



METROLOGIC INSTRUMENTS, INC.

MetroSelect[®]
Configuration Guide



Copyright

© 2007 by Metrologic Instruments, Inc. All rights reserved. No part of this work may be reproduced, transmitted, or stored in any form or by any means without prior written consent, except by reviewer, who may quote brief passages in a review, or provided for in the Copyright Act of 1976.

Trademarks

Metrologic is a registered trademark of Metrologic Instruments, Inc. Products identified in this document are hereby acknowledged as trademarks, registered or otherwise, of Metrologic Instruments, Inc. or their respective companies.

TABLE OF CONTENTS

Introduction

Symbol Key xi

Bar Code Configuration Methods

Single-Code Method xii
Multi-Code Method xii

Need to Start Over?

Recall Defaultsxiii

Section A: Code Types and Decode Rules

UPC/EAN..... 1
Code 128.....3
Code 39.....4
Interleaved 2 of 5.....6
Standard 2 of 5.....9
Other 2 of 5 Codes 10
Codabar..... 12
Code 93..... 13
Code 11 13
Telepen..... 14
Plessey Codes..... 15
Other Decode Features 17
Configurable Code Lengths..... 18
RSS 14 Features21
RSS Limited Features23
RSS Expanded Features.....25

TABLE OF CONTENTS

Section B: Supplements

Two Digit Supplements/Redundancy	1
Five Digit Supplements/Redundancy	1
Supplements Required/Not Required	2
Remote Supplemental Requirement	2
Bookland (978) Supplement Required	3
977 (2 Digit) Supplement Required	3
378/379 French Supplement Requirement.....	3
434/439 German Supplement Required	4
414/419 German Supplement Required	4
# System 2 Requires Supplements	4
# System 5 Requires Supplements	5
8711685 Requires 5-Digit Supplements	5
Coupon Code 128	5
Code 128 Group Separators	6
Code 128 'jC1' Extended Code Format.....	6
100 msec to Find Supplemental	6
200 msec to Find Supplemental	6
400 msec to Find Supplemental	7
Code ID's with Supplements	7
Allow 2/5 on 977 Bar Code	7
Allow 2 on 977 Bar Code	7
Beep Once/ Twice on Supplements	8
ISBN Check Digit Transmission	8
Bookland to ISBN Conversion	9

TABLE OF CONTENTS

ISBN Re-Formatting	9
ISSN Check Digit Transmission	10
ISSN Re-Formatting	10
977 to ISSN Conversion	10
Number System 4 Coupon Code 128.....	11
UPC Discard.....	11
Supplements and UPC in Same Line	11

Section C: Communications

Enable RS-232	1
Load Keyboard Wedge Defaults.....	1
Enable Light Pen/Wand Communication.....	1
Enable Keyboard Wedge Emulation.....	1
Enable Stand-Alone Keyboard Scanner.....	1
Load OCIA Defaults.....	2
Enable OCIA Output.....	2
Load IBM 46xx Defaults	2
Enable IBM 46xx Communication	2
Low Speed USB	3
Enable No Communication Mode.....	3
Reserved	3

Section D: Scanner Operation

Configuration Mode Options.....	1
Scan Buffers.....	2
Redundant Scans	4
Miscellaneous Decode Features	6
Depth of Field Adjustments	7

TABLE OF CONTENTS

Same Symbol Time Outs.....	8
Barcode Absence	9
LED Options	10
Beeper Options.....	12
Inter-Character Data Transmission Delays	17
Inter-Record Data Transmission Delays.....	18
Communication Time Out Options	19
Host Scanner Commands	21
Power Save Modes	26
Japanese Double Field Support	30
Test Modes.....	35
 Section E: Prefixes/Suffixes	
Configurable Prefixes, All Data.....	1
Configurable ID Characters, Code Specific.....	3
Identifiers Character	3
Standard Prefix Characters	8
Standard Suffix Characters	14
Longitudinal Redundancy Check (LRC)	16
Configurable Suffixes, All Data.....	17
Special Formats.....	20
Character Replacements.....	21
 Section F: Code Formatting	
UPC/EAN.....	1
Codabar.....	5
Code 39.....	7
Code 11.....	9

TABLE OF CONTENTS

Telepen.....	9
Plessey.....	10
2 of 5.....	12
Section G: RS-232	
Enable RS-232 Mode	1
Parity Features	2
Baud Rates.....	3
Data/Stop Bits.....	5
Hardware Handshaking	6
Software Handshaking	9
Miscellaneous.....	12
Section H: Keyboard	
Enable Keyboard Emulation	1
Country/Scan Code Table Selects	2
Keyboard/System Type	4
Special Keyboard Features	5
Inter-Scan Code Delays	9
Control Sets.....	10
3151 Terminal Keyboard	12
Section I: OCIA	
Load OCIA Defaults.....	1
Enable OCIA.....	1
DTS/Siemens	1
DTS/Nixdorf.....	1
NCR-S	1
NCR-F	1

TABLE OF CONTENTS

Section J: Light Pen/Laser Emulation

Enable Light Pen Mode	1
Space/Bar Height	1
Transmit Code 39	1
Transmit as Scanned.....	1
Poll Light Pen Source	2
Light Pen Extra Toggle	2
10x Narrow Element Border	2
50x Narrow Element Border	2
Set Narrow Element Width	3
Laser Emulation.....	3

Section K: IBM 46xx Configuration

Enable IBM 46xx Communication	1
Load IBM 46xx Defaults	1
IBM Ports.....	1
IBM Reserve Codes	2

Section M: Code Bytes

Code Byte Usage	1
Code Bytes 0-5.....	2
Code Bytes 6-9.....	3
Reserved Codes.....	4
Code Byte/Code Type Table	5
ASCII Reference Table.....	6
Extended Key Code Reference Table	11

TABLE OF CONTENTS

Section N: Miscellaneous Features

Custom Defaults	1
Serial Configuration Mode	5
Software/Serial Number	5

Section O: Auxiliary Port Controls

Disable AUX Port.....	1
AUX Port and Secondary Device Data Formats	
When Using a Metrologic Device as a Secondary.....	1
When Using a Non-Metrologic RS-232 Device as a Secondary.....	3
Additional AUX Port Data Formats	4
AUX Port Baud Rates.....	5
AUX Port Parity	7
AUX Port Stop/Data Bits.....	8
Enable/Disable RTS/CTS Handshaking	9
Message AUX RTS/CTS	9
Character AUX RTS/CTS	9
Enable/Disable Port Mode 7.....	9
Enable/Disable D/E Commands	10
Enable/Disable F/L Commands	10
Enable/Disable M/O Commands	10
Enable/Disable XON/XOFF Handshaking	11
Enable/Disable ACK/NAK.....	11
AUX CTS/RTS Polarity.....	12
AUX Same Symbol Timeout.....	12
Main Output Port Auxiliary Data Formats	13



TABLE OF CONTENTS

Inter-Character Delays	15
Inter-Character De lays	16
Section P: USB	1
Section R: IS3480 / MS3580 / MS3780	
Button Modes	1
Button Click Delay	1
Primary and Secondary Scan Patterns	2
Sweet Spot Mode (IS3480)	4
CodeGate (IS3480 / MS3580)	4
Depth of Field	4
IR Activation	5
TTL RS232	5
CodeGate (MS3780)	6
Modes (MS3780)	7
Section S: Protocol Formatting	
ROM Emulation	1

INTRODUCTION

Your new scanner has been configured at the factory with a set of default communication protocols. Since many host systems have unique formats and protocol requirements, Metrologic provides a wide range of configurable features that may be selected with the use of this bar code configuration guide.

Once the configuration is completed, the scanner stores the settings in nonvolatile memory or NOVRAM. NOVRAM saves the settings when the power is turned off.

Symbol Key	
* (asterisk)	Default Feature
~ (tilde)	Feature requires the <i>Multi-Code Configuration Method</i> , see <i>Bar Code Configuration Methods on page xii</i> .
	Important!
	Note

BAR CODE CONFIGURATION METHODS

Metrologic scanners can be bar code configured in two ways: the *Single-Code Method* and the *Multi-Code Method*.

Single-Code Method

Most features can be enabled or disabled using the Single-Code Method.

1. Power up the scanner.
2. Scan the bar code(s) for the desired feature(s).
3. Observe a multi-toned, “save setting” beep that indicates the configuration has been saved to NOVRAM.

Multi-Code Method

All features can be enabled or disabled using the Multi-Code Method. A feature marked with a “~” requires the Multi-Code Method.

1. Power up the scanner.
2. Scan the *Enter/Exit Configuration Mode* bar code. [3 beeps]
3. Scan the bar code(s) for the desired feature(s). [1 beep]
4. Scan the *Enter/Exit Configuration Mode* bar code [3 beeps] and save new configuration.

Enter/Exit Configuration Mode



To abort a configuration change, power off the scanner before scanning the *Enter/Exit Configuration Mode* bar code.

NEED TO START OVER?

Scan the Recall Default bar code. This will erase all previous settings and return to the scanner's default communications protocol.

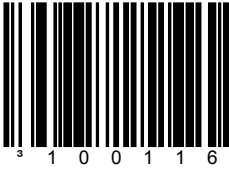
- Keyboard Wedge interface scanners will load keyboard wedge defaults.
- All other scanners will load RS232 defaults.



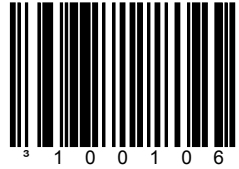
Metrologic manufactures custom OEM scanners, which load the OEM's defaults. For further information on the affects they have on Metrologic default communications protocols refer to Section N, Custom Defaults.



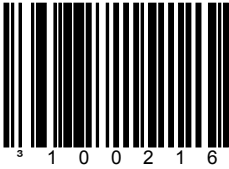
* Enable UPC/EAN



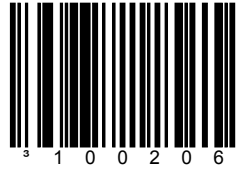
Disable UPC/EAN



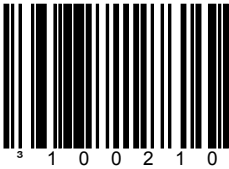
* Enable UPC-A



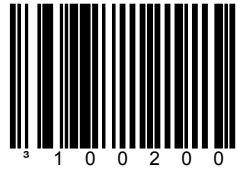
Disable UPC-A



* Enable UPC-E



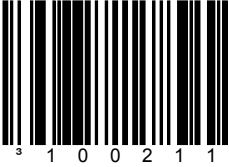
Disable UPC-E



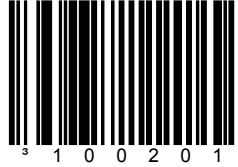
SECTION A

UPC/EAN

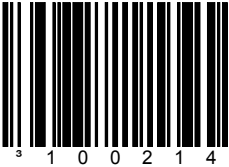
* Enable EAN-13



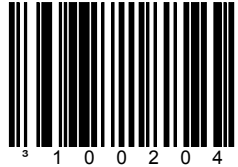
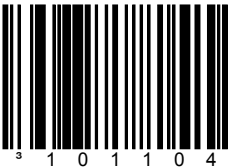
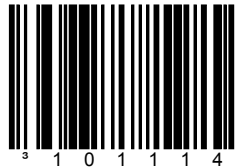
Disable EAN-13



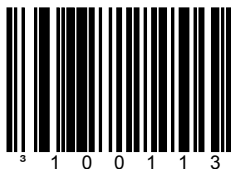
* Enable EAN-8



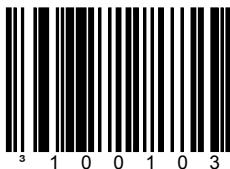
Disable EAN-8

* Enable
Auto Redundancy UPC-EDisable
Auto Redundancy UPC-E

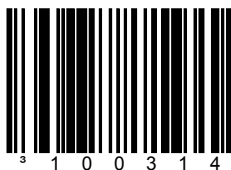
* Enable Code 128



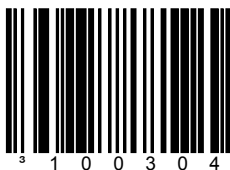
Disable Code 128



Enable
UCC/EAN-28
'C1' Code Formatting



Disable
UCC/EAN-128
'C1' Code Formatting

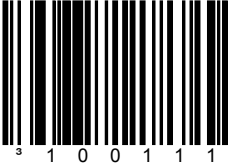


For Coupon Code 128, see Section B, page 5.

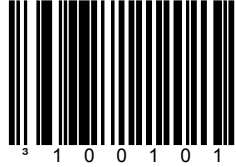
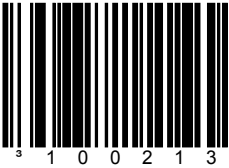
SECTION A

CODE 39

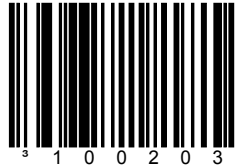
* Enable Code 39



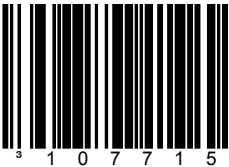
Disable Code 39

Enable MOD 43
Check on Code 39

The scanner will only scan Code 39 bar codes that have a valid Modulo 43 check digit.

* Disable MOD 43
Check on Code 39

The scanner will not test Code 39 bar codes for a modulo 43 check digit.

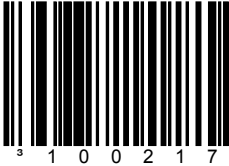
Transmit Mode 43 Check
Digit on Code 39

This feature works in conjunction with Mode 43 Check on Code 39. Both options must be enabled for this feature to work.

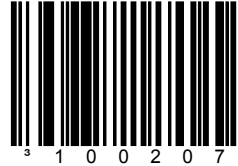
* Do Not Transmit Mode 43
Check Digit on Code 39

This option will not transmit Code 39's Mod 43 check character.

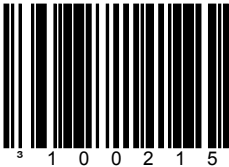
Enable Full ASCII Code 39



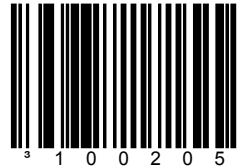
* Disable Full ASCII Code 39



Enable PARAF Support
(Italian Pharmaceutical Codes)



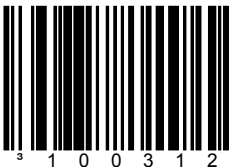
* Disable PARAF Support



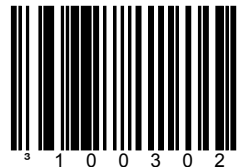
The scanner will convert Code 39 bar codes to PARAF format.

The scanner will not convert code 39 bar codes to PARAF format.

Enable TRI-OPTIC Code



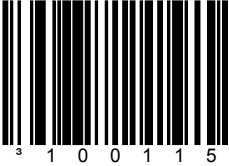
* Disable TRI-OPTIC Code



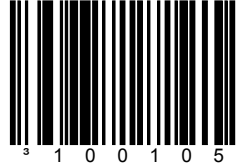
SECTION A

INTERLEAVED 2 OF 5

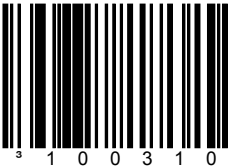
* Enable Interleaved
2 of 5 (ITF)



Disable Interleaved
2 of 5 (ITF)

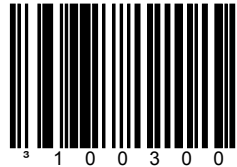


Enable MOD 10
Check on ITF



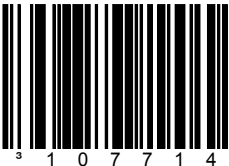
The scanner will only scan
Interleaved 2 of 5 (ITF)
Bar codes that have a
Modulo 10 check digit.

* Disable MOD 10
Check on ITF



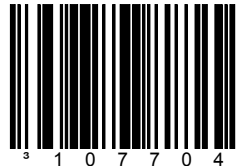
The scanner will not test
Interleaved 2 of 5 (ITF)
bar codes for a Modulo 10
check digit.

Transmit MOD 10
Check Digit on ITF



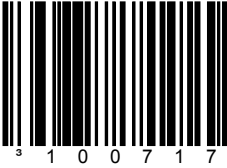
The scanner transmits
Interleaved 2 of 5 (ITF)
MOD 10 check character.

* Do Not Transmit MOD 10
Check Digit on ITF

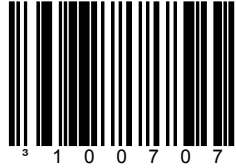


The scanner will not
transmit Interleaved 2 of 5
(ITF) MOD 10 check digit
characters. This feature
works in conjunction with
Mod 10 Check on ITF. Both
must be enabled for this
feature to work.

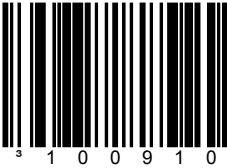
Enable ALT
Check Digit ITF



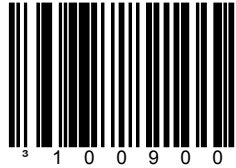
* Disable ALT
Check Digit ITF



Enable 12 Digit ITF
Check Digit at 1

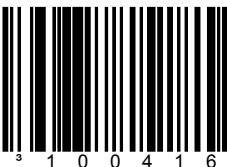


* Normal Check Digit

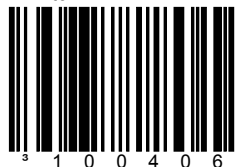


This feature requires
MOD 10 ITF Check Digit to
be enabled. The 12-
character ITF check digit
calculation will start with 1
instead of 0.

Enable ITF/Code 39 Filter



* Disable ITF/Code 39
Filter



Supports Code 39/ITF filters.

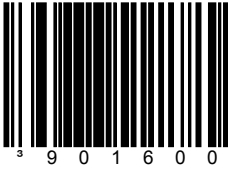


This feature may adversely
affect reading Codabar,
Code 93 and some other
non-standard symbologies.

SECTION A

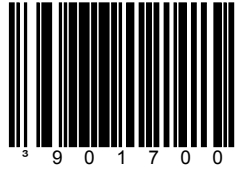
INTERLEAVED 2 OF 5

~ ITF Symbol Length
Lock 1 †



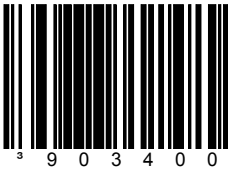
To specify a 1st ITF symbol length lock, scan the above bar code and the appropriate code bytes located in Section M. †

~ ITF Symbol Length
Lock 2 †



To specify a 2nd ITF symbol length lock, scan the above bar code and the appropriate code bytes located in Section M. †

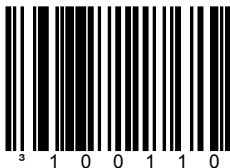
~ ITF Minimum
Symbol Length †



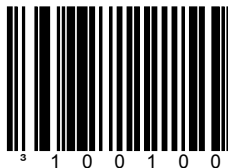
To specify a minimum number of ITF characters to be decoded, scan the above bar code and the appropriate code bytes located in Section M. †

† Refer to the *Multi-Code Configuration Method* on page xii.

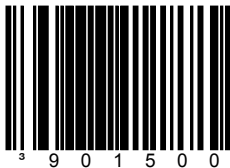
Enable
Standard 2 of 5



* Disable
Standard 2 of 5



~ Standard 2 of 5
Symbol Length Lock



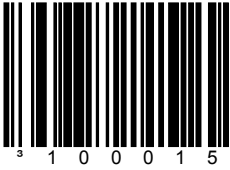
To specify a minimum number of ITF characters to be decoded, scan the above bar code and the appropriate code bytes located in Section M.†

† Refer to the Multi-Code configuration method on page xii.

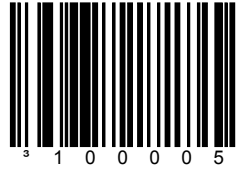
SECTION A

OTHER 2 OF 5 CODES

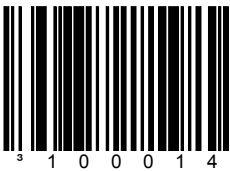
Enable Matrix 2 of 5



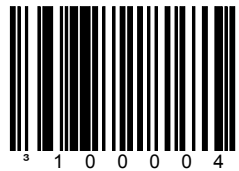
* Disable Matrix 2 of 5



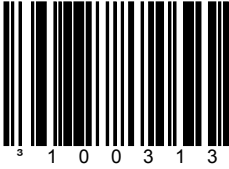
Enable 15 Digit
Airline 2 of 5



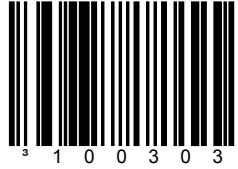
* Disable 15 Digit
Airline 2 of 5



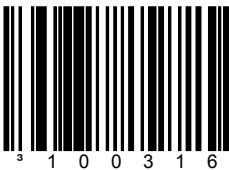
Enable 13 Digit
Airline 2 of 5



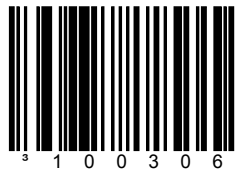
* Disable 13 Digit
Airline 2 of 5



Enable Hong Kong
2 of 5



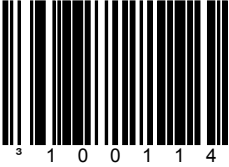
* Disable Hong Kong
2 of 5



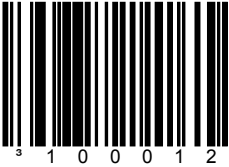
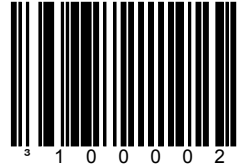
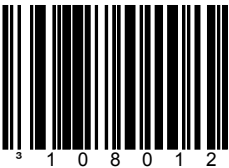
SECTION A

CODABAR

* Enable Codabar

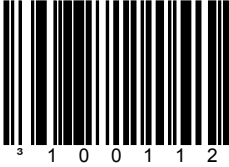


* Disable Codabar

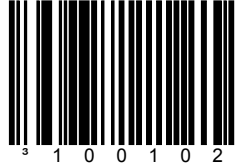
Enable
Dual Field Codabar* Disable
Dual Field CodabarEnable
Tab in Dual Codabar* Disable
Tab in Dual Codabar

This feature requires *Dual Field Codabar* to be enabled. The scanner will insert a tab between the fields of the dual field Codabar.

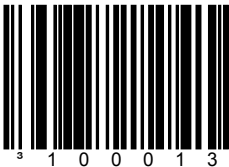
* Enable Code 93



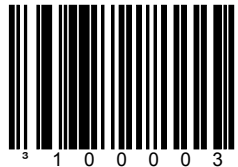
Disable Code 93



Enable Code 11



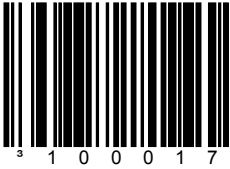
* Disable Code 11



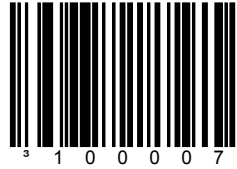
SECTION A

TELEPEN

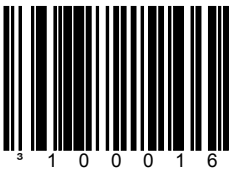
Enable Telepen



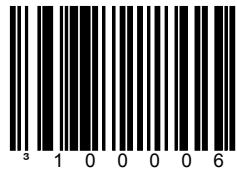
* Disable Telepen



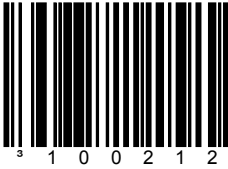
Enable
ALPHA Telepen



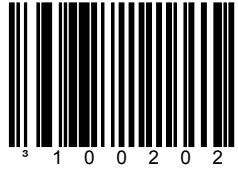
* Disable
ALPHA Telepen



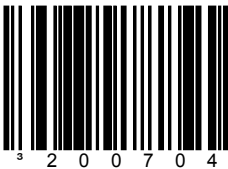
Enable MSI Plessey



* Disable MSI Plessey

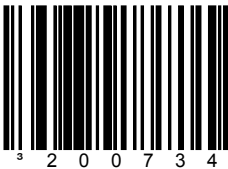


* No MSI Plessey
Check Digit



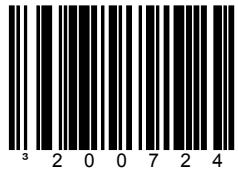
The scanner will not test
MSI Plessey bar codes for a
check digit.

Enable MSI Plessey
MOD 10/10 Check Digit



The scanner will test MSI
Plessey bar codes for a
double Modulo 10 check
digit.

* Enable MSI Plessey MOD
10 Check Digit

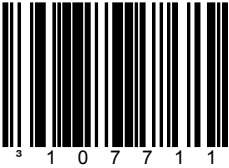


The scanner will test MSI
Plessey bar codes for a
single Modulo 10 check
digit.

SECTION A

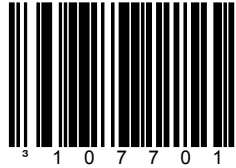
PLESSEY CODES

Transmit
MSI Plessey Check Digit



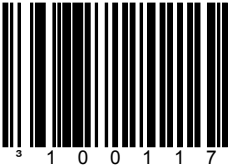
This option works in conjunction with one or both of the Enabled MSI Plessey Mode options.

* Do Not Transmit
MSI Plessey Check Digit

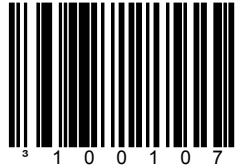


The scanner will not transmit MSI Plessey check digit characters.

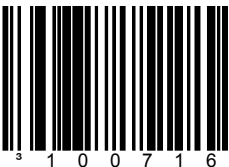
Enable UK Plessey



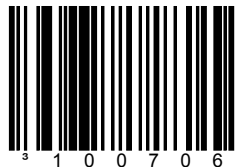
* Disable UK Plessey



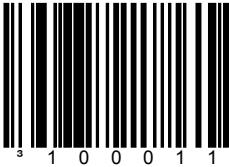
Enable UK Plessey
A to X Conversion



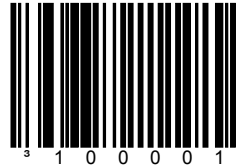
* Disable UK Plessey
A to X Conversion



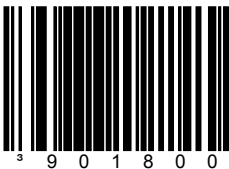
Enable Double Border
Required/Large
Inter-Character Space



* Disable Double Border
Required/Large
Inter-Character Space

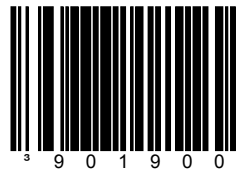


~ Minimum
Symbol Length †



Omnidirectional default is 4. Combine this code with the proper Code Bytes, to specify the minimum number of characters in all non-UPC/EAN bar codes.†

~ Symbol Length Lock †



This code combined with the proper Code Bytes, locks the bar code's length into place.†

† Refer to the Multi-Code Configuration Method on page xii.

SECTION A

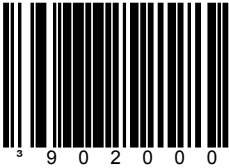
CONFIGURABLE CODE LENGTHS

There are seven bar code lock lengths available. Specific code types can be assigned to a lock length using the *Multi-Code* configuration method.

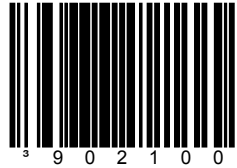
Example:

1. Scan the enter/exit configuration bar code.
2. Scan the *code length lock #1* bar code.
3. Scan the three Code Bytes that represent the code length.
4. Scan the matching code type lock #1 bar code.
5. Scan the three code bytes that represent the code type.
Refer to the *Code Type Table* in Section M.
6. Repeat steps 2 through 5 for lock lengths 2 through 7 if desired.
7. Scan the enter/exit configuration bar code when finished to save settings.

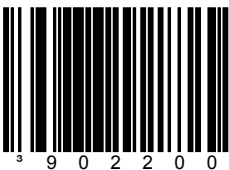
~ Code Length
Lock #1



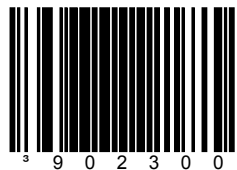
~ Code Type
Lock #1



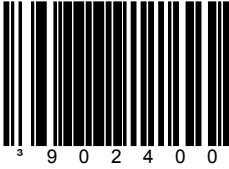
~ Code Length
Lock #2



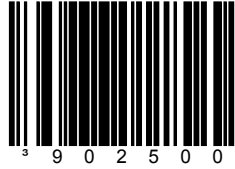
~ Code Type
Lock #2



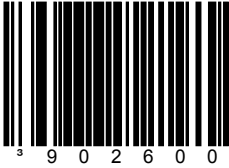
~ Code Length
Lock #3



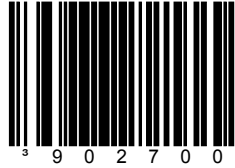
~ Code Type
Lock #3



~ Code Length
Lock #4



~ Code Type
Lock #4



~ Code Length
Lock #5



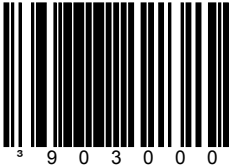
~ Code Type
Lock #5



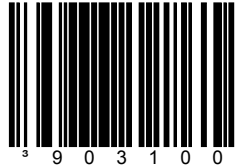
SECTION A

CONFIGURABLE CODE LENGTHS

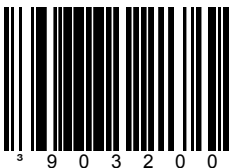
~ Code Length
Lock #6



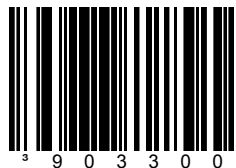
~ Code Type
Lock #6



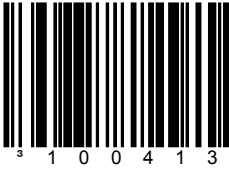
~ Code Length
Lock #7



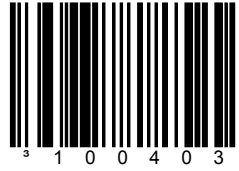
~ Code Type
Lock #7



Enable RSS 14



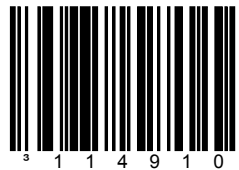
* Disable RSS 14



* Transmit
RSS 14 Check Digit



Do Not Transmit
RSS 14 Check Digit



SECTION A

RSS 14 FEATURES

* Transmit
RSS 14 Application ID



Application identifier "01" is transmitted by default.

Do Not Transmit
RSS 14 Application ID



* Transmit
RSS 14 Symbology ID

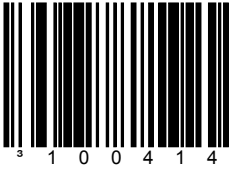


Symbology identifier "je0" is transmitted by default.

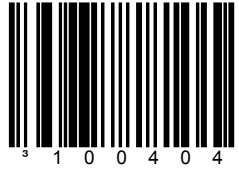
Do Not Transmit
RSS 14 Symbology ID



Enable RSS Limited



* Disable RSS Limited



* Transmit
RSS Limited Check Digit



Do Not Transmit
RSS Limited Check Digit



SECTION A

RSS LIMITED FEATURES

* Transmit RSS Limited
Application ID



Application identifier "01" is
transmitted by default.

Do Not Transmit
RSS Limited Application ID



* Transmit RSS Limited
Symbology ID

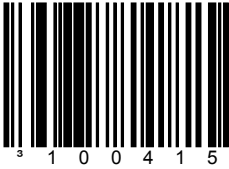


Symbology identifier "je0" is
transmitted by default.

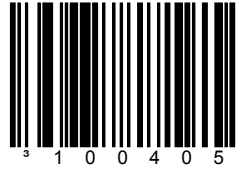
Do Not Transmit
RSS Limited Symbology ID



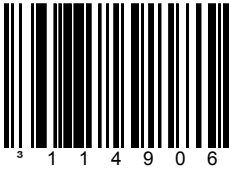
Enable RSS Expanded



* Disable RSS Expanded



* Transmit RSS Expanded Symbology ID

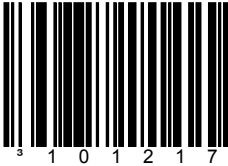


Do Not Transmit RSS Expanded Symbology ID

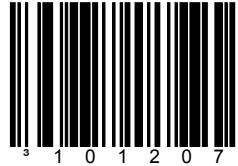


Symbology identifier "je0" is transmitted by default.

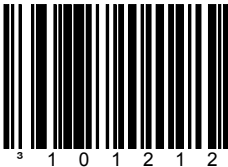
Enable Two Digit Supplements



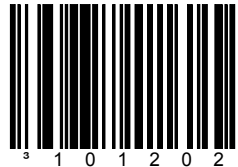
* Disable Two Digit Supplements



* Enable Two Digit Redundancy



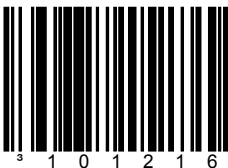
Disable Two Digit Redundancy



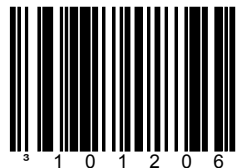
Twice before accepting data, the scanner will scan the bar code plus the two digit add on.

When scanned, will not implement the two digit redundancy feature.

Enable Five Digit Supplements



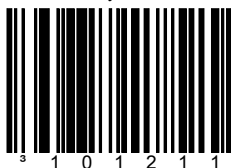
* Disable Five Digit Supplements



SECTION B

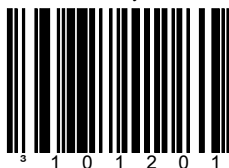
SUPPLEMENTS/REDUNDANCY

Enable Five Digit
Redundancy



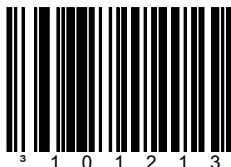
Twice before accepting
data, the scanner will scan
the bar code plus the five
digit add on.

* Disable Five Digit
Redundancy



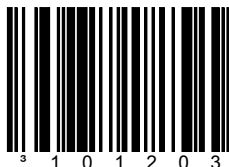
The scanner will not
implement the five digit
redundancy feature.

Supplements
are Required



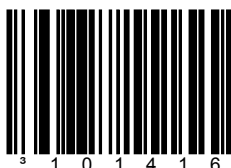
All UPC/EAN labels that are
scanned must have a
supplement.

* Supplements are
not Required

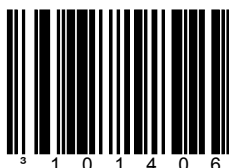


UPC/EAN labels do not
require a supplement to be
scanned.

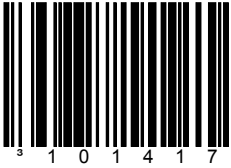
Enable Remote
Supplemental Requirement



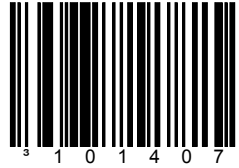
* Disable
Remote Supplemental
Requirement



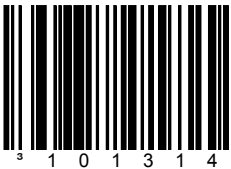
Enable Bookland (978)
Supplement Requirement



* Disable Bookland (978)
Supplement Requirement

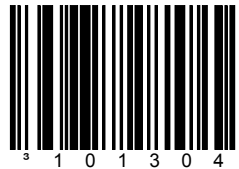


Enable 977 (2 digit)
Supplemental Requirement



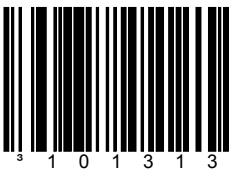
The scanner will require a 2 digit supplement be scanned when an EAN-13 code begins with 977.

* Disable 977 (2 digit)
Supplemental Requirement

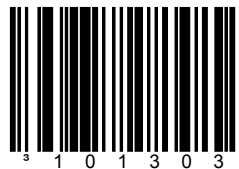


The scanner will not require a 2 digit supplement be scanned whenever an EAN-13 code begins with 977.

Enable 378/379 French
Supplement Requirement



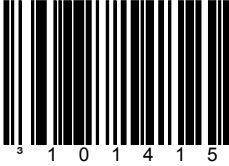
* Disable 378/379 French
Supplemental Requirement



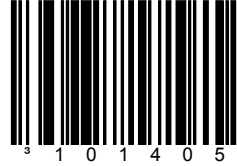
SECTION B

SUPPLEMENTS

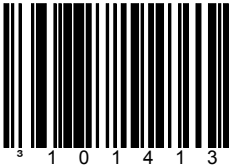
Enable 434/439 German
Supplemental Requirement



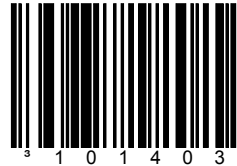
* Disable 434/439
German Supplemental
Requirement



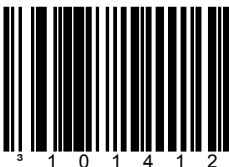
Enable 414/419 German
Supplemental Requirement



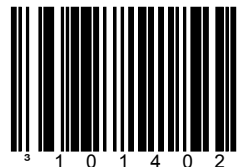
* Disable 414/419 German
Supplemental Requirement



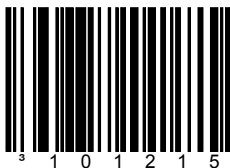
Enable # System 2 Requires
Supplements



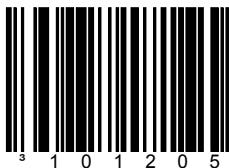
* Disable # System 2
Requires Supplements



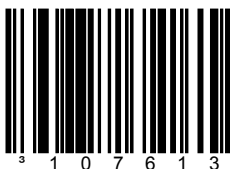
Enable # System 5 Requires
Supplements



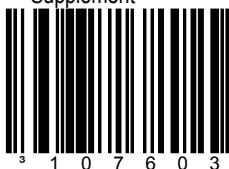
* Disable # System 5
Requires Supplements



Enable 8711685 Requires
5-Digit Supplement



* Disable 8711685
Requires 5-Digit
Supplement



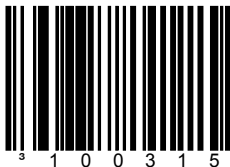
The scanner will require a
5-digit supplement to be
scanned when an EAN-13
code begins with 8711685.

The scanner will not require
a 5-digit supplement to be
scanned when an EAN-13
code begins with 8711685.

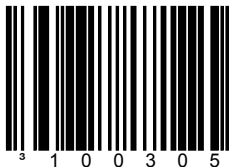


This feature is not
available with all
models.

Enable Coupon
Code 128



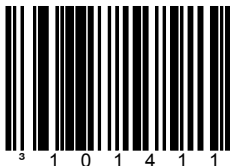
* Disable Coupon
Code 128



SECTION B

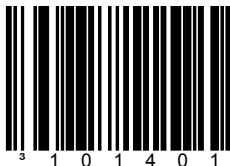
SUPPLEMENTS

Enable Code 128 'JC1'
Extended Code Format



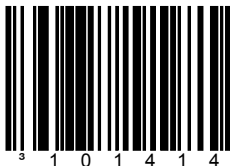
The scanner will transmit a 'JC1' at the beginning of the code 128 portion of the coupon code.

* Disable Code 128 'JC1'
Extended Code Format



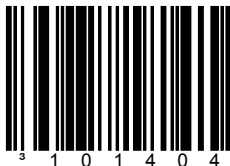
The scanner will not transmit a 'JC1' at the beginning of the code 128 portion of the coupon code.

Enable 128 Group
Separators



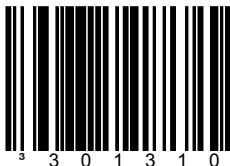
"GS" (1DH) character will be transmitted with coupon Code 128 codes.

* Disable 128 Group
Separators



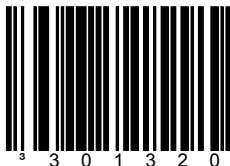
"GS" (1DH) character will not be transmitted with coupon Code 128 codes.

* 100 msec to Find
Supplemental



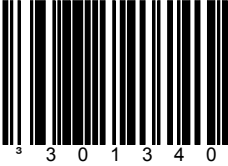
The scanner will allot 100 milliseconds to "find" an add on after a main UPC/EAN bar code has been scanned.

200 msec to Find
Supplemental



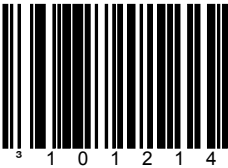
The scanner will allot 200 milliseconds to "find" an add on after a main UPC/EAN bar code has been scanned.

400 msec to Find
Supplemental

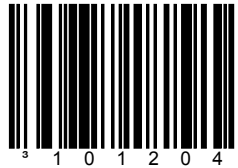


The scanner will allot 400 milliseconds to “find” an add on after a main UPC/EAN bar code has been scanned.

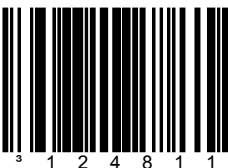
Enable Code ID's with
Supplements



* Disable Code ID's with
Supplements

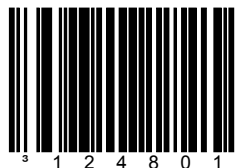


Allow 2/5 on 977 Bar Code



This feature allows either 2 or 5 digit supplements if 977 mode is active.

Allow 2 on 977 Bar Code

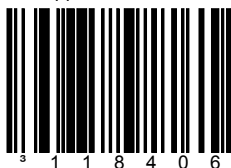


This feature allows 2 digit supplements if 977 mode is active.

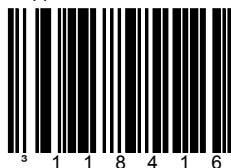
SECTION B

SUPPLEMENTS

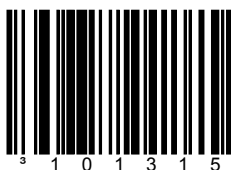
* Beep Once on
Supplements



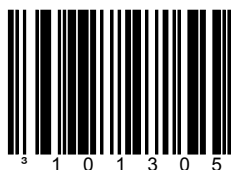
Beep twice on
Supplements



Enable ISBN Check Digit
Transmission



Disable ISBN Check Digit
Transmission

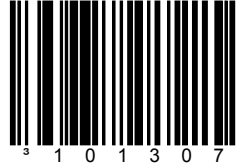


This feature is not
available with all
models.

Enable Bookland to ISBN Conversion

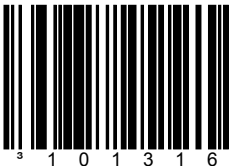


* Disable Bookland to ISBN Conversion

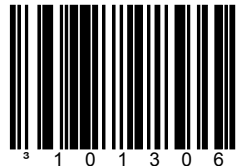


This feature is not available with all models.

Enable ISBN Re-Formatting



* Disable ISBN Re-Formatting

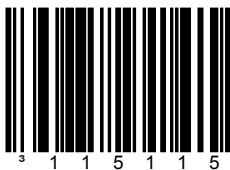


This feature is not available with all models.

SECTION B

SUPPLEMENTS

Enable ISSN Check Digit
Transmission



* Disable ISSN Check Digit
Transmission



Enable
ISSN Re-Formatting

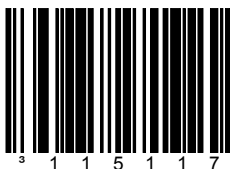


* Disable
ISSN Re-Formatting

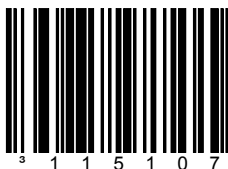


Transmit a hyphen with the
barcode.

Enable 977 to
ISSN Conversion



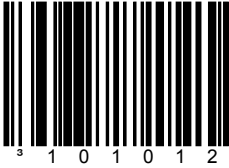
* Disable 977 to
ISSN Conversion



Convert 977 periodicals to
ISSN format.

Do not convert 977
periodicals to ISSN format.

Enable Number System 4
Coupon Code 128

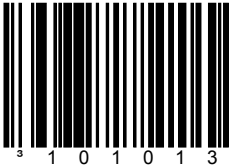


Supports Coupon Code 128
for Number System 4 bar
codes.

* Disable Number System
4 Coupon Code 9128

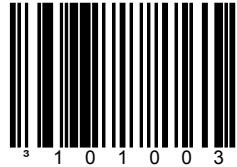


Enable UPC Discard

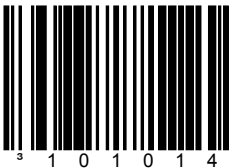


Supports UPC discard if the
Code 128 portion of the
Coupon Code 128 is
scanned.

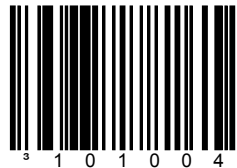
* Disable UPC Discard



Allow Supplements and
UPC in Same Line



Disable Supplements and
UPC in Same Line



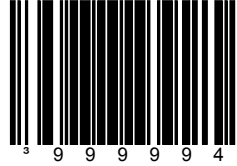
This feature requires
2 digit supplements be
enabled as well as
required redundancy
and supplements.

* Enable RS-232



The scanner will work with RS-232 $\pm 12V$ serial output.

Load Keyboard Wedge Defaults



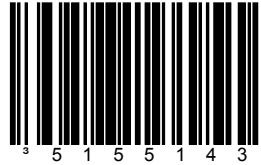
Scan this before selecting Normal or Stand Alone Mode.

Enable Light Pen/Wand Communication



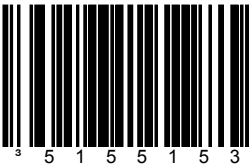
Use this option if a scanner is used in place of a light pen.

Enable Keyboard Wedge Emulation



Select if the scanner provides keyboard emulation by converting the scanned bar code data to the PC keyboard scan code equivalent.

Enable Stand-Alone Keyboard Scanner



Allows the scanner to be used without an external keyboard.

SECTION C

COMMUNICATIONS

Load OCIA Defaults

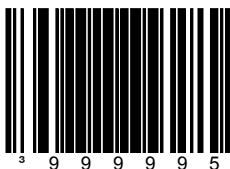


Scan this before selecting
Enable OCIA output.

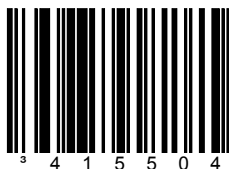
Enable OCIA Output



Select this option if the
communications
requirement is an Optically
Coupled Interface Adapter
(OCIA). This is a docked
(by the host) serial interface.

Load
IBM 46xx Defaults

Scan this before selecting
Enable IBM 46xx
Communication

Enable IBM 46xx
Communication

Select this option for IBM
46xx SIOC/RS485
communications.



Not all scanners
support this interface.
The correct interface
board is required.

Load Low Speed
External USB Defaults †

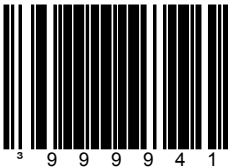


† Refer to Section P for full speed USB options.

Enable
Low Speed USB †



Load Low Speed
Internal USB Defaults †



Enable
No Communication Mode



Select this option if the scanner **does not** interface with the host device.

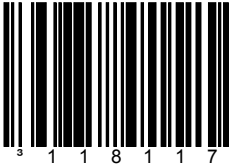
Reserved



Reserved

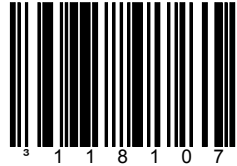


Allow Configuration Mode on Power-Up



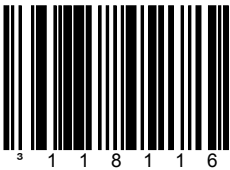
The scanner can only enter MetroSet® mode before any bar codes are scanned.

* Allow Configuration Mode Anytime



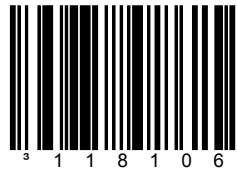
Allow MetroSet® configuration at any time.

Allow Configuration Codes on Power Up



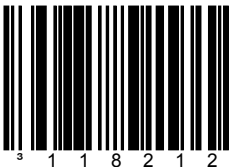
Once a product bar code is scanned after power-up, the scanner will not accept configuration bar codes.

* Allow Configuration Codes Anytime

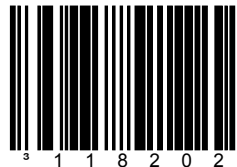


Allows scanning of configuration bar codes any time.

Enable Single Code Configuration



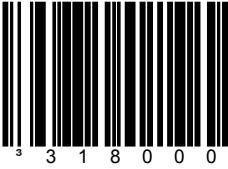
Disable Single Code Configuration



SECTION D

SCAN BUFFERS

* 1 Scan Buffer



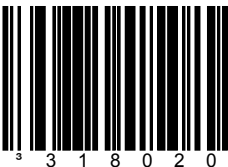
The scanner will scan one bar code in the scan field and not scan again until the bar code is removed from the scan field for the duration of the same symbol time out.

2 Scan Buffers



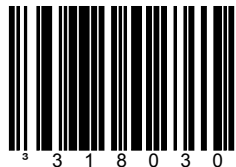
The scanner will scan 2 bar codes in the scan field one time each. These 2 bar codes will not be scanned again until they are removed from the scan field for the duration of the same symbol time out.

3 Scan Buffers



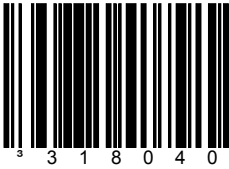
Same function as 2 Scan Buffers, but 3 bar codes are in the scan field.

4 Scan Buffers



Same function as 2 Scan Buffers, but 4 bar codes are in the scan field.

5 Scan Buffers



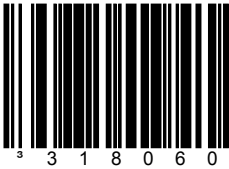
Same function as 2 Scan Buffers, but 5 bar codes are in the scan field.

6 Scan Buffers



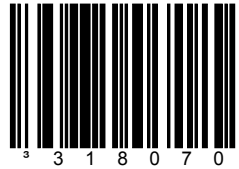
Same function as 2 Scan Buffers, but 6 bar codes are in the scan field.

7 Scan Buffers



Same function as 2 Scan Buffers, but 7 bar codes are in the scan field.

8 Scan Buffers

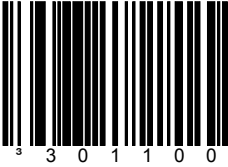


Same function as 2 Scan Buffers, but 8 bar codes are in the scan field.

SECTION D

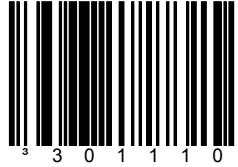
REDUNDANT SCANS

* 0 Redundant Scans



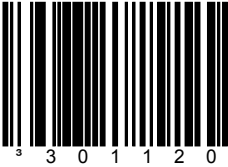
Requires 1 good decode for a "good scan".

1 Redundant Scans



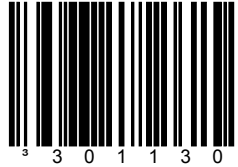
Requires 2 consecutive decodes of the same bar code data for a "good scan".

2 Redundant Scans



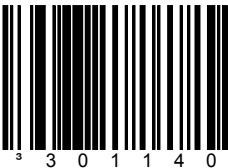
Requires 3 consecutive decodes of the same bar code data for a "good scan".

3 Redundant Scans



Requires 4 consecutive decodes of the same bar code data for a "good scan".

4 Redundant Scans



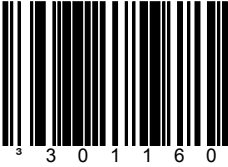
Requires 5 consecutive decodes of the same bar code data for a "good scan".

5 Redundant Scans



Requires 6 consecutive decodes of the same bar code data for a "good scan".

6 Redundant Scans



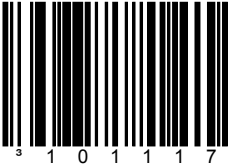
Requires 7 consecutive decodes of the same bar code data for a “good scan”.

7 Redundant Scans



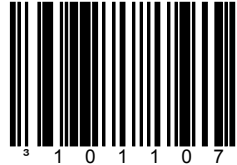
Requires 8 consecutive decodes of the same bar code data for a “good scan”.

In-Store Redundancy



Enable redundancy of EAN-13 Sys2 & UPCA sys2 & Sys4 (store printed barcodes).

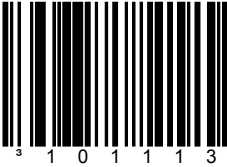
* Disable In-Store Redundancy



Disable redundancy of EAN-13 Sys2 & UPCA sys2 & Sys4 (store printed barcodes).

SECTION D

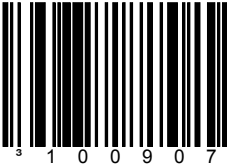
MISCELLANEOUS DECODE FEATURES

* Enable Segmented
UPC Decoding

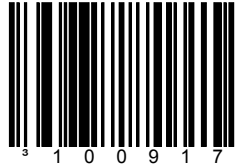
Enabling segmented UPC decoding aids in deciphering damaged or incomplete bar codes.

Disable Segmented
UPC Decoding

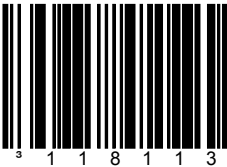
Disable this feature when bar codes are in good reading condition. This will speed up decoding and improve over all accuracy.

* Enable
Piece In-Store Bar Codes

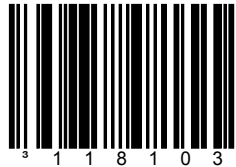
Enable piece EAN-13 Sys2, and UPCA Sys2 and Sys4 (store printed barcodes).

Disable
Piece In-Store Bar Codes

Disable piece EAN-13 Sys2, and UPCA Sys2 and Sys4 (store printed barcodes).

Optional
Same Symbol Check

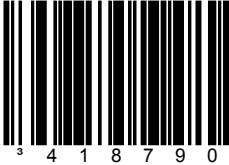
Requires 1 different character between successive bar codes to consider the bar code "new".

* Normal
Same Symbol Check

Requires 3 different characters between successive bar codes to consider the bar code "new".

i Do not change these settings unless instructed by a Metrologic representative.

* Optimize for
Low Density Codes †



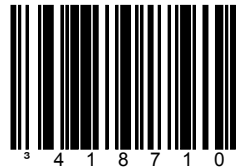
Optimize for
High Density Codes †



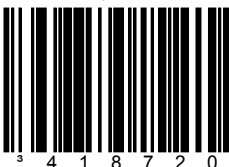
Fixed for
High Density Codes †



Fixed for
Medium Density Codes †



Fixed for
Low Density Codes †



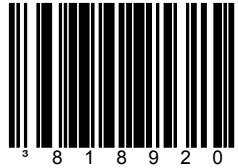
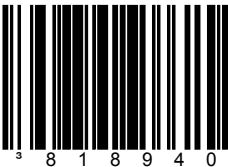
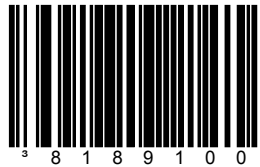
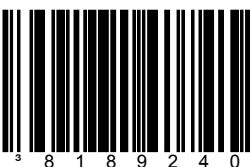
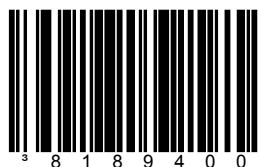
† For use with
omnidirectional
scanners only.

SECTION D

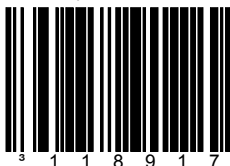
SAME SYMBOL TIME OUTS

These numbers determine the length of time before a bar code can be rescanned after it is removed from the scan field. Single code fixed settings in msec of No, 50, 100, 200, 500, 1200 (1.2 sec), 2000 (2.0 sec) and infinite are available. User configurable values can be set in user-configurable increments of 50 msec to 6350 msec (6.35 sec).

No Same Symbol Time Out

Same Symbol Time Out
100 msecsSame Symbol Time Out
200 msecs* Same Symbol Time Out
500 msecsSame Symbol Time Out
1200 msecsSame Symbol Time Out
2000 msecs

Infinite
Same Symbol Time Out

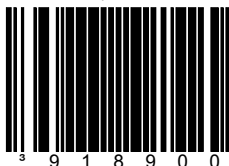


The scanner will not repetitively scan the same bar code.



This option overrides the symbol rescan time-outs.

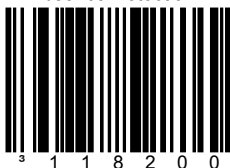
~ Variable
Same Symbol Time Out



Using the Multi-Code Method (*on page xii*), scan this bar code and a code byte sequence from Section M to set the same symbol time-out duration. Values range from 001 to 127 (50 to 6350 msec).

BARCODE ABSENCE

* Enable Bar Code
Absence Detection †

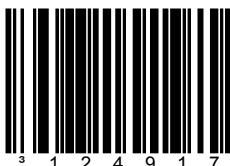


† Excludes the MS2000 Stratos Series.

Disable Bar Code
Absence Detection †

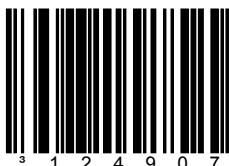


Enable Stratos Bar Code
Absence Detection



The scan field must be free of data for 50 milliseconds to accept a new bar code.

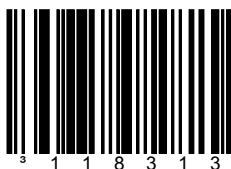
* Disable Stratos Bar Code
Absence Detection



SECTION D

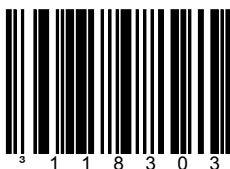
LED OPTIONS

Flash Green LED if
Rescan Allowed

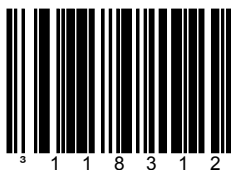


This indicates same symbol
timeout has elapsed.

* Do not flash Green LED if
Rescan Allowed

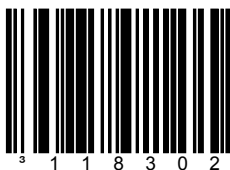


Reverse LED Functions



Red = Laser On
Green = Good Read

* Normal LED Functions



Green = Laser On
Red = Good Read

* Enable 3rd LED



Enable scanner's optional
third LED.

Disable 3rd LED



Disable scanner's optional
third LED.

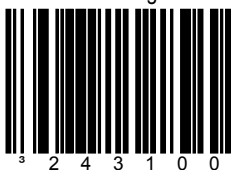


This feature is not
available with all
models.



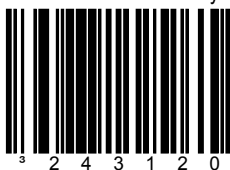
This feature is not
available with all
models.

* Laser LED High Intensity



Laser LED Intensity is High or Normal.

Laser LED Low Intensity

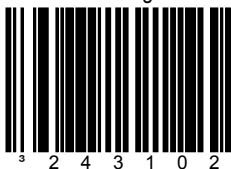


Laser LED is Low Intensity



This feature is not available with all models.

* Scan LED High Intensity



Scan LED Intensity is High or Normal.

Scan LED Low Intensity

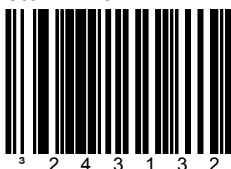


Scan LED Intensity is Low Intensity



This feature is not available with all models.

Scan LED Off

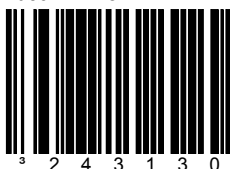


The scan LED does not signify barcode scanning. The LED will continue to light for all other functions.



This feature is not available with all models.

Laser LED Off



The laser LED does not signify laser ON. The LED will continue to light for all other functions.



This feature is not available with all models.

SECTION D

BEEPER OPTIONS

* Normal Tone



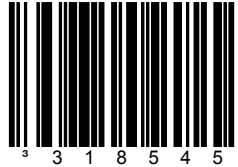
Optional Tone 1



Optional Tone 2



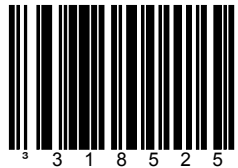
Optional Tone 3



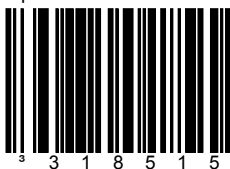
Optional Tone 4



Optional Tone 5



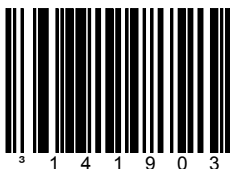
Optional Tone 6



No Beep

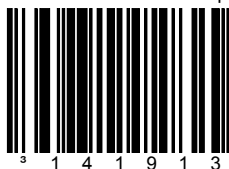


* Enable Good Scan Beep

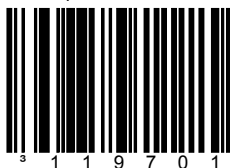



Enable good scan beep on power up.

Disable Good Scan Beep




Disable good scan beep on power up.

* Enable Button
Beep Controls

 This feature is not available with all models.

Disable Button
Beep Controls

 This feature is not available with all models.

SECTION D

BEEPER OPTIONS

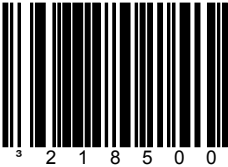
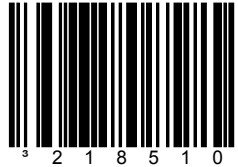
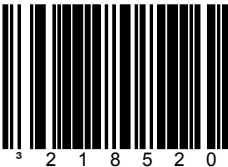
Next Beep Tone



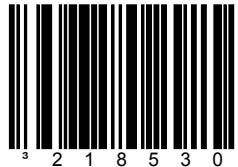
Next Volume



* Loudest Volume

2nd Loudest Volume3rd Loudest Volume

No Volume



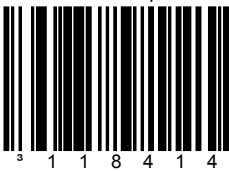
* Beep Once on Supplements



Beep Twice on Supplements



Enable Fast Beep



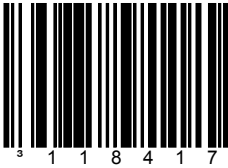
* Disable Fast Beep



SECTION D

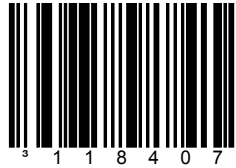
BEEPER OPTIONS

Beep on BEL Command

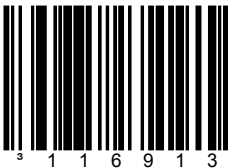


The scanner beeps when it receives a BEL character from the host. If a number is sent within 200 msec before the BEL character, then the scanner will beep that number of times.

* Ignore BEL Command

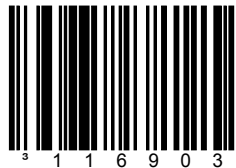


Enable Light Pen Toggle During Beep



The scanner will beep and toggle the light pen data line on a successful decode. This drives a "good read" indicator.

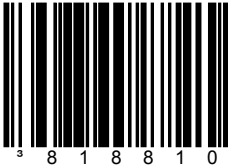
* Disable Light Pen Toggle During Beep



SECTION D INTER-CHARACTER DATA TRANSMISSION DELAYS

Use these codes to select the amount of delay between sending data characters and “Bar Code” records from the scanner to the host. This helps prevent the scanner from overflowing host input buffers.

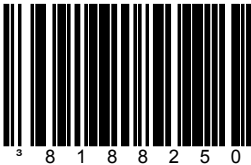
* 1 msec
Inter-Character Delay



10 msec
Inter-Character Delay



25 msec
Inter-Character Delay



~ Variable msec
Inter-Character Delay



Scan this bar code and a sequence of code bytes in Section M to set the delay between characters sent to the host system. Delay range can be set from 1 to 255 msec.

Refer to the *Multi-Code Configuration Method on page xii*.

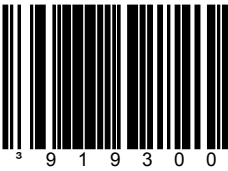
SECTION D INTER-CHARACTER DATA TRANSMISSION DELAYS

No Inter-Character Delay

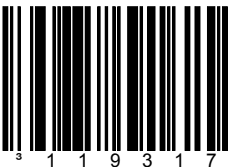


INTER-RECORD DATA TRANSMISSION DELAYS

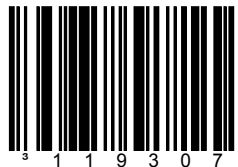
~ Variable
Inter-Record Delay



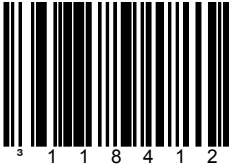
Turn Off Laser During
Inter-Record Delay



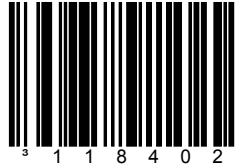
* Leave Laser On During
Inter-Record Delay



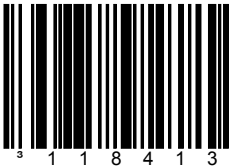
Enable
Communications Time Outs



* Disable Communications
Time Outs

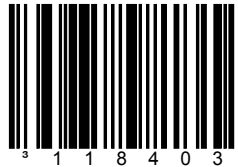


* Beep Before Transmit



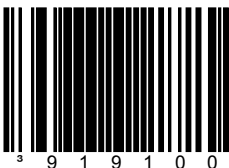
Scanner will beep before
each label is transmitted.

Beep After Transmit

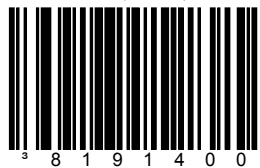


Scanner will beep after each
label is transmitted.

~ Variable Communications
Time Out



* Default Communications
Time Out (2 secs)



SECTION D

COMMUNICATION TIME OUT OPTIONS

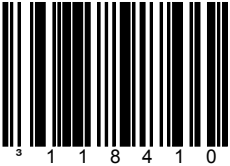
Short Communications Time
Out (1 sec)



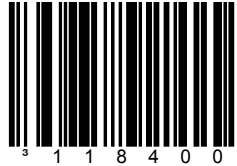
Long Communications
Time Out (4 secs)



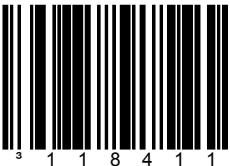
Three Beeps on Time Out



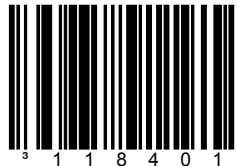
* No Beeps on Time Out



Razzberry Tone on
Time Out



* No Razzberry Tone
on Time Out

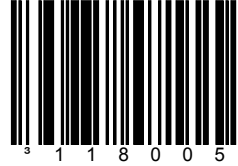


Enable "D/E" Disable Command

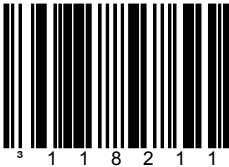


The scanner will disable scanning after it receives and ASCII "D" from the host device. It will enable scanning when it receives an ASCII "E".

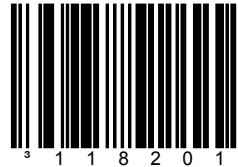
* Disable "D/E" Disable



Do not monitor D/E commands.

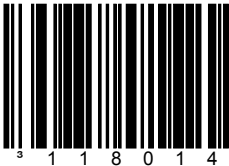
Enable "Z/R" Type
D/E Simulation

The scanner will disable scanning after it receives an ASCII "Z" from the host device. It will enable scanning when it receives an ASCII "R".

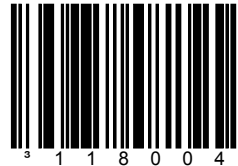
* No "Z/R" Type
D/E Simulation

Do not monitor Z/R commands.

Enable "F/L" Laser Command



The scanner will turn off the laser after receiving an ASCII "F" character. The laser will turn on after it receives an ASCII "L" character.

* Disable "F/L" Laser
Command

Do not monitor "F/L" commands.

SECTION D

HOST SCANNER COMMANDS

Motor "On/Off" Using
M/O Commands †



† For use with omnidirectional
scanners only.

* Disable "M/O"
Commands



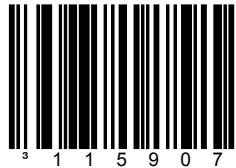
Do not monitor the M/O
commands.

The scanner will turn the
motor OFF after it receives an
ASCII "O" character. The
motor will turn ON after the
scanner receives an ASCII
"M" character. †

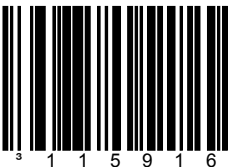
Enable I Command



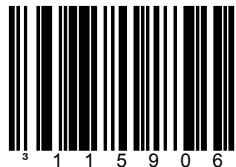
Disable I Command



Enable i Command



Disable i Command



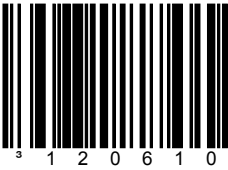
Enable S Command



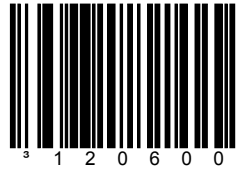
* Disable S Command



Enable EM Commands



* Disable EM Commands

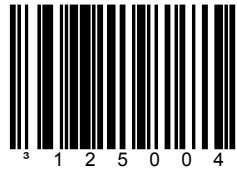


Enable EM command. End of Medium (ctrl Y). The EM command sends an ID string then a scanner status spread over two bytes.

Enable SI/SO Command



Disable SI/SO Command

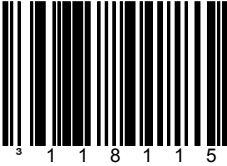


SECTION D

HOST SCANNER COMMANDS

Use

DTR Scan Disable



The scanner will monitor the DTR input to determine if scanning should be allowed. A +12V "active" level enables decoding. A -12V "inactive" level disables decoding.

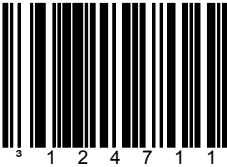
* Do not use

DTR Scan Disable

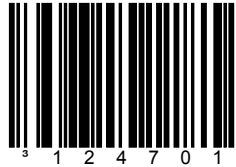


Do not monitor the DTR input.

Enable Pass Through

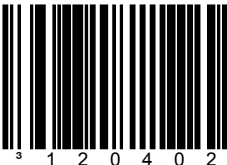


Disable Pass Through



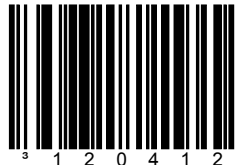
The AUX scanner must be configured for the same Baud rate as the host, with STX prefix, Nixdorf ID characters and CR Terminator enabled.

* Blink LEDs on Disable



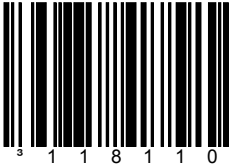
When using CTS scan disable or DTR disable, blink the LEDs that signify the unit is disabled (signal = off).

No Blink LEDs on Disable



When using CTS scan enable or DTR disable, do not blink the LEDs that signify the unit is disabled (signal = off).

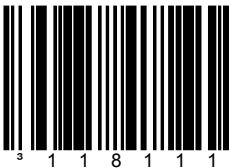
Activate on DC2 Character



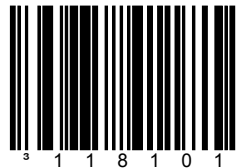
* Do Not Activate on DC2 Character



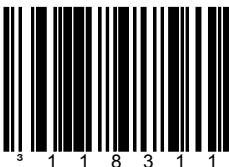
Transmit "NO READ" if DC2 Activated



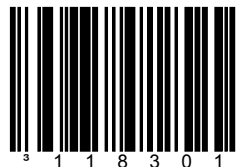
Do Not Transmit "NO READ" if DC2 Activated



No Green LED During "NO READ" Xmit



* Green LED During "NO READ" Xmit



SECTION D

POWER SAVE MODES

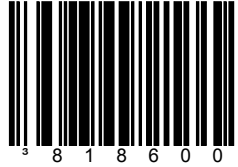
Always Power Save Mode†



The scanner enters power save mode immediately after power-up and after each bar code scanned. †

† For use with omnidirectional scanners only.

No Power Save Mode†



The scanner will never enter power save mode. †

Power Save Mode in 1 minute †



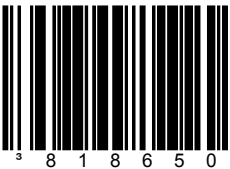
The scanner enters power save mode when the scanner remains idle for 1 min. †

Power Save Mode in 2 minutes †



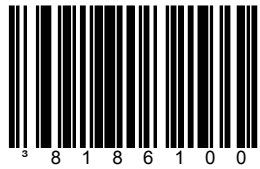
The scanner enters power save mode if the scanner remains idle for 2 min. †

Power Save in 5 Minutes †



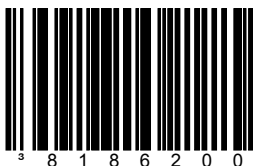
The scanner enters power save mode if the scanner remains idle for 5 min. †

Power Save in 10 Minutes †



The scanner enters power save mode if the scanner remains idle for 10 min. †

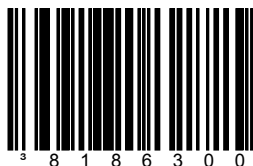
Power Save in 20 Minutes †



† For use with omnidirectional scanners only.

The scanner enters power save mode if the scanner remains idle for 20 min. †

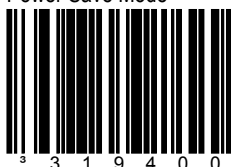
Power Save in 30 Minutes †



The scanner enters power save mode if the scanner remains idle for 30 min. †

Default

Power Save Mode ††



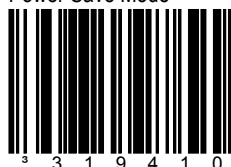
†† Some Metrologic scanners automatically 'wake' or exit from the power save mode if the IR detects movement. Other Metrologic scanners wake if their multi-Function Button is pressed. Please refer to the Installation and User's Guide specific to each product.



This feature is not available with all models.

Blink

Power Save Mode ††



The laser Blinks OFF & ON after a configured period of non-use.

When the scanner recognizes a bar code it will exit the blink mode.

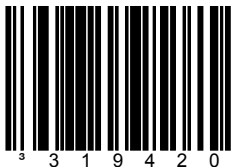


This feature is not available with all models.

SECTION D

POWER SAVE MODES

Laser OFF
Power Save Mode ††

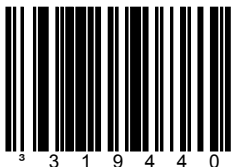


The laser turns OFF after a configured period of non-use.



This feature is not available with all models.

Dual #1
Power Save Mode ††



The laser blinks OFF & ON after a configured period of non-use then the laser and motor turn OFF at thirty-minute intervals.

Example 1:

Example of Dual #1 Power Save Mode with the power save timeout set to 15 minutes.



This feature is not available with all models.

Laser Motor OFF
Power Save Mode ††

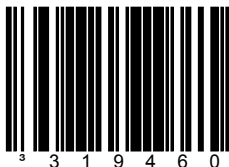


The laser and motor turns OFF after a configured period of non-use.



This feature is not available with all models.

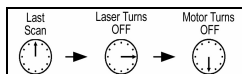
Dual #2
Power Save Mode ††



The laser turns OFF after a configured period of non-use then the motor turns OFF at thirty-minute intervals.

Example 2:

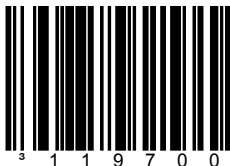
Example of Dual #2 Power Save Mode with the power save timeout set to 15-minutes.



This feature is not available with all models.

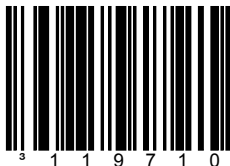
†† Some Metrologic scanners automatically 'wake' or exit from the power save mode if the IR detects movement. Other Metrologic scanners wake if their multi-Function Button is pressed. Please refer to the Installation and User's Guide specific to each product.

* Enable
Power Save Switch



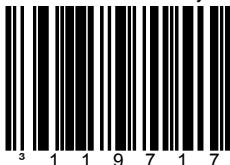
This feature is not available with all models.

Disable
Power Save Switch



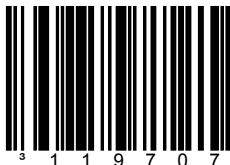
This feature is not available with all models.

Enable
Wake with Switch Only



Only wake from power save using the multi-function button

* Enable
Wake with IR or Switch



Wake using the IR or the multifunction button.

SECTION D

JAPANESE DOUBLE FIELD SUPPORT

To support Japanese Double Field Bar Codes, first make sure you have your scanner configured to the following settings.

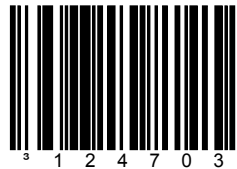
- Disable Segmented UPC Decoding
- Enable 2 scan buffers
- Disable bar code absence detection
- Enable normal code selects

Then, scan the **Enable Japan 2 Field** bar code.

Enable Japan 2 Field



* Disable Japan 2 Field



Next, select the matching bar codes that are used for double field symbols.

Note that only UPC/EAN bar codes are allowed in double field mode.

Select at least two characters for each bar code. The maximum is 4 upper and 4 lower bar codes.

EXAMPLE**To select 54 as the first two characters in the Upper Code pair 1:**

1. Scan the *Upper Code 1 Character 1* bar code (shown on page D 31)
2. Determine the correct Code Byte Value for the character 5 in 54
(Refer to Section M's ASCII Reference Table, starting on page M 6)
 - a. Scan Code Byte 0
 - b. Scan Code Byte 5
 - c. Scan Code Byte 3
3. Scan the *Upper Code 1 Character 2* bar code (shown on page D 31)
4. Determine the correct Code Byte Value for the character 4 in 54.
 - a. Scan Code Byte 0
 - b. Scan Code Byte 5
 - c. Scan Code Byte 2

To select 18 as the first two characters in the Lower Code pair 1:

1. Scan the *Lower Code 1 Character 1* bar code (shown on page D 31)
2. Determine the correct Code Byte Value for the character 1 in 18
(refer to Section M's ASCII Reference Table starting on page M 6)
 - a. Scan Code Byte 0
 - b. Scan Code Byte 4
 - c. Scan Code Byte 9
3. Scan the *Lower Code 1 Character 2* bar code (shown on page D 31)
4. Determine the correct Code Byte Value for the character 8 in 18.
(Refer to Section M's ASCII Reference Table, starting on page M 6)
 - a. Scan Code Byte 0
 - b. Scan Code Byte 5
 - c. Scan Code Byte 6

Upper Code 1 Character 1



Upper Code 1 Character 2



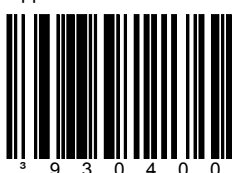
Lower Code 1 Character 1



Lower Code 1 Character 2



Upper Code 2 Character 1



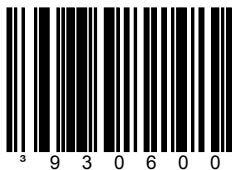
Upper Code 2 Character 2



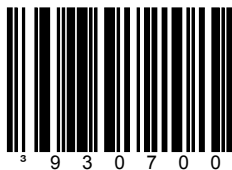
SECTION D

JAPANESE DOUBLE FIELD SUPPORT

Lower Code 2 Character 1



Lower Code 2 Character 2



Upper Code 3 Character 1



Upper Code 3 Character 2



Lower Code 3 Character 1



Lower Code 3 Character 1



Upper Code 4 Character 1



Upper Code 4 Character 2



Lower Code 4 Character 1



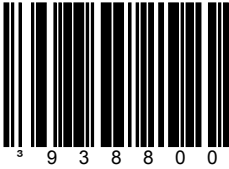
Lower Code 4 Character 2



SECTION D

JAPANESE DOUBLE FIELD SUPPORT

Japanese Trial Time



Scan the above bar code followed by the 3 code bytes in Section M that represent the timeout value desired if in special code select mode.

1 is equal to 100 milliseconds

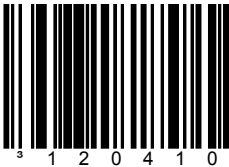
Example:

If a 500 millisecond timeout is desired, scan the above code followed by code byte 0, code byte 0 and code byte 5.

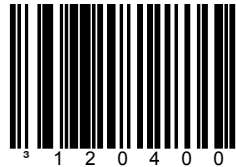
Enable Code Selects



Transmit Top Code Select



Transmit the highest priority code select if all are not found.

* Transmit
All Code Selects

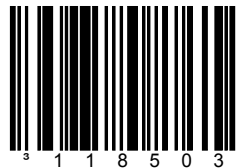
Transmit all code selects.

Enable Error Tone

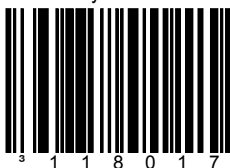


Adds ability to sound RAZZ error tone when special code selects fail.

* Disable Error Tone



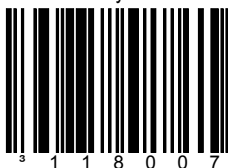
Scanability ON



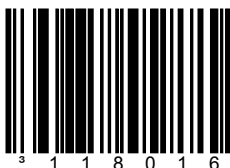
The scanner will enter scanability test mode.

i Do not enable unless instructed to by a Metrologic representative.

* Scanability OFF



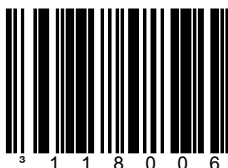
Scan Count Mode ON



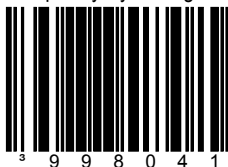
The scanner will enter scan count test mode and the scanner's firmware number will transmit to the host.

i Do not enable unless instructed to by a Metrologic representative.

* Scan Count Mode OFF



Temporary Symbologies



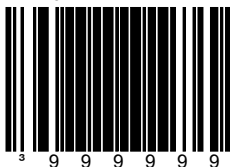
The *Temporary Symbologies* test code enables all major types of bar code symbologies, reduces the minimum number of characters required to 1, sets the minimum ITF characters required to 2, and adds the symbology name as a prefix to the transmission. This feature is disabled when power to the scanner is cycled OFF and ON.

i Do not enable unless instructed to by a Metrologic representative

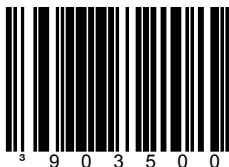


Scan the *Enter/Exit Configuration Mode* bar code before trying to set this feature. Please refer to the Multi-Code method on page xii.

Enter/Exit
Configuration Mode

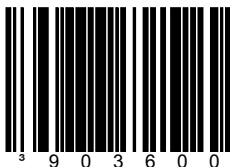


~ Configurable Prefix
Character #1



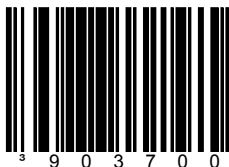
A prefix ID can be added and assigned for data transmission. Use this code with a 3-code byte sequence from Section M that represents the desired character.

~ Configurable Prefix
Character #2



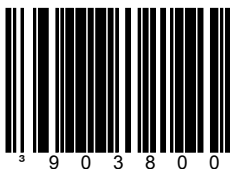
Assigns a 2nd configurable prefix character.

~ Configurable Prefix
Character #3



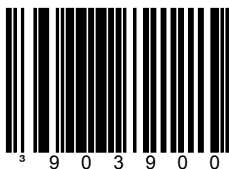
Assigns a 3rd configurable prefix character.

~ Configurable Prefix
Character #4



Assigns a 4th configurable prefix character.

~ Configurable Prefix
Character #5

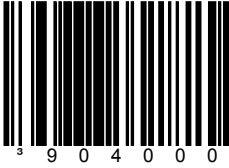


Assigns a 5th configurable prefix character.

SECTION E

CONFIGURABLE PREFIXES, ALL DATA

~ Configurable Prefix
Character #6



Assigns a 6th configurable
prefix character.

~ Configurable Prefix
Character #7



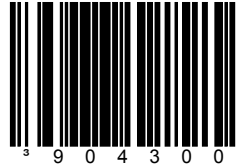
Assigns a 7th configurable
prefix character.

~ Configurable Prefix
Character #8



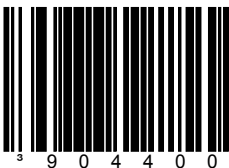
Assigns a 8th configurable
prefix character.

~ Configurable Prefix
Character #9

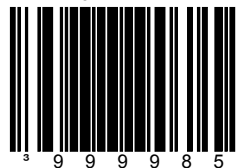


Assigns a 9th configurable
prefix character.

~ Configurable Prefix
Character #10

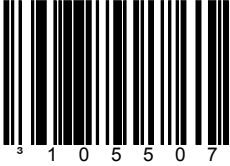


* Clear all User
Configurable Prefixes



SECTION E CONFIGURABLE ID CHARACTERS, CODE SPECIFIC

* Use Configurable Code ID Bytes as Prefixes

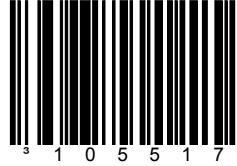


User configured, code specific ID bytes are transmitted before the data.



If using prefixes, user configured suffixes can not be used.

Use Configurable Code ID Bytes as Suffixes



User configured, code specific ID bytes are transmitted after the data.



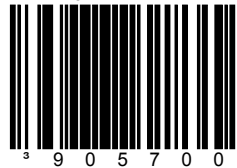
If using suffixes, user configured prefixes can not be used.

IDENTIFIERS CHARACTER

~ Configurable UPC-A ID †



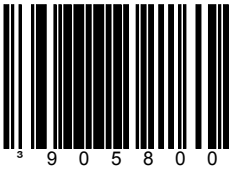
~ Configurable UPC-E ID †



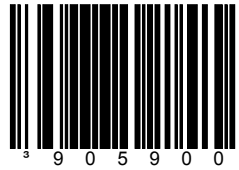
† While using the Multi-Code method, scan this bar code followed by the 3 code byte bar codes in Section M that represent a unique ID character to be associated with this bar code type. (Refer to the *Multi-Code Method* on page xii.)

SECTION E CONFIGURABLE ID CHARACTERS, CODE SPECIFIC

~ Configurable EAN-8 ID †

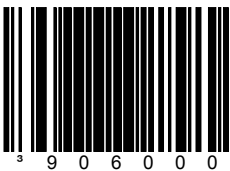


~ Configurable EAN-13 ID †



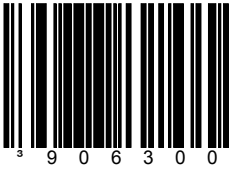
† While using the Multi-Code method, scan this bar code followed by the 3 code byte bar codes in Section M that represent a unique ID character to be associated with this bar code type. (Refer to the *Multi-Code Method* on page xii.)

~ Configurable Code 39 ID †

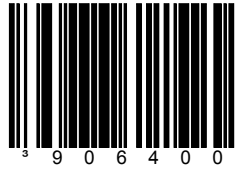
~ Configurable
Code 128 ID †

SECTION E CONFIGURABLE ID CHARACTERS, CODE SPECIFIC

~ Configurable Code 93 ID †

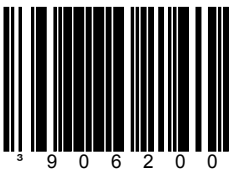


~ Configurable Code 11 ID †

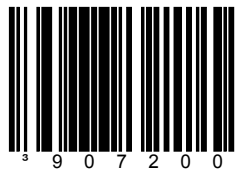


† While using the Multi-Code method, scan this bar code followed by the 3 code byte bar codes in Section M that represent a unique ID character to be associated with this bar code type. (Refer to the Multi-Code Method on page xii.)

~ Configurable Telepen ID †

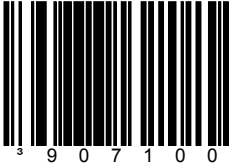


~ Configurable
TRI-OPTIC ID †



SECTION E CONFIGURABLE ID CHARACTERS, CODE SPECIFIC

~ Configurable
Standard 2 of 5 ID †

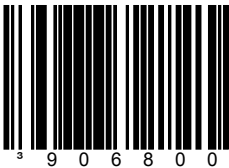


~ Configurable
Interleaved 2 of 5 ID †



† While using the Multi-Code method, scan this bar code followed by the 3 code byte bar codes in Section M that represent a unique ID character to be associated with this bar code type. (Refer to the *Multi-Code Method* on page *xii*.)

~ Configurable
Matrix 2 of 5 ID †



~ Configurable
Airline 2 of 5 ID †



SECTION E CONFIGURABLE ID CHARACTERS CODE SPECIFIC

~ Configurable
MSI Plessey ID †

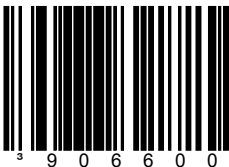


~ Configurable
UK Plessey ID†

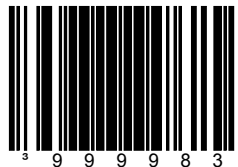


† While using the Multi-Code method, scan this bar code followed by the 3 code byte bar codes in Section M that represent a unique ID character to be associated with this bar code type. (Refer to the *Multi-Code Method on page xii.*)

~ Configurable
Codabar ID †



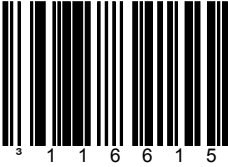
* Clear all Configurable
Code Specific ID's †



SECTION E

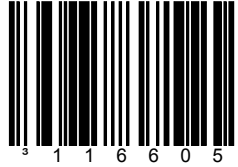
STANDARD PREFIX CHARACTERS

Enable STX Prefix



The scanner will transmit a **Start of TeXt** (ASCII 02H) before each bar code.

* Disable STX Prefix

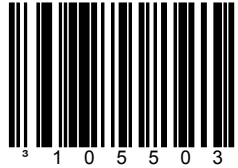


Will not transmit a **Start of TeXt** (ASCII 02H) before each bar code.

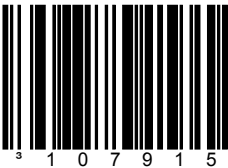
Enable Rockford-Thompson Mode



* Disable Rockford-Thompson Mode

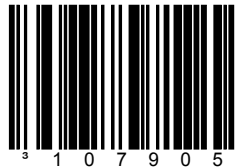


Enable AIM ID Characters



The scanner will transmit AIM symbology identifiers.

* Disable AIM ID Characters



The scanner will not transmit AIM symbology identifiers.



Some scanner models may not support this feature.

Enable UPC Prefix ID

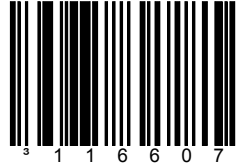


When enabled, the scanner will transmit a prefix before any UPC/EAN bar code.

The prefixes are as follows:

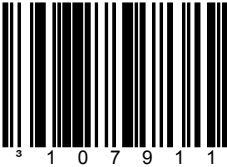
- A (UPC-A),
- E0 (UPC-E),
- F (EAN-13), and
- FF (EAN-8).

* Disable UPC Prefix ID



Do not send prefix ID Characters with UPC/EAN codes.

Enable NCR Prefix ID

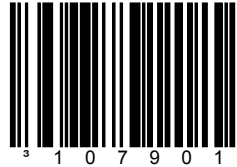


When enabled, the scanner will transmit a prefix before the following code types.

The prefixes are as follows:

- A (UPC-A),
- E0 (UPC-E),
- FF (EAN-8),
- F (EAN-13),
- B1 (Code 39),
- B2 (ITF) and
- B3 (Code 128 & other codes).

* Disable NCR Prefix ID



SECTION E

STANDARD PREFIX CHARACTERS

Enable Nixdorf ID
Characters



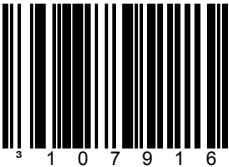
This option transmits code
identifiers before each bar
code for many
Siemens/Nixdorf registers.

* Disable Nixdorf ID
Characters



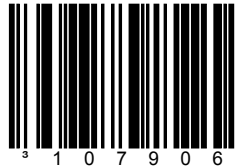
This option will not transmit
Siemens/Nixdorf code
identifiers.

Enable SANYO ID
Characters



Transmit Sanyo ID
Characters.

* Disable SANYO ID
Characters



Do not transmit Sanyo ID
Characters.

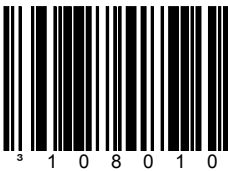
Enable TEC Register
Format ID Characters



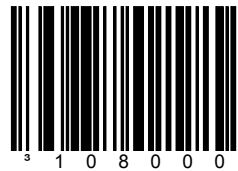
Disable TEC Register
Format ID Characters



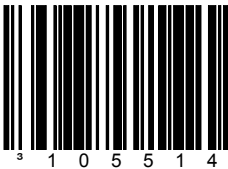
Enable TEC MA1530
ID Characters



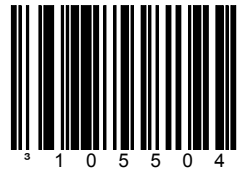
Disable TEC MA1530
ID Characters



Enable Symbology Prefix



Disable Symbology Prefix



This option adds a symbology description in front of the bar code transmission.

Do not add a symbology description in front of the bar code transmission.

SECTION E

STANDARD PREFIX CHARACTERS

Enable Manufacturer
ID Prefix



Transmits "METROLOGIC"
before all bar code data to
identify the scanner as a
Metrologic Scanner.

* Disable Manufacturer
ID Prefix



The scanner will not
transmit the manufacturer
identification string.

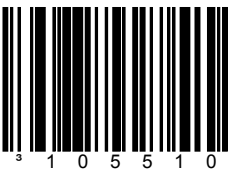
Enable "C" Prefix



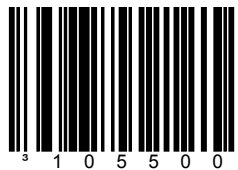
* Disable "C" Prefix



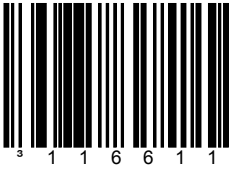
Enable "\$" Prefix ID
for UPC/EAN



* Disable "\$" Prefix ID
for UPC/EAN

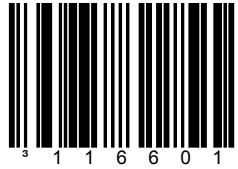


Enable Tab Prefix



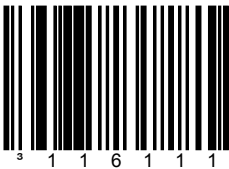
The scanner will transmit a TAB (ASCII 09H) before each bar code.

* Disable Tab Prefix

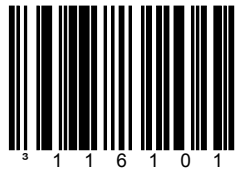


The scanner will not transmit a TAB.

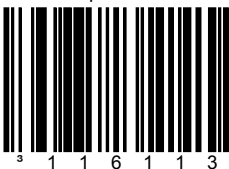
Enable SNI Beetle Mode



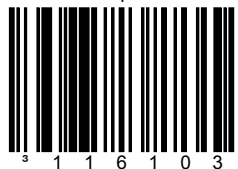
* Disable SNI Beetle Mode



Enable Cipher 1021 IDs



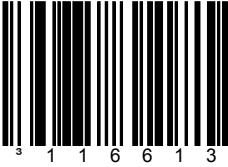
* Disable Cipher 1021 IDs



SECTION E

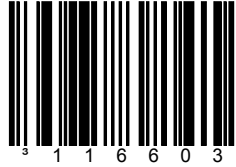
STANDARD SUFFIX CHARACTERS

* Enable CR Suffix



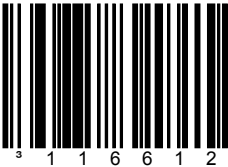
The scanner will transmit a **Carriage Return** after each bar code.

Disable CR Suffix



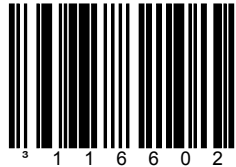
The scanner will not transmit a **Carriage Return** after each bar code.

* Enable LF Suffix



The scanner will transmit a **Line Feed** after each bar code.

Disable LF Suffix

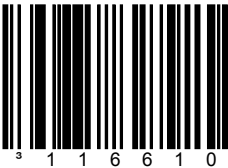


The scanner will not transmit a **Line Feed** after each bar code.



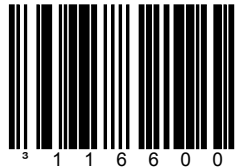
This feature is Disabled when keyboard wedge defaults are loaded.

Enable Tab Suffix



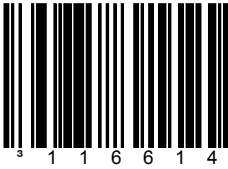
The scanner will transmit a **TAB (ASCII 09H)** after each bar code.

* Disable Tab Suffix



The scanner will not transmit a **TAB (ASCII 09H)** after each bar code.

Enable ETX Suffix



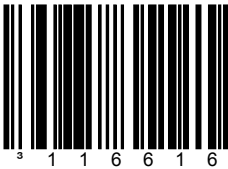
The scanner will transmit
End of TeXt (ASCII 03H)
after the bar code data.

* Disable ETX Suffix



The scanner will not
transmit End of TeXt
(ASCII 03H).

Enable UPC Suffix ID

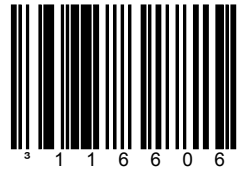


The scanner will transmit a
suffix after any UPC/EAN
bar code.

The suffixes are as follows:

- A (UPC-A),
- E (UPC-E),
- F (EAN-13) and
- F (EAN-8).

* Disable UPC Suffix ID

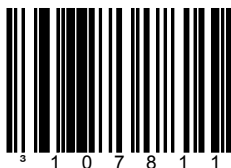


The scanner will not
transmit a suffix after
UPC/EAN bar codes.

SECTION E

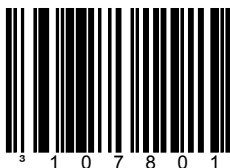
LONGITUDINAL REDUNDANCY CHECK (LRC)

Enable Transmit of
LRC Calculation



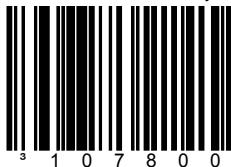
The scanner outputs an
LRC check character after
the bar code.

* Disable Transmit of
LCR Calculation



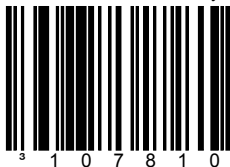
The scanner will not output
an LRC (check character)
after the bar code.

* Start LRC on First Byte



The scanner will calculate
the LRC check digit starting
with the first character.

Start LRC on Second Byte



The scanner will calculate
the LRC check digit starting
with the second character.

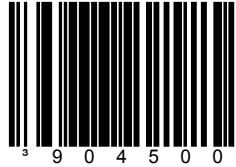


Scan the *Enter/Exit Configuration Mode* bar code before trying to set this feature. Refer to the *Multi-Code Method* on page xii.

Enter/Exit
Configuration Mode



~ Configurable Suffix
Character #1



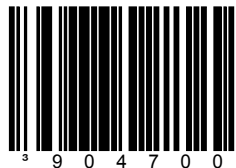
A suffix ID can be added and assigned for data transmission. Use this code with a 3 byte sequence from Section M that represents the desired character.

~ Configurable Suffix
Character #2



Assigns a 2nd configurable suffix character.

~ Configurable Suffix
Character #3

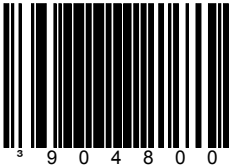


Assigns a 3rd configurable suffix character.

SECTION E

CONFIGURABLE SUFFIXES, ALL DATA

~ Configurable Suffix
Character #4 †



Assigns a 4th configurable
suffix character.

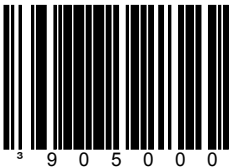
~ Configurable Suffix
Character #5 †



Assigns a 5th configurable
suffix character.

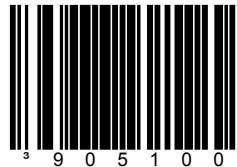
† While using the Multi-Code method,
scan this bar code followed by the 3
code byte bar codes in Section M
that represents the desired
character. (Refer to the *Multi-Code
Method on page xii.*)

~ Configurable Suffix
Character #6 †



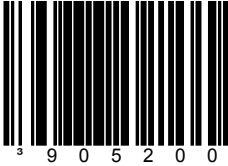
Assigns a 6th configurable
suffix character.

~ Configurable Suffix
Character #7 †



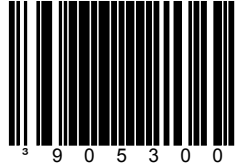
Assigns 7th configurable
suffix character.

~ Configurable Suffix
Character #8 †



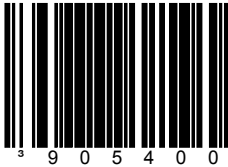
Assigns a 8th configurable
suffix character.

~ Configurable Suffix
Character #9 †



Assigns a 9th configurable
suffix character.

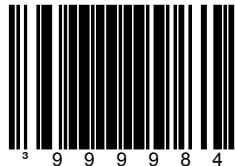
~ Configurable Suffix
Character #10 †



Assigns a 10th configurable
suffix character.

† While using the Multi-Code method, scan this bar code followed by the 3 code byte bar codes in Section M that represent the desired character. (Refer to the *Multi-Code Method* on page xii.)

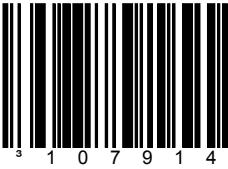
* Clear All User
Configurable Suffixes



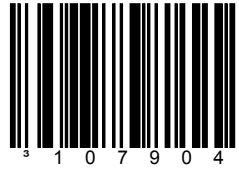
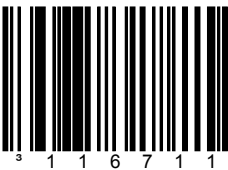
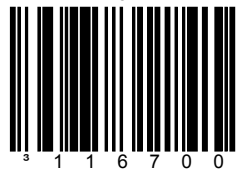
SECTION E

SPECIAL FORMATS

Enable SINEKO Mode



* Disable SINEKO Mode

Enable Newcode Formatting
Mode A* Disable Newcode
Formatting Mode AEnable Newcode Formatting
Mode B* Disable Newcode
Formatting Mode B

To replace a character:

1. Scan the *Enter/Exit Configuration Mode* bar code (located on page xii, at the front of this guide).
2. Scan the *Character to Replace Code* (shown below).
3. Scan the ASCII Code Byte value of the character you wish to replace (refer to the ASCII reference table in Section M).
4. Scan the *Replacement Character* bar code.
5. Scan the ASCII Code Byte value of the replacement character.
6. Scan the *Enter/Exit Configuration Mode* bar code (located on page xii, at the front of this guide).

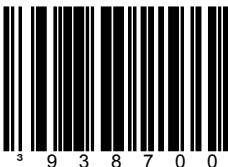
Character to Replace



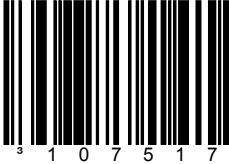
No Replacement



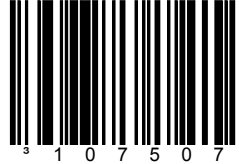
Replacement Character



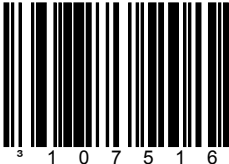
* Transmit UPC-A
Check Digit



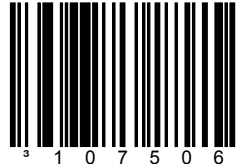
Do not Transmit
UPC-A Check Digit



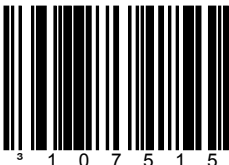
Transmit UPC-E
Check Digit



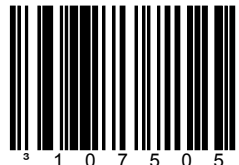
* Do Not Transmit
UPC-E Check Digit



Expand UPC-E to 12 Digits



* Do Not Expand
UPC-E To 12 Digits



Expand UPC-E bar codes to the 12 digit equivalent, UPC-A bar codes.

Do not expand UPC-E to the 12 digit equivalent, UPC-A bar code.

SECTION F

UPC/EAN

Convert UPC-A to EAN-13



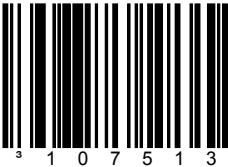
The scanner converts UPC-A to EAN-13 by transmitting a leading zero before the bar code.

* Do Not Convert
UPC-A to EAN-13



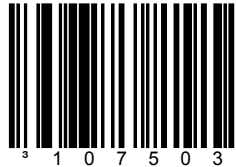
The scanner will not convert UPC-A to EAN-13.

Transmit Lead Zero
on UPC-E



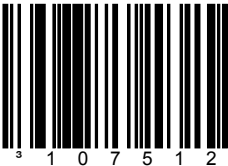
This option will transmit a zero before each UPC-E bar code.

Do Not Transmit
Lead Zero on UPC-E



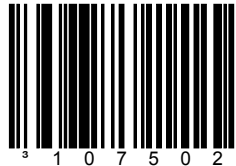
This option will not transmit a zero before each UPC-E bar code.

Convert EAN-8 to EAN-13



The scanner will transmit five zeros before the bar code to convert EAN-8 to EAN-13.

* Do Not Convert
EAN-8 to EAN-13

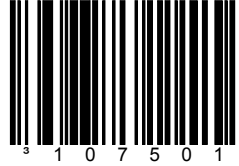


The scanner will not convert EAN-8 to EAN-13.

* Transmit UPC-A
Number System

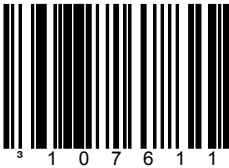


Do Not Transmit UPC-A
Number System

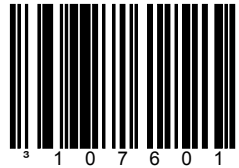


i Metrologic strongly discourages using this feature. Duplicate numbers may result in the database.

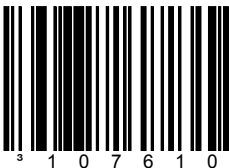
* Transmit
UPC-A MFR #



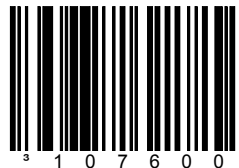
Do Not Transmit
UPC-A MFR #



* Transmit
UPC-A ITEM #



Do Not Transmit
UPC-A ITEM #



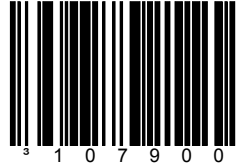
SECTION F

UPC/EAN

* Transmit EAN-8
Check Digit



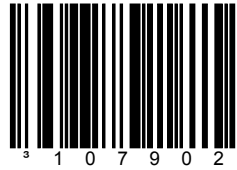
Do Not Transmit
EAN-8 Check Digit



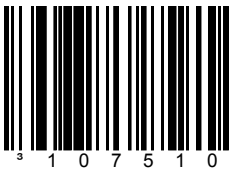
* Transmit EAN-13
Check Digit



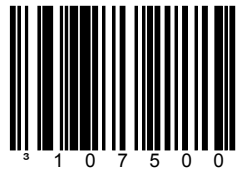
Do Not Transmit
EAN-13 Check Digit



GTIN-14 Format

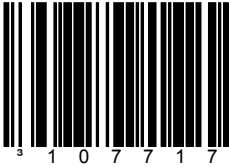


No GTIN-14 Format



This feature is not
available with all
models.

Transmit Codabar Start/Stop Characters



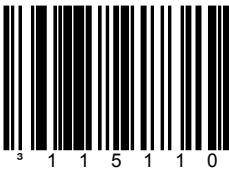
Transmits Codabar's start/stop characters before and after each bar code.

* Do Not Transmit Codabar Start/Stop

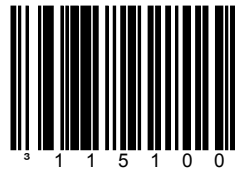


Will not transmit Codabar's start/stop characters before and after each bar code.

Convert Codabar Start/Stop Characters to Lowercase



* Do Not Convert Codabar Start/Stop Characters to Lowercase



SECTION F

CODABAR

Enable
CLSI Editing



CLSI type editing will be done
before the information is
transmitted to the host.



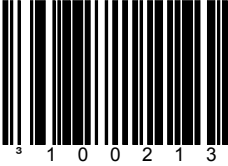
This option will only
work with 14 digit
Codabar type lengths.

* Do Not Enable
CLSI Editing



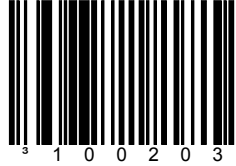
This option will not perform
CLSI type editing before the
information is transmitted to
the host.

Enable MOD 43
Check on Code 39



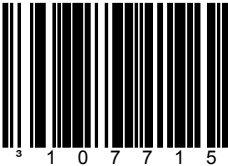
The scanner will only scan
Code 39 bar codes that
have a valid Modulo 43
Check Digit.

* Disable MOD 43 Check
on Code 39



The scanner will not test
Code 39 bar codes for a
Modulo 43 Check Digit.

Transmit Mod 43
Check Digit on Code 39



This feature works in
conjunction with Mod 43
Check on Code 39. Both
must be enabled for this
feature to work.

* Do Not Transmit Mod 43
Check Digit on Code 39



This option will not transmit
Code 39's Mod 43 check
character.

SECTION F

CODE 39

Transmit Code 39 Start/Stop
Characters



The scanner transmits Code
39's start/stop characters before
and after each bar code.

* Do Not Transmit Code 39
Start/Stop Characters



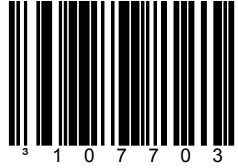
The scanner will not transmit
Code 39's start/stop characters
before and after each bar code.

Transmit
Code 11 Check Digit



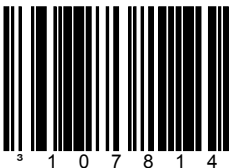
The scanner will transmit Code 11 check characters when used with the Enable Code 11 feature in Section A.

* Do Not Transmit
Code 11 Check Digit

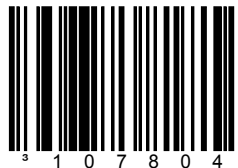


The scanner will not transmit Code 11 check characters.

Enable
Convert Telepen ^L to E



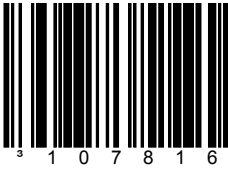
* Disable
Convert Telepen ^L to E



SECTION F

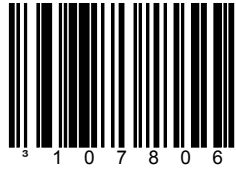
PLESSEY

Transmit
UK Plessey Check Digit



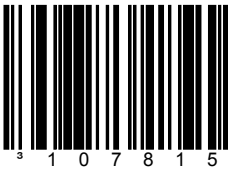
The scanner will transmit UK Plessey Check Digit characters when used with the Enable UK Plessey feature in Section A.

* Do Not Transmit
UK Plessey Check Digit



Will not transmit UK Plessey Check Digit characters.

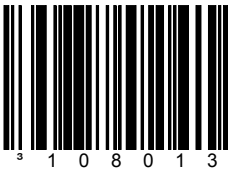
Enable
UK Plessey Special Format



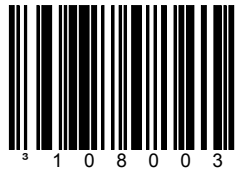
Disable
UK Plessey Special Format



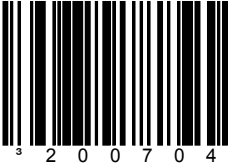
Handle Incorrect
UK Plessey Stop Character



* Normal UK Plessey Stop
Character Handling

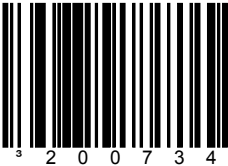


* No MSI Plessey
Check Digit



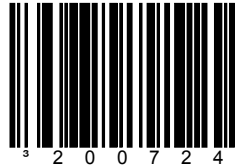
The scanner will not test
MSI Plessey bar codes for a
check digit.

Enable MSI Plessey MOD
10/10 Check Digit



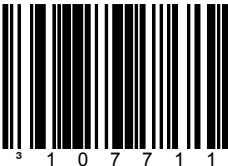
The scanner will test MSI
Plessey bar codes for a
double Modulo 10 check
digit.

* Enable MSI Plessey MOD
10 Check Digit



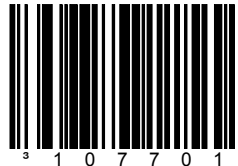
The scanner will test MSI
Plessey bar codes for a single
Modulo 10 check digit.

Transmit
MSI Plessey Check Digit



This option works in
conjunction with one or both
of the Enabled MSI Plessey
Mode options.

* Do Not Transmit
MSI Plessey Check Digit



The scanner will not transmit
MSI Plessey's check digit
characters.

SECTION F

2 OF 5

Enable Mod 10
Check on ITF



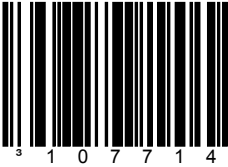
The scanner will only scan Interleaved 2 of 5 (ITF) bar codes that have a Modulo 10 check digit.

* Disable MOD 10
Check on ITF



The scanner will not test Interleaved 2 of 5 (ITF) bar codes for a Modulo 10 check digit.

Transmit Mod 10
Check Digit on ITF



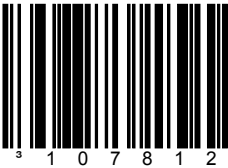
The scanner transmits Interleaved 2 of 5 (ITF) Mod 10 check character.

* Do Not Transmit Mod 10
Check Digit on ITF

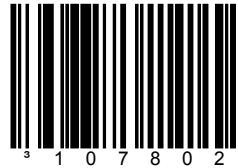


The scanner will not transmit Interleaved 2 of 5 (ITF) Mod 10 check digit character. This feature works in conjunction with Mod 10 check on ITF. Both must be enabled for this feature to work.

Transmit Matrix 2 of 5
Check Digit



* Do Not Transmit
Matrix 2 of 5 Check Digit.



* Enable RS-232 Mode



When enabled the scanner will work with RS-232 $\pm 12V$ serial output.

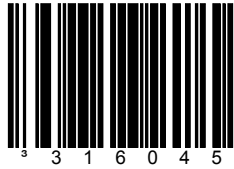
SECTION G

PARITY FEATURES



A parity bit is an extra data bit used to help catch data transmission errors. The scanner's parity must match the host's parity.

No Parity

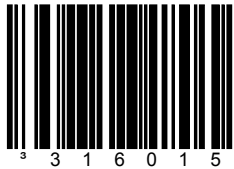


Odd Parity



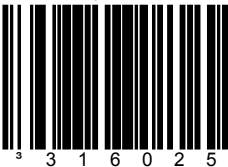
Select Odd Parity to set the parity bit to either 1 or 0 to ensure an odd number of bits are 1's.

* Space Parity



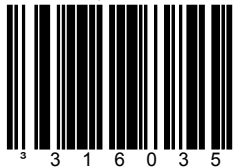
Select to set the parity bit always 0.

Even Parity



Select to set the parity bit to either 1 or 0 to ensure an even number of bits are 1's.

Mark Parity

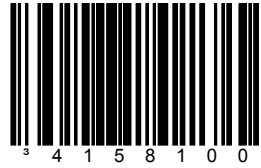


Select to set the parity bit always 1.



A “Baud” or “Baud Rate” is the speed at which data is transmitted. Select a Baud for the scanner that matches the host device.

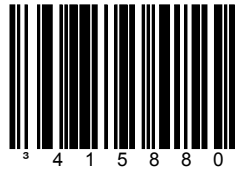
115200 BAUD Rate



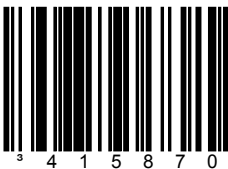
57600 BAUD Rate



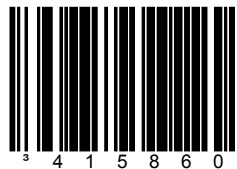
38400 BAUD Rate



19200 BAUD Rate



14400 BAUD Rate



SECTION G

BAUD RATES

* 9600 BAUD Rate



4800 BAUD Rate



2400 BAUD Rate



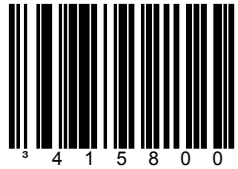
1200 BAUD Rate



600 BAUD Rate



300 BAUD Rate



* 7 Data Bits

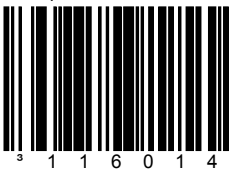


8 Data Bits

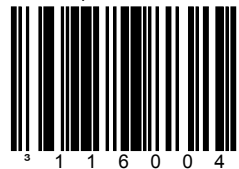


Number of data bits transmitted for each character.

1 Stop Bit



* 2 Stop Bits



SECTION G

HARDWARE HANDSHAKING

Enable RTS/CTS
Handshaking



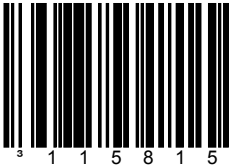
Output a Request to Send (RTS) signal and wait for a Clear To Send (CTS) signal before transmitting data.

* Disable RTS/CTS
Handshaking



Do not use RTS/CTS handshaking.

* Character RTS/CTS



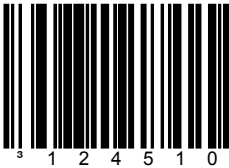
Activate/Deactivate RTS signal for each character.

Message RTS/CTS



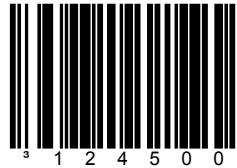
Activate RTS before sending the first character and leave it active until after the last character has been transmitted.

Invert RTS Polarity (RSV1)



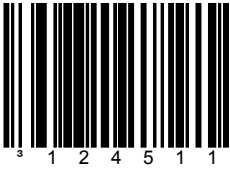
+12V = Inactive
-12V = Active

* Standard RTS Polarity



Use standard RTS polarity
-12V = Inactive
+12V = Active

Invert CTS Polarity (RSV2)



+12V = Inactive, do not send

-12V = Active, OK to send

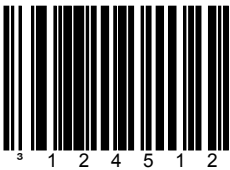
* Standard CTS Polarity



-12V = Inactive, do not send

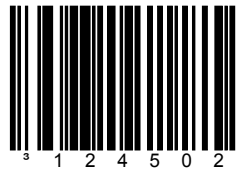
+12V = Active, OK to send

Activate RTS, Do Not wait for CTS (RSV3)



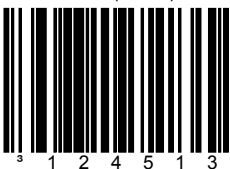
Activate RTS for transmission but do not wait for CTS to send.

* Activate RTS, Wait for CTS



Wait for CTS after activating RTS.

Test CTS Not Present Before RTS (RSV4)



Do not activate RTS if CTS is already present.

* Do Not Test for CTS Present Before RTS

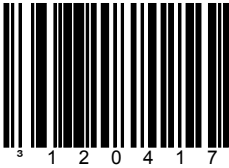


Activate RTS without testing if CTS is already active.

SECTION G

HARDWARE HANDSHAKING

CTS Scan Transmit

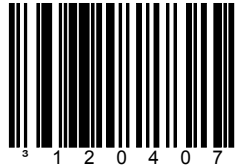


The CTS line is used to allow a decoded bar code to be transmitted. Use reserved code 4 to ensure 1 bar code per CTS. This will prevent the scanner from gathering data until the CTS signal has been retracted.



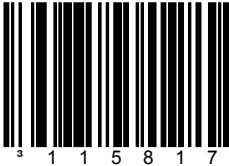
This feature is not available with all models.

* No CTS Scan Transmit



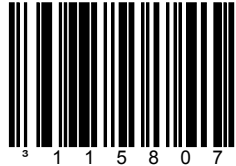
Do not support CTS scan transmit.

Enable DTR Support

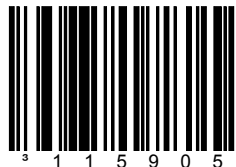


The scanner will stop scanning when the Data Terminal Ready (DTR) signal goes inactive.

* Disable DTR Support

Enable
RTS Counter Toggle

The scanner will toggle the RTS line on a good decode.

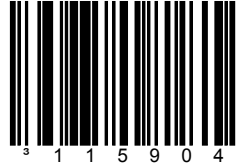
* Disable
RTS Counter Toggle

Enable XON/XOFF
Handshaking



The scanner will stop transmission whenever an XOFF (ASCII 13H) is received. Transmission will resume after an XON (ASCII 11H) is received.

* Disable XON/XOFF
Handshaking



The scanner will not test for XON/XOFF.

Enable ACK/NAK

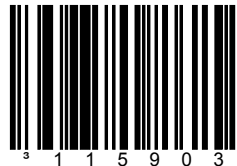


After transmitting data, wait for an ACK (06H) or a NAK (15H) response from the host.

If ACK is received, complete the communications cycle and look for more bar codes.

If NAK is received, retransmit the last set of bar code data and wait for ACK/NAK again.

* Disable ACK/NAK

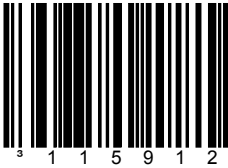


Do not support ACK/NAK handshaking.

SECTION G

SOFTWARE HANDSHAKING

Enable O/N Handshaking



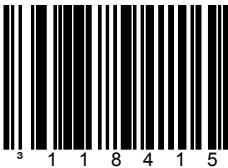
ACK/NAK handshaking (page G 9) must be enabled for this feature to work.

Support BEL/CAN in ACK/NAK



When BEL (07H) is received, the scanner beeps 3 times and exits the communications loop. If a CAN (18H) is received, then the scanner will exit the communications loop, silently.

Enable Razz Command

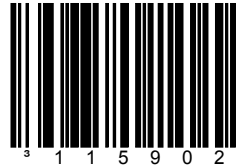


When a z is received, the scanner will RAZZ once. Multiple razzes can be sounded if the character before the z is a number and is sent within 1 second of the z.

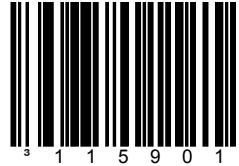


The normal BEL commands must be activated for feature.

Disable O/N Handshaking

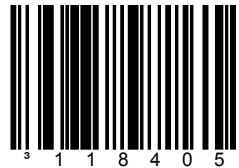


* Ignore BEL/CAN in ACK/NAK



Ignore BEL/CAN characters in communication loop.


Disable Razz Command



Ignore z characters in communication loop.


Enable XON/XOFF
Scan Inhibit On



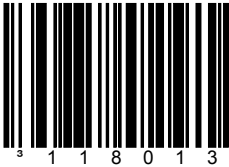
 This feature is not available with all models.

* Disable XON/XOFF
Scan Inhibit Off



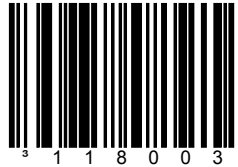
 This feature is not available with all models.

Enable 5 Retries on
ACK/NAK Time Out



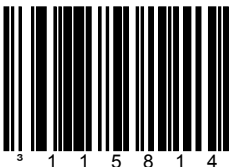
Allow up to 5 NAK retransmissions of the data before dropping out of the communications loop.

* Disable 5 Retries on
ACK/NAK Time Out

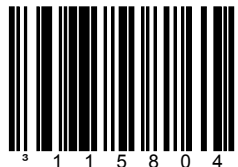


Do not limit retransmission to 5 NAK cycles.

Enable 5 NAK Retries



Disable 5 NAK Retries



SECTION G

MISCELLANEOUS

Enable French PC Term



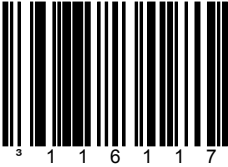
The scanner transmits PC type make/break scan codes instead of ASCII data characters. The scan codes match a WYSE French PC Terminal Emulation.

* Disable French PC Term



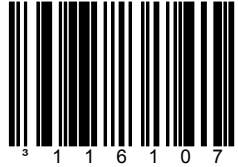
Do not transmit in French PC Term Mode.

Enable USA Wyse PC



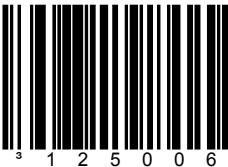
Enables USA Wyse PC style keyboard PCTERM mode.

Disable USA Wyse PC

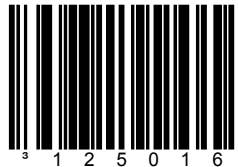


Disables USA Wyse PC style keyboard PCTERM mode.

* Enable Receive Data

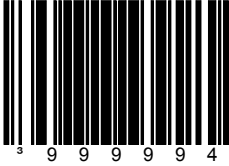


Disable Receive Data



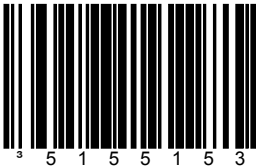
Disable receive port after 5 seconds.

Load Keyboard Wedge Defaults



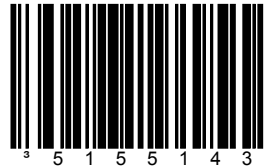
Loads default settings for keyboard wedge mode.

Enable Stand-Alone Keyboard Emulation



Use this with special stand-alone models that are not cabled for an external keyboard. When the Stand-Alone Mode is enabled, the scanner will send keyboard "power on" information and configure hardware to simulate a constant keyboard connection.

* Enable Keyboard Wedge Emulation



Use this with an external keyboard. Transmit in wedge mode to allow standard PC keyboards to communicate when no bar code data is available.

SECTION H

COUNTRY/SCAN CODE TABLE SELECTS

* USA Keyboard



Enable USA Keyboard.

Switzerland Keyboard



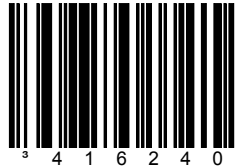
Enable Swiss Keyboard

Spain Keyboard



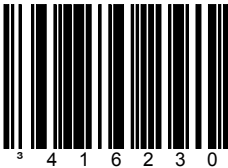
Enable Spanish Keyboard

Italy Keyboard



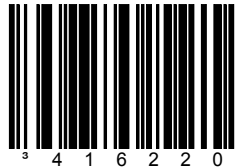
Enable Italian Keyboard

Germany Keyboard



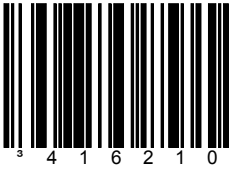
Enable German Keyboard

France Keyboard



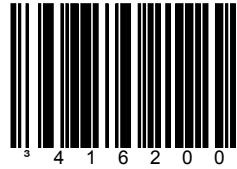
Enable French Keyboard

UK Keyboard



Enable UK Keyboard.

Belgium Keyboard



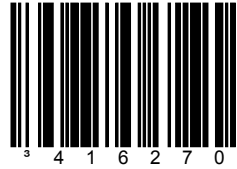
Enable Belgium Keyboard

Japanese Keyboard



Enable Japanese Keyboard

IBM 4700 Financial Keyboard



Enable IBM 4700 Financial Keyboard

Sweden/Finland Keyboard



Enable Sweden/Finland Keyboard

SECTION H

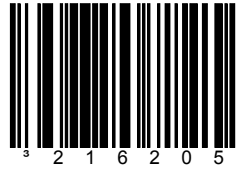
KEYBOARD/SYSTEM TYPE

* AT Keyboard



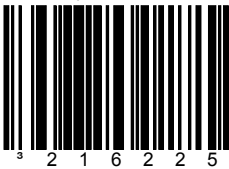
If using an AT computer, scan the above bar code. (Includes IBM PS/2 and compatible models 50, 55, 60, 80)

XT Keyboard



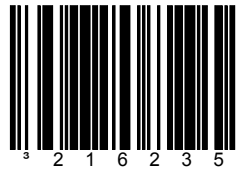
If using an XT computer, scan the above bar code.

PS/2 Keyboard



Scan the above code for PS/2 computer. (Includes IBM PC and compatible models 30, 70 and 8556)

Terminal KB Emulation



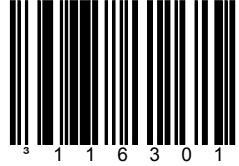
Scan the above code to enable terminal keyboard emulation mode.

Transmit
Make Code Only



i Do not scan unless instructed by a Metrologic representative.

* Transmit
Make/Break Code



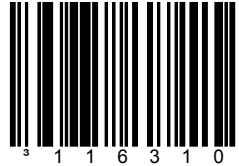
i Do not scan unless instructed by a Metrologic representative.

Do Not Transmit
F0H Break Code



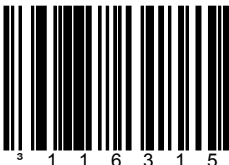
The scanner will not transmit the F0H in the break-code sequence.

* Transmit
F0H Break Code



The scanner will transmit the F0H in the break-code sequence.

Transmit Cleanup Bit



Use for certain NEC computers.

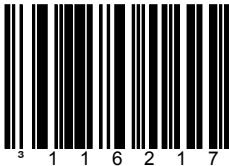
* Do Not Transmit
Cleanup Bit



SECTION H

SPECIAL KEYBOARD FEATURES

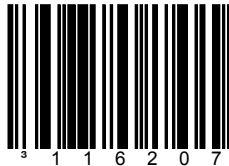
Enable Alt Mode



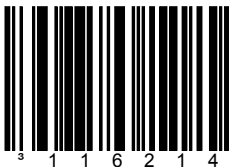
The scanner will duplicate the following keyboard sequence:

*Hold down ALT key and
Type decimal number that
corresponds to the
appropriate character.*

* Disable Alt Mode

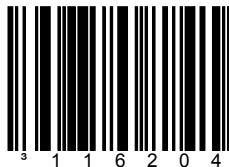


i Caution: If the host software application uses the right ALT key as a “Hot” key, ALT mode must be disabled.

Enable Auto Detect Mode
(AT/PS2)

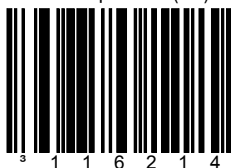
Automatically detects caps lock status.

* Disable Auto Detect Mode (AT/PS2)

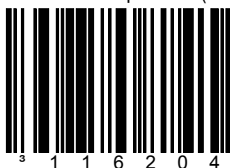


The Auto Detect Caps Lock feature is not supported.

Enable Caps Lock (XT)



* Disable Caps Lock (XT)



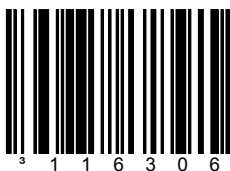
The Caps Lock feature is not supported.

Send Numbers as Keypad Data

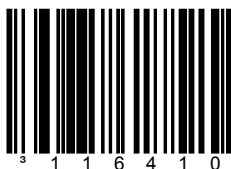


All data is sent as if it has been entered on a keypad.

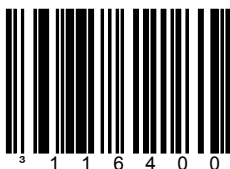
* Send Numbers as Normal Data



Enable Reserved Feature



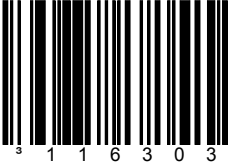
* Disable Reserved Feature



SECTION H

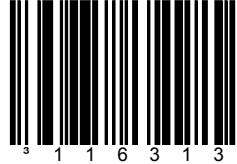
SPECIAL KEYBOARD FEATURES

* Use Extended ASCII to Send Extended Key Codes



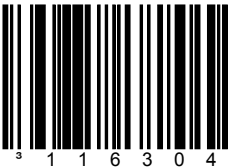
Use extended ASCII characters to send PC keyboard keys such as F1, F2, etc...See section M for details.

Use Extended ASCII Characters as Extended ASCII

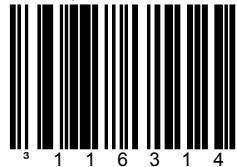


Transmit extended ASCII codes via ALT mode.

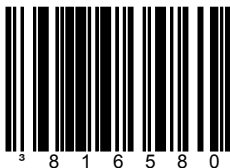
* Character KB Inhibit



Message KB Inhibit



Inter-Scan Code Delay
800 Microseconds

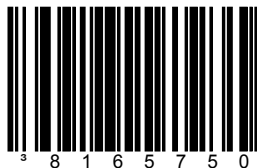


The time specified represents the amount of time between individual 9 bit-scan codes.



This parameter may need to be adjusted for operation with certain PC keyboard BIOS.

Inter-Scan Code Delay
7.5 msec

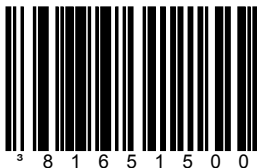


The time specified represents the amount of time between individual 9 bit-scan codes.



This parameter may need to be adjusted for operation with certain PC keyboard BIOS.

Inter-Scan Code Delay
15 msec



The time specified represents the amount of time between individual 9 bit-scan codes.



This parameter may need to be adjusted for operation with certain PC keyboard BIOS.

~ Variable Inter-Scan
Code Delay msec



Refer to the Multi-Code Configuration Method on page xii.

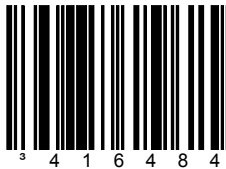
SECTION H

CONTROL SETS

In general, standard bar code symbologies will only encode the ASCII character set. Function keys, arrow keys and many other “extended” keys on an IBM compatible keyboard do not translate to ASCII characters. One method of “bar coding” the extended keys is to substitute the extended key codes when a specific ASCII control character found in the bar code stream. The Control Sets are specific translation of the ASCII (HEX) set.

CONTROL SET #1

Enable Control Set #1



Disable Control Set #1

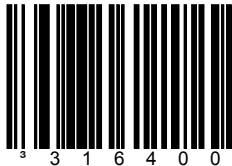


ASCII (HEX)	ASCII Control	Extended Key
00H	Null	Numeric Keypad
01H	SOH	Num Lock
02H	STX	Down
03H	ETX	Numeric Keypad
04H	EOT	Insert
05H	ENQ	Delete
06H	ACK	System Request
07H	BEL	←
08H	BS	→
09H	TAB	Tab
0AH	LF	Caps Lock
0BH	VT	Shift Tab
0CH	FF	Alt
0DH	CR	Enter
0EH	SO	Control
0FH	SI	Up Arrow
10H	DLE	F1
11H	DC1	F2
12H	DC2	F3
13H	DC3	F4
14H	DC4	F5
15H	NAK	F6
16H	SYN	F7
17H	ETB	F8
18H	CAN	F9
19H	EM	F10
1AH	SUB	Home
1BH	ESC	Esc
1CH	FS	Page Up
1DH	GS	Page Down
1EH	RS	Print Screen
1FH	US	End

SECTION H

3151 TERMINAL KEYBOARD

* 3151 Terminal Keyboard



Load OCIA Defaults



Enable OCIA



Select this option if communications require OCIA (Optically Coupled Interface Adapter).



This serial interface is clocked by the host.

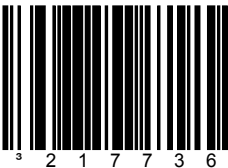
Enable DTS/Siemens



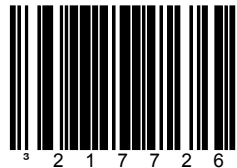
* Enable DTS/Nixdorf



Enable NCR-S



Enable NCR-F



Enable Light Pen Mode



Select this option if the scanner will be used in place of a light pen. It provides light pen emulation of each bar code scanned.

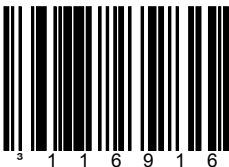
* Bars High



Spaces High

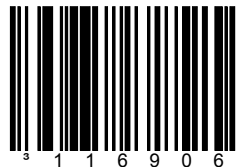


Transmit Code 39



All bar codes will be decoded then transmitted as code 39 bar codes.

* Transmit as Scanned

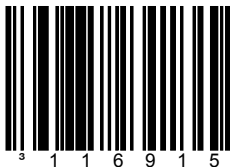


All bar codes will be decoded and transmitted in their original symbology.

SECTION J

LIGHT PEN/SET NARROW ELEMENT BORDER

Poll Light Pen Source

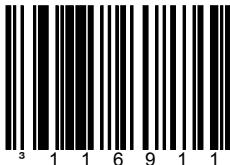


The scanner waits for an active source voltage before transmitting data.

* Do Not
Poll Light Pen Source

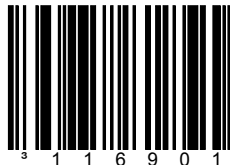
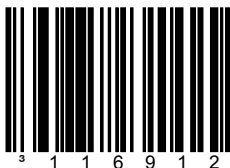


The scanner will not wait for an active source voltage before transmitting data.

Enable Light Pen a
Extra Toggle

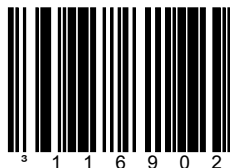
The scanner beeps and toggles the light pen data line with an extra data pulse to condition the decoder.

* Disable Light Pen
Extra Toggle

10x Narrow
Element Border

This bar code allows the transmission of Light Pen/Wand emulation using a 10x border.

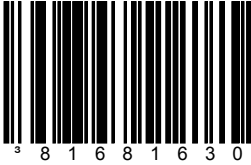
* 50x Narrow
Element Border



This bar code allows the transmission of Light Pen/Wand emulation using a 50x border.

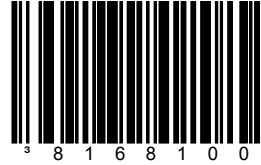
SECTION J SET NARROW ELEMENT WIDTH /LASER EMULATION

* 1 ms
Narrow Element Width



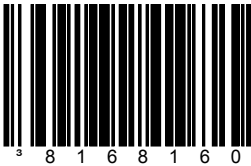
This option allows the transmission of Light/Pen Wand emulation a 1 ms narrow element width.

60 μ s
Narrow Element Width



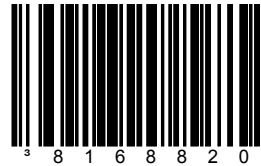
This transmits at 60 μ s narrow element width.

100 μ s
Narrow Element Width



This transmits at 100 μ s narrow element width.

500 μ s
Narrow Element Width



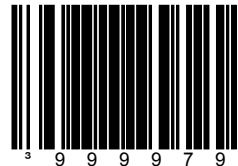
This transmits at 500 μ s narrow element width.

~ Variable
Narrow Element Width †



† Refer to the Multi-Code Method on page xii.

Laser Emulation



Sets the minimum x-dimension in 6 μ s increments. Scan this code followed by a 3 digit code byte sequence found in Section M.

†

Load
IBM 46xx Defaults



Load default format settings
for IBM 46xx systems.

Enable IBM 46xx
Communication



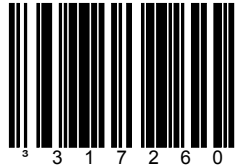
Select this option for IBM
46xx SIOC/RS485
communication.

i Not all scanners
support this interface.
The correct interface
board is required.

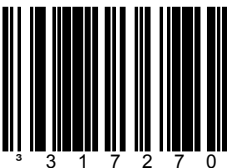
IBM Port 17B
3687-2 In Counter



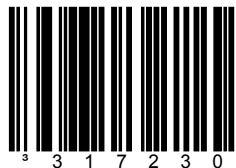
IBM Port 5B
1520 HH Laser



* IBM Port 9B
4500 CCD HH BCR1



IBM Port 9B
4501 CCD HH BCR2



SECTION K

IBM RESERVE CODES

IBM Reserve #1



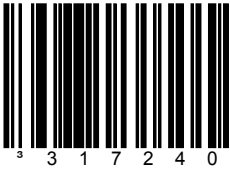
IBM Reserve #2



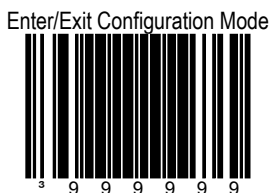
IBM Reserve #3



IBM Reserve #5



User configurable prefixes, symbol length and other features that use these code bytes for configuration, require that the scanner be in configuration mode. Scan the Enter/Exit Configuration Mode bar code before starting the configuration cycle. Single code configuration mode does not work for these multi-code sequences.



EXAMPLE

User configurable prefix/suffix characters (Section E) can be saved into the scanner by scanning the 3 digit decimal equivalent of the ASCII character into the appropriate character location with the code byte bar codes.

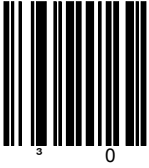
To add an asterisk (*) as a prefix scan the following bar codes in order:

1. Enter/Exit Configuration Mode (3 beeps)
2. Configurable Prefix 1 (1 beep)
3. Code Byte 0 (1 beep)
4. Code Byte 4 (2 beeps)
5. Code Byte 2 (3 beeps)
6. Enter/Exit Configuration Mode (3 beeps)

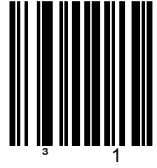
SECTION M

CODE BYTES 0-5

Code Byte 0



Code Byte 1



Code Byte 2



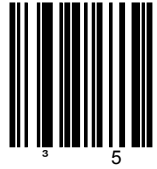
Code Byte 3



Code Byte 4



Code Byte 5



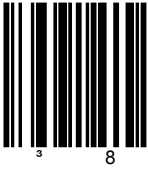
Code Byte 6



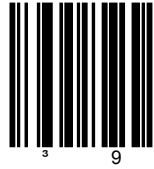
Code Byte 7



Code Byte 8



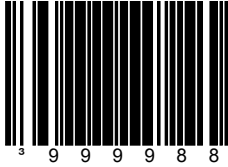
Code Byte 9



SECTION M

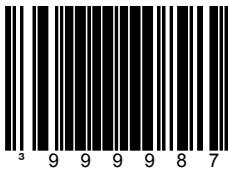
RESERVED CODES

~ Enable Reserved Code



Contact a Metrologic customer service representative for additional details on this feature.

~ Disable Reserved Code



SECTION M

CODE BYTE/CODE TYPE TABLE

CODE BYTE	CODE TYPES
004	UPC-A
002	UPC-E
003	EAN-8
005	EAN-13
080	Code 39
081	Codabar
082	Interleaved 2 of 5
083	Code 128
084	Code 93
091	MSI Plessey
092	Code 11
093	Airline 2 of 5 (15 digits)
094	Matrix 2 of 5
095	Telepen
096	UK Plessey
098	Standard 2 of 5
097	Airline (13 digits)
099	TRI-OPTIC

SECTION M

ASCII REFERENCE TABLE

HEX VALUE	DECIMAL VALUE/ CODE BYTE VALUE	CHARACTER	CONTROL KEYBOARD EQUIVALENT
00	000	NUL	@
01	001	SOH	A
02	002	STX	B
03	003	ETX	C
04	004	EOT	D
05	005	ENQ	E
06	006	ACK	F
07	007	BEL	G
08	008	BS	H
09	009	HT	I
0A	010	LF	J
0B	011	VT	K
0C	012	FF	L
0D	013	CR	M
0E	014	SO	N
0F	015	SI	O
10	016	DLE	P
11	017	DC1	Q
12	018	DC2	R
13	019	DC3	S
14	020	DC4	T
15	021	NAK	U
16	022	SYN	V
17	023	ETB	W
18	024	CAN	X
19	025	EM	Y
1A	026	SUB	Z

SECTION M

ASCII REFERENCE TABLE

HEX VALUE	DECIMAL VALUE/ CODE BYTE VALUE	CHARACTER	CONTROL KEYBOARD EQUIVALENT
1B	027	ESC	[
1C	028	FS	\
1D	029	GS	^
1E	030	RS	_
1F	031	US	
20	032	SP	space, blank
21	033	!	
22	034	"	
23	035	#	
24	036	\$	
25	037	%	
26	038	&	
27	039	'	apostrophe
28	040	(
29	041)	
2A	042	*	
2B	043	+	
2C	044	,	comma
2D	045	-	minus
2E	046	.	period
2F	047	/	
30	048	0	number zero
31	049	1	number one
32	050	2	
33	051	3	
34	052	4	
35	053	5	

SECTION M

ASCII REFERENCE TABLE

HEX VALUE	DECIMAL VALUE/ CODE BYTE VALUE	CHARACTER	CONTROL KEYBOARD EQUIVALENT
36	054	6	
37	055	7	
38	056	8	
39	057	9	
3A	058	:	
3B	059	;	
3C	060	<	less than
3D	061	=	
3E	062	>	greater than
3F	063	?	
40	064	@	shift P
41	065	A	
42	066	B	
43	067	C	
44	068	D	
45	069	E	
46	070	F	
47	071	G	
48	072	H	
49	073	I	letter I
4A	074	J	
4B	075	K	
4C	076	L	
4D	077	M	
4E	078	N	

HEX VALUE	DECIMAL VALUE/ CODE BYTE VALUE	CHARACTER	CONTROL KEYBOARD EQUIVALENT
4F	079	O	letter O
50	080	P	
51	081	Q	
52	082	R	
53	083	S	
54	084	T	
55	085	U	
56	086	V	
57	087	W	
58	088	X	
59	089	Y	
5A	090	Z	
5B	091	[shift K
5C	092	\	shift L
5D	093]	shift M
5E	094	^	↑, shift N
5F	095	_	←, shift O, underscore
60	096	`	accent grave
61	097	a	
62	098	b	
63	099	c	
64	100	d	
65	101	e	
66	102	f	
67	103	g	
68	104	h	
69	105	i	

SECTION M

ASCII REFERENCE TABLE

HEX VALUE	DECIMAL VALUE/ CODE BYTE VALUE	CHARACTER	CONTROL KEYBOARD EQUIVALENT
6A	106	j	
6B	107	k	
6C	108	l	
6D	109	m	
6E	110	n	
6F	111	o	
70	112	p	
71	113	q	
72	114	r	
73	115	s	
74	116	t	
75	117	u	
76	118	v	
77	119	w	
78	120	x	
79	121	y	
7A	122	z	
7B	123	{	
7C	124		vertical slash
7D	125	}	alt mode
7E	126	~	(alt mode)
7F	127	DEL	delete, rubout

SECTION M

EXTENDED KEY CODE REFERENCE TABLE

KEY	AT SCAN CODE	PS2 SCAN CODE	3151	PREFIX/SUFFIX VALUE HEX = DECIMAL
↑	75H	48H	63H	80H = 128
↓	72H	50H	60H	81H = 129
→	74H	4DH	6AH	82H = 130
←	6BH	4BH	61H	83H = 131
Insert	70H	52H	67H	84H = 132
Delete	71H	53H	64H	85H = 133
Home	6CH	47H	6EH	86H = 134
End	69H	4FH	00H	87H = 135
Page Up	7DH	49H	00H	88H = 136
Page Down	7AH	51H	00H	89H = 137
Right Alt	11H	38H	00H	8AH = 138
Right Ctrl	14H	1DH	39H	8BH = 139
Reserved	00H	00H	00H	8CH = 140
Reserved	00H	00H	00H	8DH = 141
Numeric Keypad Enter	5AH	1CH	79H	8EH = 142
Numeric Keypad /	4AH	35H	00H	8FH = 143
F1	05H	3BH	07H	90H = 144
F2	06H	3CH	0FH	91H = 145
F3	04H	3DH	17H	92H = 146
F4	0CH	3EH	1FH	93H = 147
F5	03H	3FH	27H	94H = 148
F6	0BH	40H	2FH	95H = 149
F7	83H	41H	37H	96H = 150
F8	0AH	42H	3FH	97H = 151
F9	01H	43H	47H	98H = 152
F10	09H	44H	4FH	99H = 153
F11	78H	57H	56H	9AH = 154
F12	07H	58H	5EH	9BH = 155
Numeric +	79H	4EH	00H	9CH = 156

SECTION M

EXTENDED KEY CODE REFERENCE TABLE

KEY	AT SCAN CODE	PS2 SCAN CODE	3151	PREFIX/SUFFIX VALUE HEX = DECIMAL
Numeric -	7BH	4AH	7CH	9DH = 157
Numeric *	7CH	37H	00H	9EH = 158
Caps Lock	58H	3AH	14H	9FH = 159
Num Lock	77H	45H	00H	A0H = 160
Left ALT	11H	38H	00H	A1H = 161
Left CTRL	14H	1DH	11H	A2H = 162
Left Shift	12H	2AH	12H	A3H = 163
Right Shift	59H	36H	59H	A4H = 164
Print Screen	Multiple	00H	00H	A5H = 165
Tab	0DH	0FH	0DH	A6H = 166
Shift Tab	8DH	8FH	65H	A7H = 167
Enter	5AH	1CH	5AH	A8H = 168
ESC	76H	01H	08H	A9H = 169
Left ALT Make	11H	36H	00H	AAH = 170
Left ALT Break	11H	B6H	00H	ABH = 171
Left CTRL Make	14H	1DH	00H	ACH = 172
Left CTRL Break	14H	9DH	00H	ADH = 173
* Left ALT + 1 character	11H	36H	00H	AEH = 174
* Left CTRL + 1 character	14H	1DH	00H	AFH = 175
* Send			58H	C0H = 192
Clear			6FH	C1H = 193
Jump			76H	C2H = 194
Send Line			7EH	C3H = 195
Erase EOF			6DH	C4H = 196
Send - Make Only			58H	C5H = 197

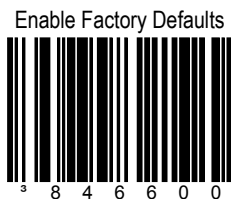
* Example:

1st Configurable Prefix = 174

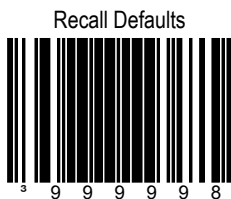
2nd Configurable Prefix = 065

Scanner will transmit <left ALT Make> "A" <Left ALT Break>

Metrologic manufactures several scanners for OEM applications. These scanners may use a different set of defaults than the standard Metrologic factory defaults. Scanning the following bar codes will restore the default factory settings.



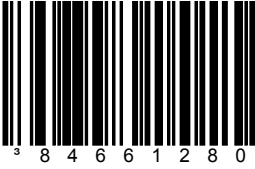
Scan this code followed by the “Recall Defaults” code to enable and load Metrologic factory defaults.



SECTION N

CUSTOM DEFAULTS

Ruby Verifone Defaults



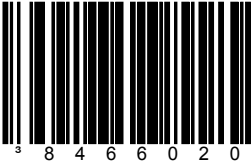
Scan this code followed by the "Recall Defaults" code to enable and load Ruby Verifone Defaults.

RCH



Scan this code followed by the "Recall Defaults" code to enable and load RCH Defaults.

Sanyo



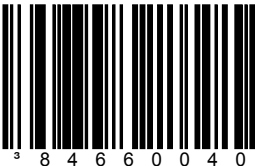
Scan this code followed by the "Recall Defaults" code to enable and load Sanyo Defaults.

Gilbarco



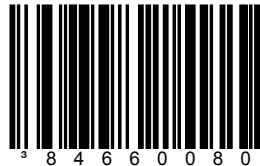
Scan this code followed by the "Recall Defaults" code to enable and load Gilbarco Defaults.

ALT Defaults



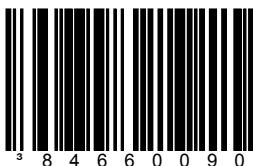
Scan this code followed by the "Recall Defaults" code to enable and load ALT Defaults.

MS6750 Defaults



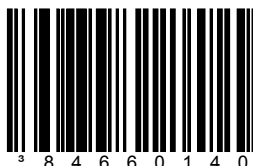
Scan this code followed by the "Recall Defaults" code to enable and load MS6750 Defaults.

German Post Defaults



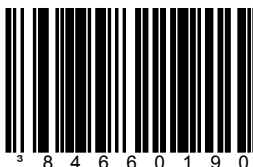
Scan this code followed by the "Recall Defaults" code to enable and load German Post Defaults.

Wincor Nixdorf Defaults



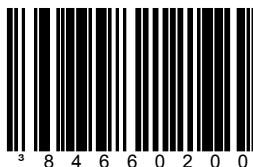
Scan this code followed by the "Recall Defaults" code to enable and load Wincor Nixdorf Defaults.

Quantum Pharmacy Defaults



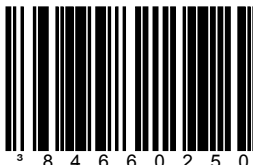
Scan this code followed by the "Recall Defaults" code to enable and load Quantum Pharmacy Defaults.

Korean Mental Defaults



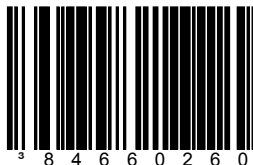
Scan this code followed by the "Recall Defaults" code to enable and load Korean Mental Defaults.

Wincor Nixdorf, QuantumE Defaults



Scan this code followed by the "Recall Defaults" code to enable and load Wincor Nixdorf QuantumE Defaults.

Auxiliary Wincor Nixdorf Plus Markets Defaults

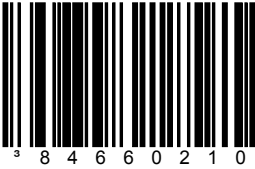


Scan this code followed by the "Recall Defaults" code to enable and load Auxiliary Wincor Nixdorf Plus Markets Defaults.

SECTION N

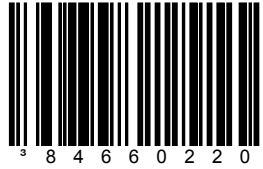
CUSTOM DEFAULTS

Custom 21 Defaults



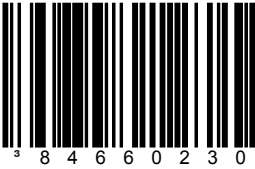
Scan this code followed by the "Recall Defaults" code to enable and load Custom 21 Defaults.

Custom 22 Defaults



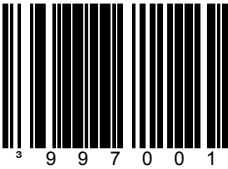
Scan this code followed by the "Recall Defaults" code to enable and load Custom 22 Defaults.

Custom 23 Defaults

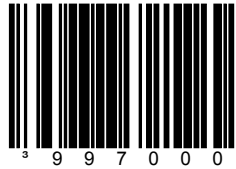


Scan this code followed by the "Recall Defaults" code to enable and load Custom 23 Defaults.

Custom Terminal FR1



Custom Keyboard FR1



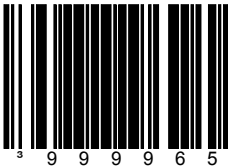
For Serial Configuration Mode, all commands must be framed by an STX (02 Hex) and ETX (03 Hex). To recall defaults:

1. Transmit <STX>999999<ETX> through the Serial Port. This will put the scanner in serial configuration mode. Scanning will be suspended and the scanner will respond with an ACK (06 Hex).
2. Transmit <STX>999998<ETX> through the Serial Port. This is the Recall Default bar code in the MetroSelect guide. The scanner will respond with an ACK (06 Hex).
3. Transmit <STX>999999<ETX> through the Serial Port. This will cause the scanner to exit configuration mode and save the new settings. The scanner will beep 3 times and send an ACK (06 Hex).

If at anytime, the scanner cannot recognize a command, it will respond with a NAK (15 Hex).

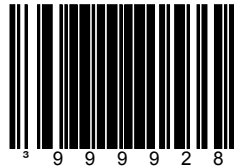
SOFTWARE/SERIAL NUMBER

Software Number



The scanner will transmit its software revision.

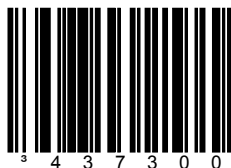
Scanner Information



This barcode will transmit the "main" & "interface coprocessor" software numbers as well as the scanner's serial number.

The data is output as barcode (formatted) data (ie. 15xxx/15xxx/9876543210, where x represents any non-numbered value).

* Disable AUX Port



AUX PORT AND SECONDARY DEVICE DATA FORMATS



The following section includes features that are not available with all Metrologic scanner models. Please contact a customer service representative for additional information and technical assistance.

When using a Metrologic device as a secondary:

Follow **Step 1** to configure the *auxiliary port* to accept a Metrologic scanner as the *secondary scanner*. Then follow **Step 2** to configure the *secondary scanner* to match the auxiliary port's data format.

If the secondary scanner is not a Metrologic scanner go to page O-3 and follow the instructions under "When using a non-Metrologic RS-232 Device as a secondary".



The auxiliary input port's data format must match the main output format of the secondary scanner.

Step 1: Scan the following bar code to enable the *auxiliary port* on the *primary scanner*.

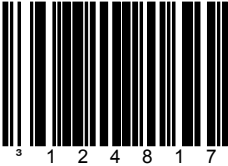
AUX Port Data Format



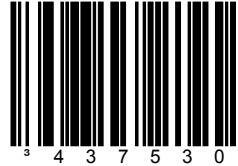
SECTION O AUX PORT AND SECONDARY DEVICE DATA FORMATS

Step 2: Then scan the following bar codes, in order, to configure the *secondary* scanner.

1. Enable AUX Output



2. Secondary Scanner Data Format



3. Enable Comm Timeouts



4. Turn OFF Auxiliary Scanner's Beeper (Optional)



SECTION O **AUX PORT AND SECONDARY DEVICE DATA FORMATS**



The following section includes features that are not available with all Metrologic scanner models. Please contact a customer service representative for additional information and technical assistance.

When using a non-Metrologic RS-232 device as a secondary:

Scan the following bar code to enable the auxiliary port on the *primary* scanner.

AUX Port General RS-232 Format



The *auxiliary* input port's data format must match the main output format of the secondary device. The *secondary* device must be capable of RTS/CTS handshaking and have a carriage return (ASCII 0DH) terminator on the data.



The default settings for the *AUX Port General RS-232 Format* are:

- 38400 baud
- 7 data bits
- 2 stop bits
- Space parity

SECTION O

ADDITIONAL AUXILIARY PORT DATA FORMATS



The auxiliary input port's data format must match the main output format of the secondary device.

Enable AUX Port with UPC
Supplemental Data Format



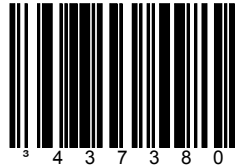
Enable AUX Port with Code
Select Data Format



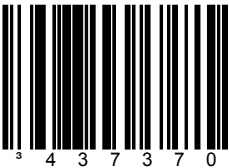
Enable AUX Port with Tech 7,
8 Data Format



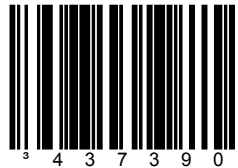
Enable AUX Port with
Reserved 2 Data Format



Enable AUX Port with Beetle
Mode Data Format



Enable AUX Port with
Reserved 1 Data Format



Enable AUX Port with Stratos
Decode Data Format



AUXILIARY PORT BAUD RATES

AUX 115200 Baud Rate



AUX 57600 Baud Rate



AUX 38400 Baud Rate



AUX 19200 Baud Rate



SECTION O

AUXILIARY PORT BAUD RATES

AUX 14400 Baud Rate



AUX 9600 Baud Rate



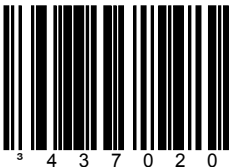
AUX 4800 Baud Rate



AUX 2400 Baud Rate



AUX 1200 Baud Rate



AUX 600 Baud Rate



AUX 300 Baud Rate

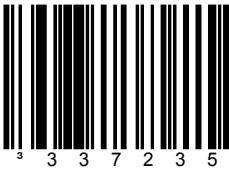


AUXILIARY PORT PARITY

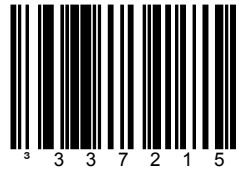
AUX No Parity



AUX Mark Parity



* AUX Space Parity



SECTION O

AUXILIARY PORT PARITY

AUX Even Parity



AUX Odd Parity



AUXILIARY PORT STOP BITS/DATA BITS

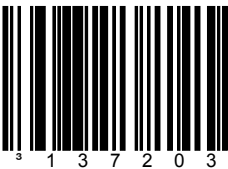
AUX 1 Stop Bit



* AUX 2 Stop Bits



* AUX 7 Data Bits



AUX 8 Data Bits



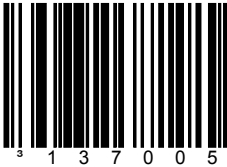
* Enable AUX RTS/CTS Handshaking



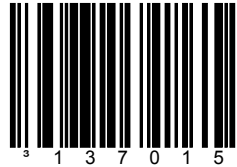
Disable AUX RTS/CTS Handshaking



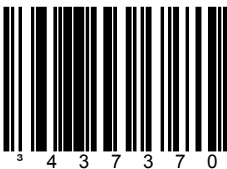
Message AUX RTS/CTS



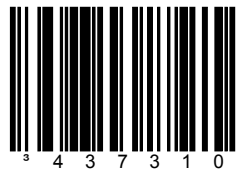
* Character AUX RTS/CTS



Enable AUX Port Mode 7



Disable AUX Port Mode 7



Mode 7 enables reception of prefix and suffix codes when AUX port RTS/CTS handshaking is disabled.

SECTION O

AUXILIARY D/E, F/L, AND M/O

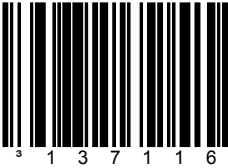
Enable
AUX "D/E" Commands



* Disable
AUX "D/E" Commands



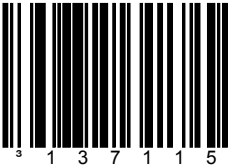
Enable AUX "F/L"
Commands



* Disable AUX "F/L"
Commands



Enable AUX
"M/O" Commands



* Disable AUX
"M/O" Commands



* Enable AUX XON/XOFF Handshaking



Disable AUX XON/XOFF Handshaking



* Enable AUX ACK/NAK Commands



Disable AUX ACK/NAK Commands



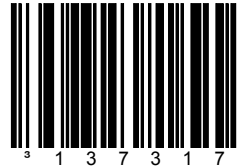
SECTION O

AUXILIARY CTS AND RTS POLARITY

* Normal
AUX CTS Polarity



Flip
AUX CTS Polarity



* Normal
AUX RTS Polarity

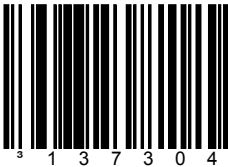


Flip
AUX RTS Polarity

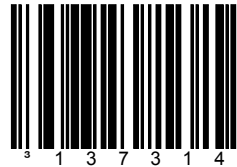


AUXILIARY SAME SYMBOL TIMEOUT

* AUX has
Same Symbol Timeout



No AUX
Same Symbol Timeout



This feature skips the same symbol timeout in the master when the auxiliary scanner scans (or repeats) faster than the same symbol timeout in the master scanner.



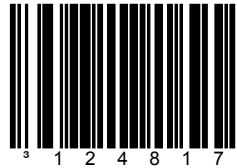
Metrologic recommends turning off the auxiliary scanner's beep if the *AUX Same Symbol Timeout* feature is disabled.

SECTION O

MAIN OUTPUT PORT AUXILIARY DATA FORMATS

When a scanner is used as a secondary scanner to another scanner's auxiliary input, the output data can be in one of the following formats.

Reserve Code 32



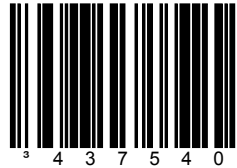
This is a quick method for setting reserve Code 32 in the secondary scanner using HoloTrak Decode Data Format.

i This code should not be used for the MS6720.

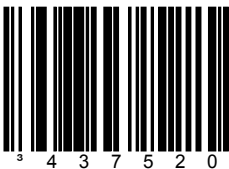
* HoloTrak Decode Output
AUX Data Format



UPC Supplemental Output
AUX Data Format



Stratos Decode Output
AUX Data Format



Code Select Output
AUX Data Format



SECTION O

MAIN OUTPUT PORT AUXILIARY DATA FORMATS

TECH 7 & 8 Output AUX
Data Format



Reserved 1 Output AUX
Data Format



Reserved 2 Output
AUX Data Format



Beetle Mode
AUX Data Format



No AUX Port
Inter-Character Delays



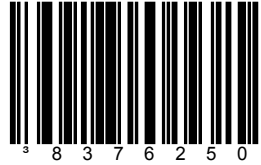
* 1 msec AUX Port
Inter-Character Delay



10 msec AUX Port
Inter-Character Delay



25 msec AUX Port
Inter-Character Delay



~ Variable AUX Port
Inter-Character Delay



The Delay between characters being sent out of the auxiliary port can be set in 1 millisecond increments by scanning the *Variable AUX Port Inter-character Delay* barcode followed by a 3 character sequence of code bytes that range from 001 to 255 milliseconds.

Refer to the *Multi-Code Configuration Method* on page xii.

SECTION O

AUXILIARY PORT CONTROLS

Prevent Beep From AUX



Prevent the main scanner from beeping when the barcode comes from the AUX port. This is the opposite of not beeping the AUX and letting the main scanner beep as verification of the barcode sent.

* Allow Beep from AUX

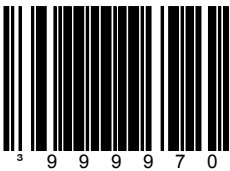


Allow the main scanner to beep when the barcode comes from the AUX port. This is the default condition.

Enable Full Speed USB



Load Integrated Full Speed
USB IBM/OEM Defaults

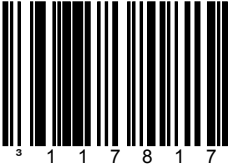


SECTION P

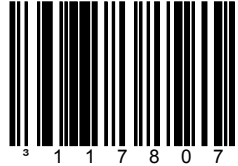
USB

The following codes can be used if the *Load Integrated Full Speed USB IBM/OEM Defaults* bar code has **not** been scanned.

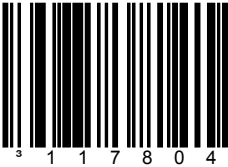
Enable USB IBM ID



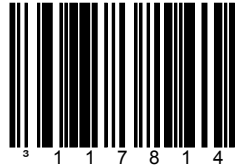
* Disable USB IBM ID



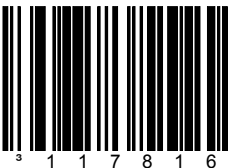
* Enhanced Code IDs



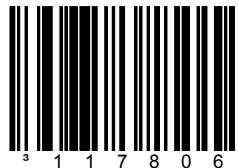
Legacy Code IDs



Reserved



* Normal USB Out



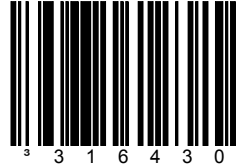
The following codes can be used if the *Load Integrated Full Speed USB IBM/OEM Defaults* bar code has **not** been scanned.

IBM OEM Scanner 4A00h
Flatbed



Full speed USB only.

IBM OEM Scanner 4B00h
Handheld

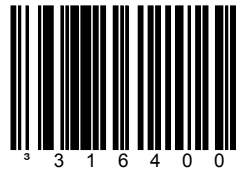


Full speed USB only.

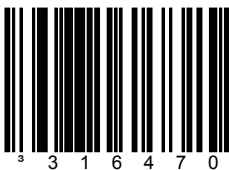
4A00h/6E00h
Tabletop Scanner/Scale



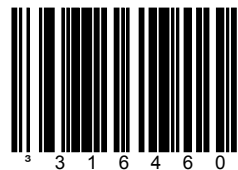
* Enable USB Keyboard
Emulation Mode



Enable Uni-Directional USB
Serial Emulation Mode



Enable Bi-Directional USB
Serial Emulation Mode



SECTION P

USB

Enable
Low Speed USB



Enable Low Speed
USB POS Defaults



Load Low Speed
External USB Defaults

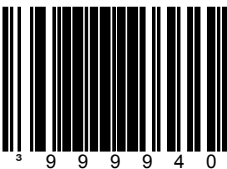


Load Low Speed **Internal**
USB Keyboard Defaults



For units labeled Low Speed
(LS) USB.

Load Full Speed Keyboard
Internal USB Defaults

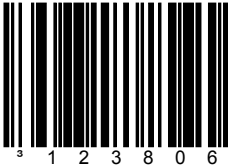


For units labeled Full Speed
(FS) USB.

The following bar codes are specific to the IS3480, MS3580 and the MS3780 unless otherwise noted.

Button Modes

* Button Click Pattern
Switching Mode

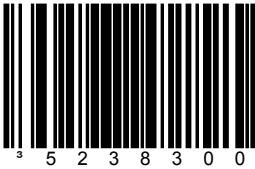


Button Hold Pattern
Switching Mode

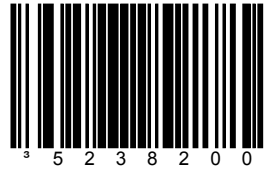


Button Click Delay

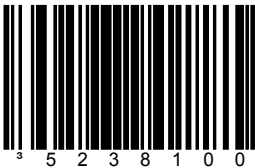
15 Second Time Out †



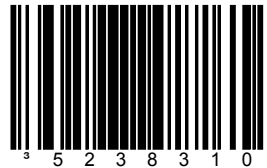
10 Second Time Out †



* 5 Second Time Out †



Infinite Time Out †



† This feature is not available for the MS3780.

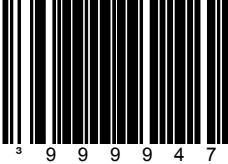
SECTION R

IS3480 / MS3580 / MS3780

The following bar codes are specific to the IS3480, MS3580 and the MS3780 (in-stand) unless otherwise noted.

Primary Scan Patterns

* Primary Omni



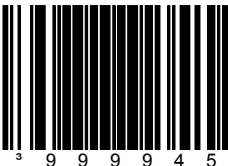
This bar code sets the **primary** pattern to all scan lines on for omnidirectional reading.

Primary Raster



This bar code sets the **primary** pattern to horizontal raster.

Primary Single-Line



This bar code sets the **primary** pattern to single-line for menu reading.

Secondary Scan Patterns

Secondary Omni



This bar code sets the **secondary** pattern to all scan lines on for omnidirectional reading.

Secondary Raster



This bar code sets the **secondary** pattern to horizontal raster.

Secondary Single-Line



This bar code sets the **secondary** pattern to single-line for menu reading.

The following bar codes are specific to the MS3780 (out-of-stand) unless otherwise noted.

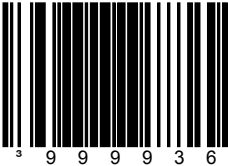
Primary Scan Patterns

* Primary Omni, Out-of-Stand



This bar code sets the **primary** pattern to all scan lines on for omnidirectional reading.

Primary Raster, Out-of-Stand



This bar code sets the **primary** pattern to horizontal raster.

Primary Single-Line,
Out-of-Stand



This bar code sets the **primary** pattern to single-line for menu reading.

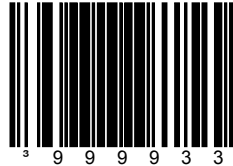
Secondary Scan Patterns

Secondary Omni, Out-of-Stand



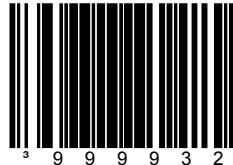
This bar code sets the **secondary** pattern to all scan lines on for omnidirectional reading.

Secondary Raster, Out-of-Stand



This bar code sets the **secondary** pattern to horizontal raster.

Secondary Single-Line,
Out-of-Stand



This bar code sets the **secondary** pattern to single-line for menu reading.

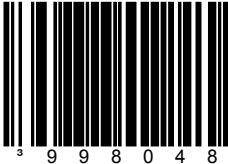
SECTION R

IS3480 / MS3580 / MS3780

The following bar codes are specific to the IS3480, MS3580 and the MS3780 unless otherwise noted.

Sweet Spot Mode

Enable Sweet Spot Mode



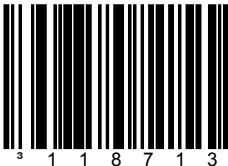
The sweet spot mode is used to determine where the maximum read rate point or "sweet spot" is located for a specific bar code type. Refer to the IS3480 Installation and User's Guide (MLPN 00-02026) for a complete description of the sweet spot mode.



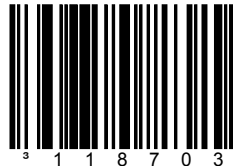
This feature is not available with the MS3580 or the MS3780.

CodeGate® (IS3480 / MS3580)

* Enable CodeGate



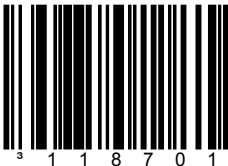
Disable CodeGate



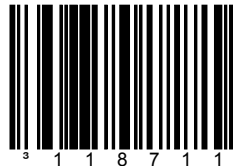
This barcode is not for use with the MS3780. Please see page R 6 for CodeGate options specific to the MS3780.

Depth of Field

* Normal Depth of Field



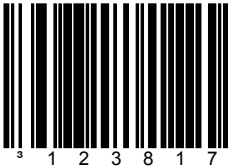
Reduced Depth of Field



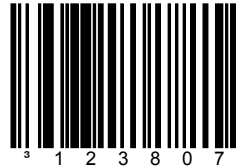
The following bar codes are specific to the IS3480, MS3580 and the MS3780 unless otherwise noted.

IR Activation

IR Activation



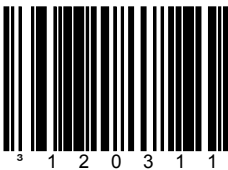
* Disable IR Activation



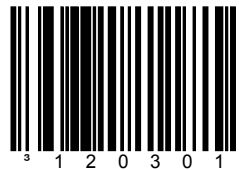
TTL RS232

The following bar codes are only valid for the TTL RS232 Quantum series (IS/MS3x80-102).

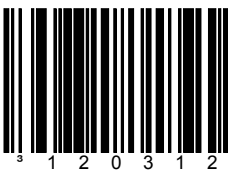
Enable TTL RS232



Disable TTL RS232

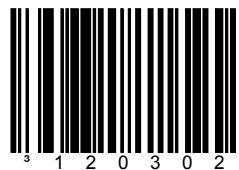


Invert TTL RxD and TxD



The TTL RxD and TxD pins
idle at 0V

Std. TTL RxD and TxD



The TTL RxD and TxD pins
idle at +5V

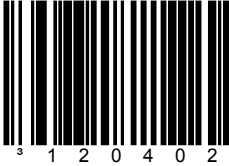
SECTION R

MS3780

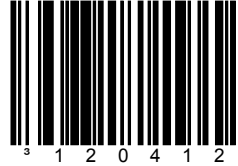
The following bar codes are specific to the MS3780 unless otherwise noted.

CodeGate (MS3780)

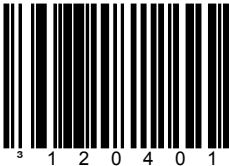
* Enable CodeGate
Out-of-Stand,
Primary Pattern Active



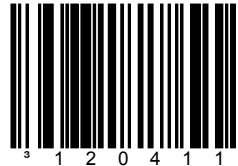
Disable CodeGate
Out-of Stand,
Primary Pattern Active



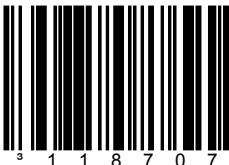
* Enable CodeGate
Out-of-Stand,
Secondary Pattern Active



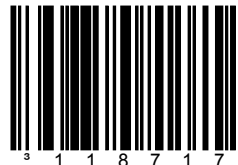
Disable CodeGate
Out-of Stand,
Secondary Pattern Active



Enable CodeGate
In-Stand



* Disable CodeGate
In-Stand



The following bar codes are specific to the MS3780 unless otherwise noted.

Modes (MS3780)

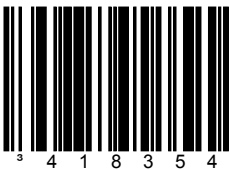
Enable Normal Mode



Enable IR Activation Mode



Enable Trigger Mode



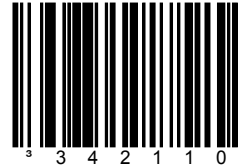
The following barcodes may be used for the Stratos Series and some Fusion or Voyager models. Please contact a customer service representative for additional information and technical assistance.

* ROM Emulation Version 1

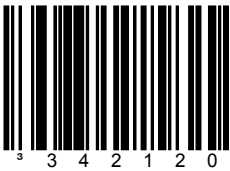


ROM emulation version 1 is the default ROM emulation. The default ROM emulation varies with each scanner. This feature sends the ROM version information when asked by the host system.

ROM Emulation Version 2



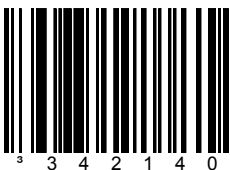
ROM Emulation Version 3



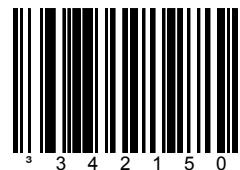
ROM Emulation Version 4



ROM Emulation Version 5



ROM Emulation Version 6



SECTION S

PROTOCOL FORMATTING

ROM Emulation Version 7



ROM Emulation Version 8



Worldwide Headquarters

Metrologic Instruments, Inc.

90 Coles Road Blackwood, NJ 08012-4683

Email: info@metrologic.com • Tel: 856-228-8100 • Customer Service: 1-800-ID-METRO

Fax: 856-228-6673 (Sales) • Fax: 856-228-1879 (Marketing) • Fax: 856-228-0653 (Legal/Finance)

Metrologic Companies

Omniplanar

Tel: 856.537.6100
Fax: 856.537.6116
Email: info@omniplanar.com

Metrologic - The Americas

Headquarters

Tel: 1.856.537.6400
Fax: 1.856.537.6474
Email: info@us.metrologic.com

Metrologic Canada

Tel: 416.752.7190
Fax: 416.752.8060
Email: info@ca.metrologic.com

Metrologic do Brasil Ltda.

Tel: 55.11.5182.7273
Fax: 55.11.5182.7198
Email: info@sa.metrologic.com

Metrologic Mexico, S.A. DE C.V.

Tel: 55.5365.6247
Fax: 55.5362.2544
Email: info@mx.metrologic.com

Metrologic South America

Tel: 239.642.1958
Fax: 239.642.1959
Email: info@sa.metrologic.com

Metrologic - USA

Tel: 1.856.537.6400
Fax: 1.856.537.6474
Email: info@us.metrologic.com

Metrologic - EMEA

Headquarters

Tel: 49-89-89019-0
Fax: 49-89-89019-200
Email:
info@europe.metrologic.com

Metrologic Eria France SA

Tel: +33 (0) 1 48.63.78.78
Fax: +33 (0) 1 48.63.24.94
Email: info@fr.metrologic.com

Metrologic Eria Iberica, SL

Tel: +34 913 272 400
Fax: +34 913 273 829
Email: info@es.metrologic.com

Metrologic Russia

Tel: +7 095 730 7424
Fax: +7 095 730 7425
Email: info@ru.metrologic.com

Metrologic Instruments GmbH

Tel: 49-89-89019-0
Fax: 49-89-89019-200
Email:
info@europe.metrologic.com

Metrologic Instruments Italia

Tel: +39 0 57 6511978 or
+39 051 651 1978
Fax: +39 0 51 6521337
Email: info@it.metrologic.com

Metrologic Instruments

Poland
Tel: +48 (22) 545 04 30
Fax: +48 (22) 545 04 31
Email: info@pl.metrologic.com

Metrologic Instruments

UK Limited
Tel: +44 (0) 1256 365900
Fax: +44 (0) 1256 365955
Email: info@uk.metrologic.com

Metrologic - APAC

Headquarters

Tel: (65) 6842-7155
Fax: (65) 6842-7166
Email: info@sg.metrologic.com

Beijing Sales Office

Tel/Fax: 86 10 82253472
Email: info@cn.metrologic.com

Chengdu Sales Office

Tel/Fax: 86 28 86200109
Email: info@cn.metrologic.com

Guangzhou Sales Office

Tel: 86-20-38823476
Fax: 86-20-38823477
Email: info@cn.metrologic.com

India Sales Office

Tel: +91 80 51256718
Fax: +91 80 51256719
Email: info@in.metrologic.com

Korea Sales Office

Tel: 82-2-6205-5379
Fax: 82-2-3444-3980
Email:
Scott.lee@kr.metrologic.com

Metrologic Asia (Pte) Ltd

Tel: (65) 6842-7155
Fax: (65) 6842-7166
Email: info@sg.metrologic.com

Metrologic Japan Co., Ltd.

Tel: 81-3-3839-8511
Fax: 81-3-3839-8519
Email: info@jp.metrologic.com

Metrologic Thailand

Tel: 661-814-2352
Email:
tawan.jandang@th.metrologic.com

MTLG Auto ID Instruments

(Shanghai) Co.,Ltd
Tel: 86-21-58692780
Fax: 86-21-58692782
Email: info@cn.metrologic.com

Suzhou Sales Office

Tel: 86-512-67622550
Fax: 86-512-67622560
Email: info@cn.metrologic.com

Taiwan Sales Office

Tel: 886-2-2351 0125
Email: john.cheng@tw.metrologic.com

April 2007

Printed in the USA



00 - 02407H