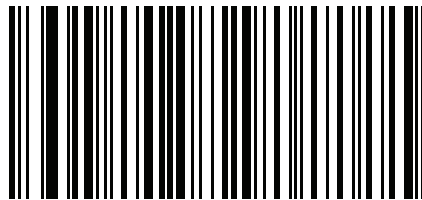


**MS-DOS 866  
Cyrillic**

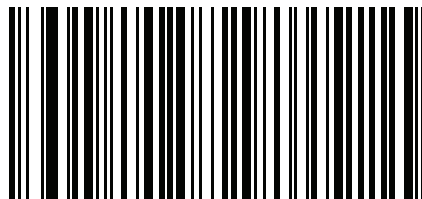


**MS-DOS 869  
Greek 2**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

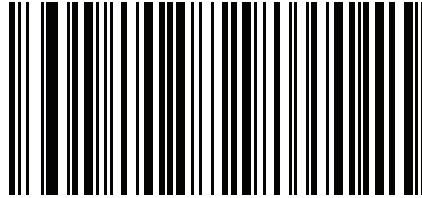


**ISO 8859-1**  
**Latin 1, Western European**

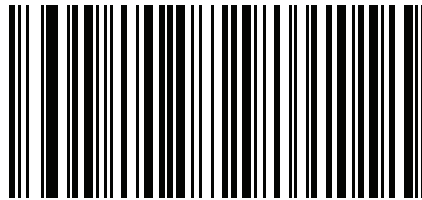


**ISO 8859-2**  
**Latin 2, Central European**

## Bar Code Encoding Scheme Specification (Code Pages) (continued)

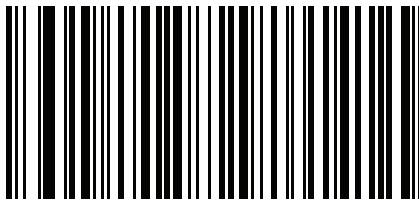


**ISO 8859-3**  
**Latin 3, South European**

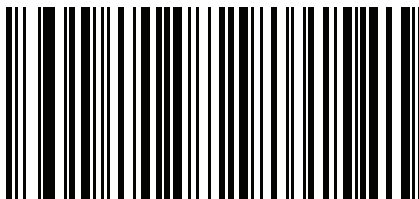


**ISO 8859-4**  
**Latin 4, North European**

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

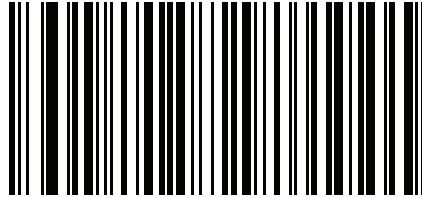


**ISO 8859-5  
Cyrillic**

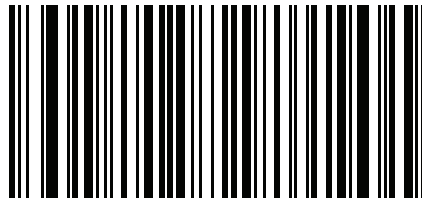


**ISO 8859-6  
Arabic**

## Bar Code Encoding Scheme Specification (Code Pages) (continued)

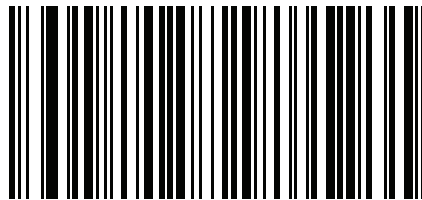


ISO 8859-7  
Greek

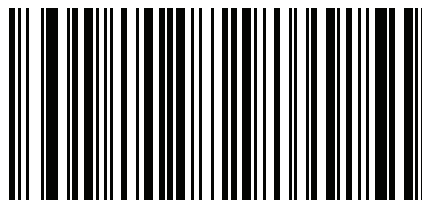


ISO 8859-8  
Hebrew

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

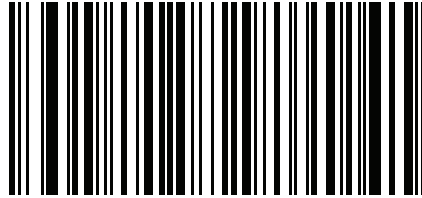


**ISO 8859-9**  
**Latin 5, Turkish**

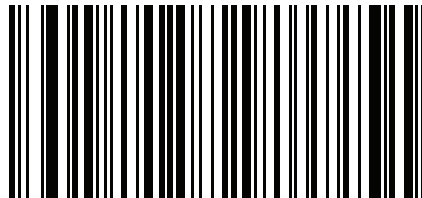


**ISO 8859-10**  
**Latin 6, Nordic**

## Bar Code Encoding Scheme Specification (Code Pages) (continued)



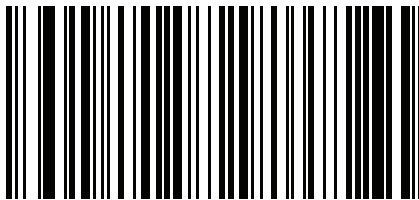
ISO 8859-11  
Thai



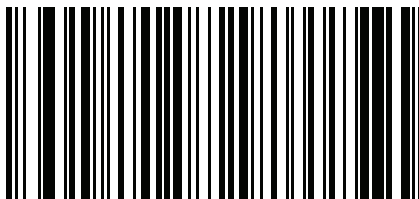
ISO 8859-13  
Latin 7, Baltic



**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

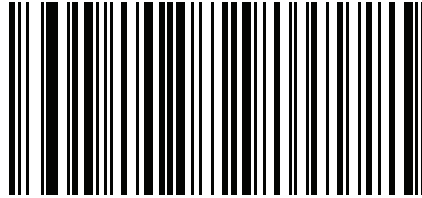


**ISO 8859-14**  
Latin 8, Celtic

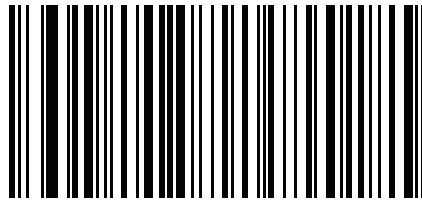


**ISO 8859-15**  
Latin 9

## Bar Code Encoding Scheme Specification (Code Pages) (continued)

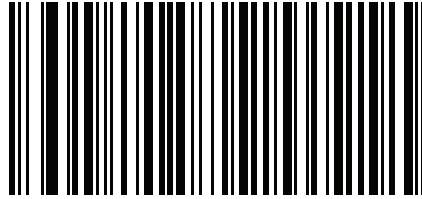


**ISO 8859-16**  
**Latin 10, South-Eastern European**



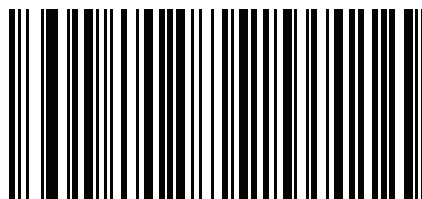
**UTF-8**

**Note:** Not valid for specifying CJK bar code.

**Bar Code Encoding Scheme Specification (Code Pages) (continued)**

**UTF-16\_LE**  
**UTF-16 Little Endian**

**Note:** Not valid for specifying CJK bar code.

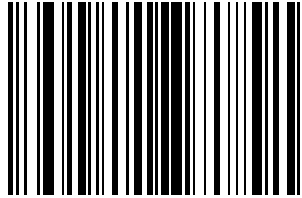


**UTF-16\_BE**  
**UTF-16 Big Endian**

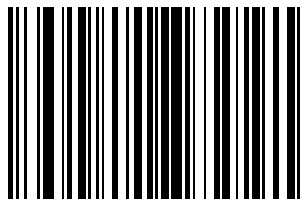
**Note:** Not valid for specifying CJK bar code.

## Turn On/Off Rule Sets

Use these bar codes to turn rule sets on and off.



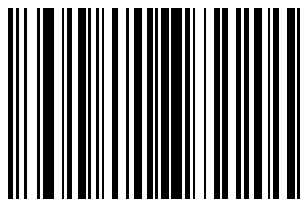
Turn On Rule Set 1



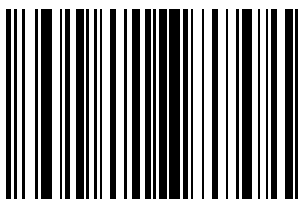
Turn On Rule Set 2

## Turn On/Off Rule Sets (continued)

Use these bar codes to turn rule sets on and off.



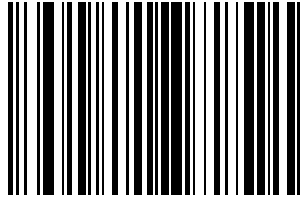
Turn On Rule Set 3



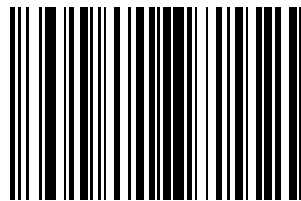
Turn On Rule Set 4

### Turn On/Off Rule Sets (continued)

Use these bar codes to turn rule sets on and off.



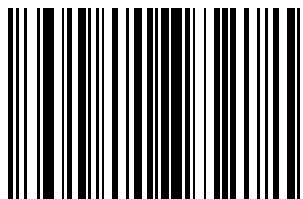
Turn Off Rule Set 1



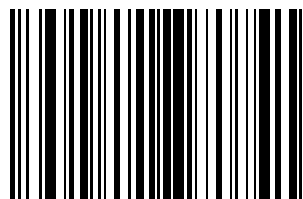
Turn Off Rule Set 2

## Turn On/Off Rule Sets (continued)

Use these bar codes to turn rule sets on and off.



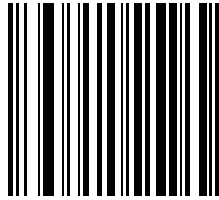
**Turn Off Rule Set 3**



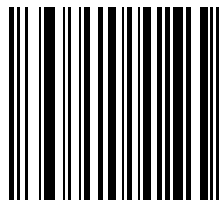
**Turn Off Rule Set 4**

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## Alphanumeric Keyboard



Space

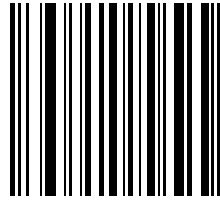


#

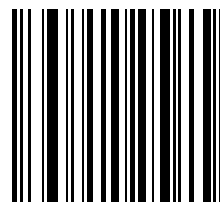


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## Alphanumeric Keyboard (continued)



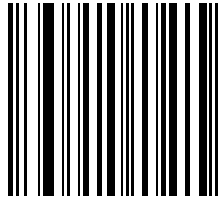
\$



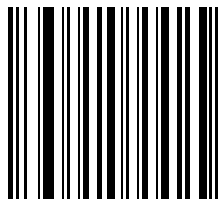
%

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## Alphanumeric Keyboard (continued)



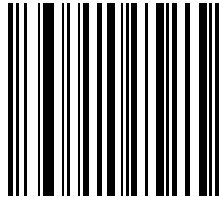
\*



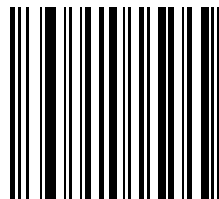
+

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## Alphanumeric Keyboard (continued)



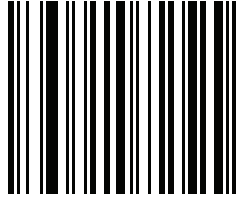
-  
(Dash)



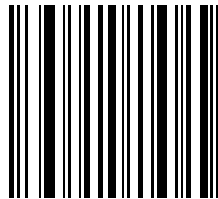
.

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## Alphanumeric Keyboard (continued)



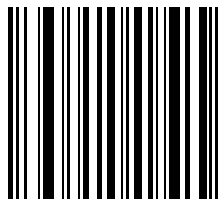
,  
(Comma)



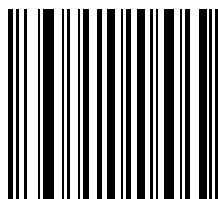
/

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## Alphanumeric Keyboard (continued)



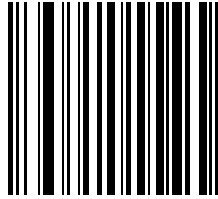
!



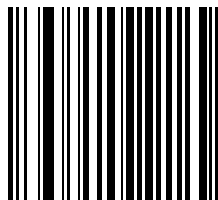
“

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## Alphanumeric Keyboard (continued)



&

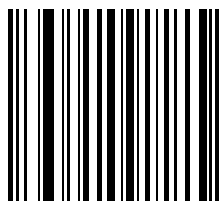


'

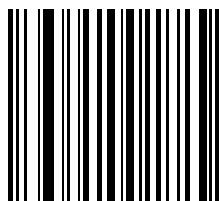
(Single Close Quote)

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## Alphanumeric Keyboard (continued)



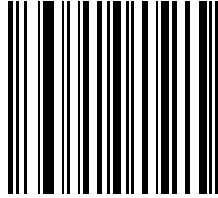
(



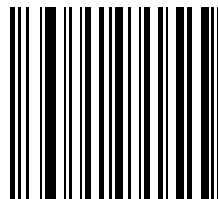
)

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## Alphanumeric Keyboard (continued)



;

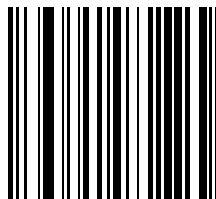


;

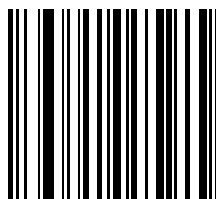


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## Alphanumeric Keyboard (continued)



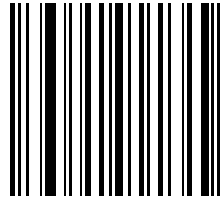
<



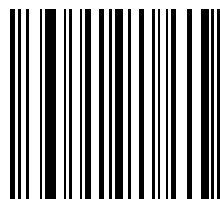
=

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## Alphanumeric Keyboard (continued)



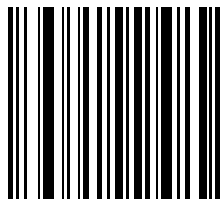
>



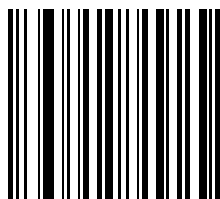
?

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## Alphanumeric Keyboard (continued)



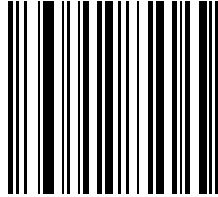
@



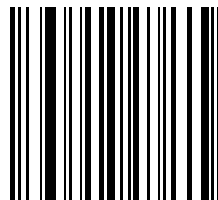
[

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## Alphanumeric Keyboard (continued)



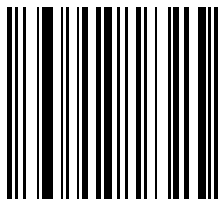
\



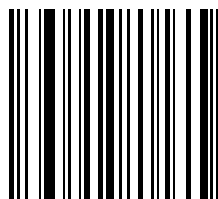
]

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## Alphanumeric Keyboard (continued)



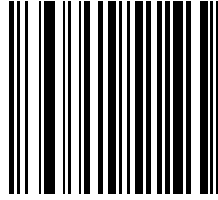
^



            
(Underscore)

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## Alphanumeric Keyboard (continued)

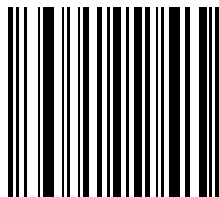


‘  
(Single Open Quote)

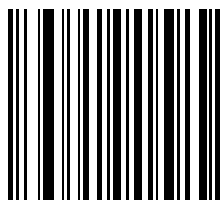
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## Alphanumeric Keyboard (continued)

✓ **NOTE** Do not confuse the numeric bar codes in this section with those on the numeric keypad.



0



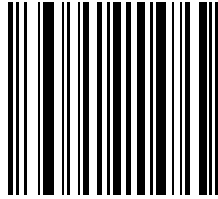
1

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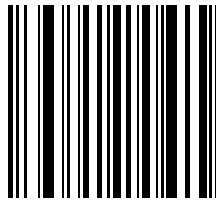
## Alphanumeric Keyboard (continued)



**NOTE** Do not confuse the numeric bar codes in this section with those on the numeric keypad.



2



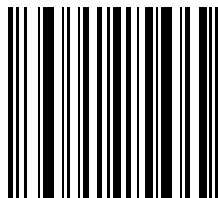
3



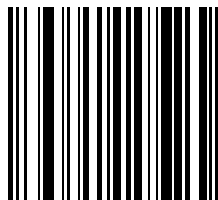
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## Alphanumeric Keyboard (continued)

✓ **NOTE** Do not confuse the numeric bar codes in this section with those on the numeric keypad.



4



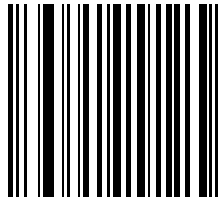
5

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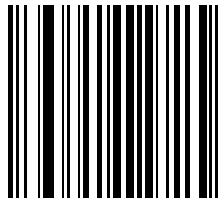
## Alphanumeric Keyboard (continued)



**NOTE** Do not confuse the numeric bar codes in this section with those on the numeric keypad.



6

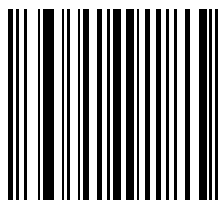


7

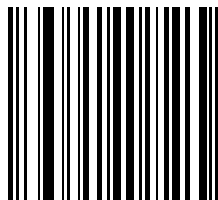
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## Alphanumeric Keyboard (continued)

✓ **NOTE** Do not confuse the numeric bar codes in this section with those on the numeric keypad.



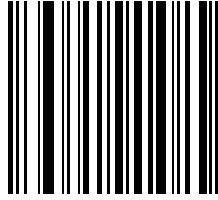
8



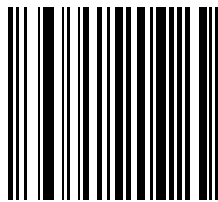
9

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## Alphanumeric Keyboard (continued)



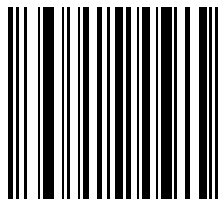
A



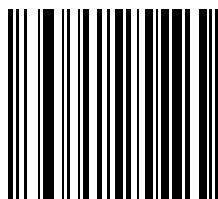
B

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## Alphanumeric Keyboard (continued)



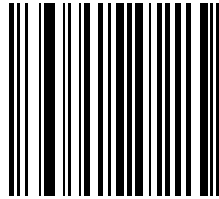
C



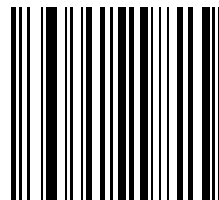
D

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## Alphanumeric Keyboard (continued)



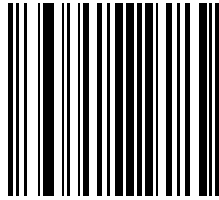
E



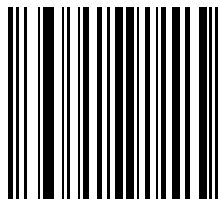
F

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## Alphanumeric Keyboard (continued)



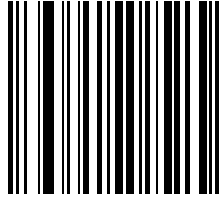
G



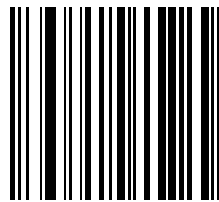
H

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## Alphanumeric Keyboard (continued)



I

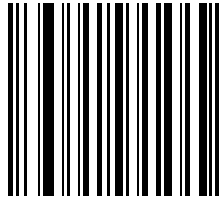


J

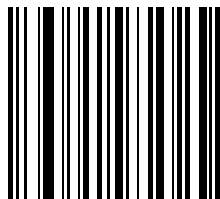


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## Alphanumeric Keyboard (continued)



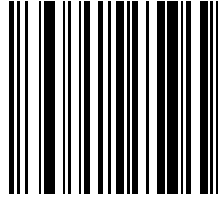
K



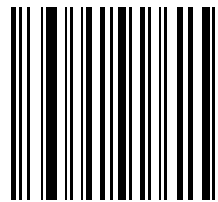
L

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## Alphanumeric Keyboard (continued)



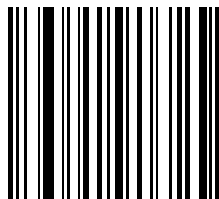
M



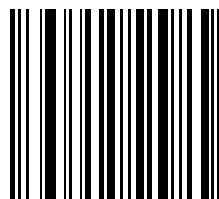
N

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## Alphanumeric Keyboard (continued)



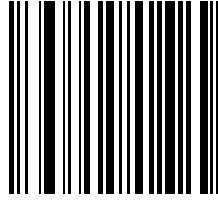
O



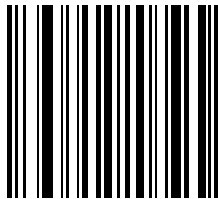
P

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## Alphanumeric Keyboard (continued)



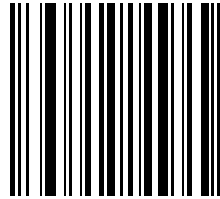
Q



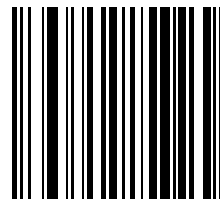
R

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## Alphanumeric Keyboard (continued)



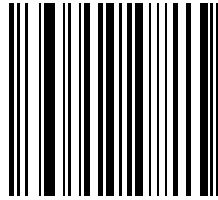
S



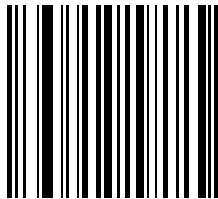
T

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## Alphanumeric Keyboard (continued)



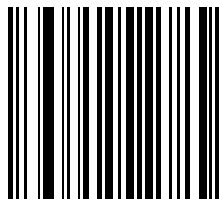
U



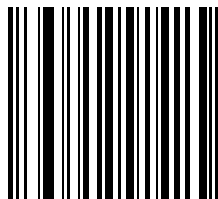
V

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## Alphanumeric Keyboard (continued)



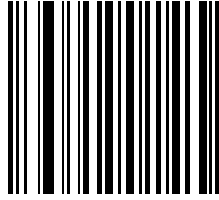
w



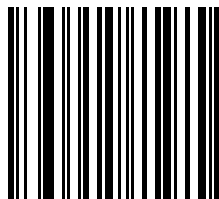
x

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## Alphanumeric Keyboard (continued)



Y

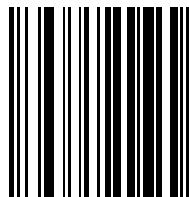


Z

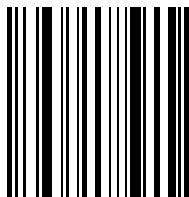


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## Alphanumeric Keyboard (continued)



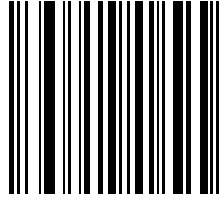
**Cancel**



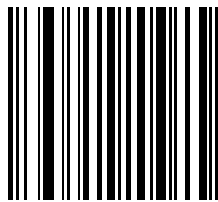
**End of Message**

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## Alphanumeric Keyboard (continued)



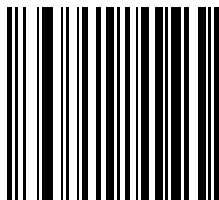
a



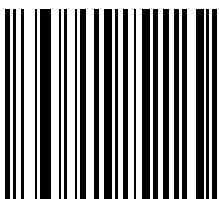
b

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## Alphanumeric Keyboard (continued)



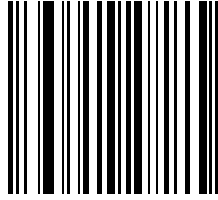
c



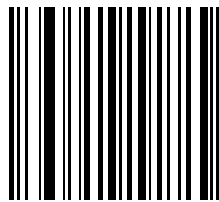
d

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## Alphanumeric Keyboard (continued)



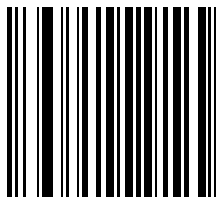
e



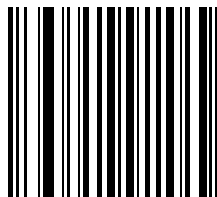
f

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## Alphanumeric Keyboard (continued)



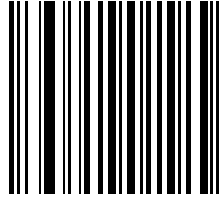
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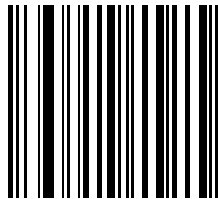
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## Alphanumeric Keyboard (continued)



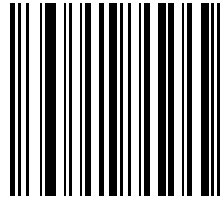
i



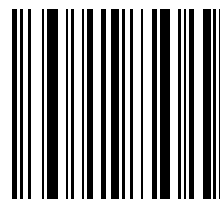
j

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## Alphanumeric Keyboard (continued)



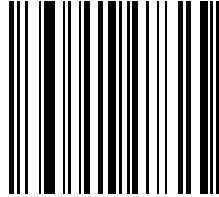
k



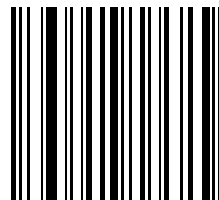
l

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## Alphanumeric Keyboard (continued)



m

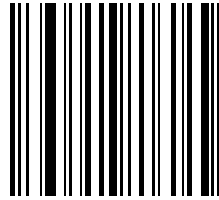


n

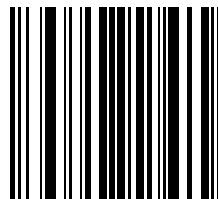


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## Alphanumeric Keyboard (continued)



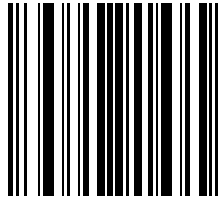
o



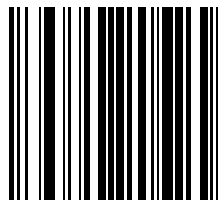
p

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## Alphanumeric Keyboard (continued)



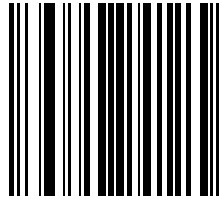
q



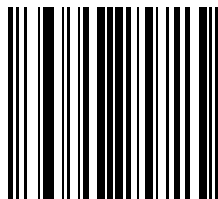
r

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## Alphanumeric Keyboard (continued)



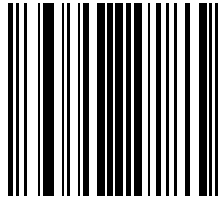
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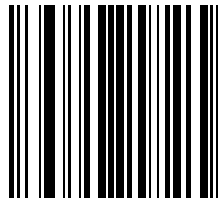
t

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## Alphanumeric Keyboard (continued)



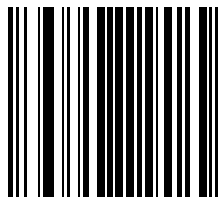
u



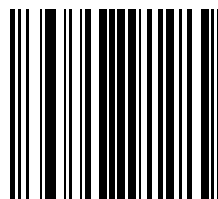
v

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## Alphanumeric Keyboard (continued)



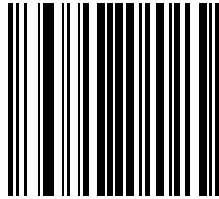
w



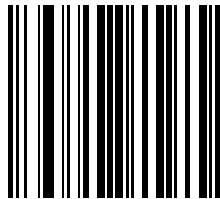
x

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## Alphanumeric Keyboard (continued)



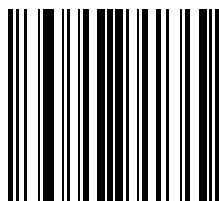
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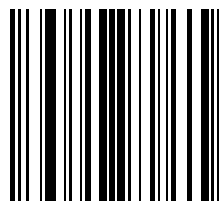
z

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## Alphanumeric Keyboard (continued)



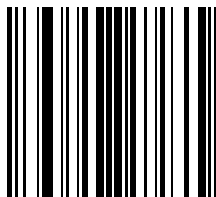
{



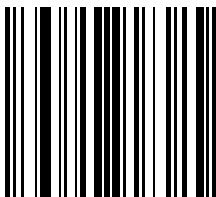
}

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## Alphanumeric Keyboard (continued)



}



~



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