

# *Parameter Menus*

This chapter describes the programmable parameters, provides bar codes for programming.

## **Operational Parameters**

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The scanner is shipped with the default settings shown in Table 1 on page 2. These default values are stored in non-volatile memory and are preserved even when the scanner is powered down.

You can change the default values by:

- ◆ Scanning the appropriate bar codes included in this chapter. These new values replace the standard default values in memory. The default parameter values can be recalled by scanning the *SET ALL DEFAULTS* bar code on page 4.

Table 1 lists the defaults for all parameters. If you wish to change any option, scan the appropriate bar code(s).

**Table 1. Default Table**

<b>Parameter</b>	<b>Parameter Number</b>	<b>Default</b>	<b>Page Number</b>
Set Default Parameter		All Defaults	4
<b>UPC/EAN</b>			
UPC-A	0x01	Enable	5
UPC-E	0x02	Enable	6
EAN-8	0x04	Enable	7
EAN-13	0x03	Enable	8
Bookland EAN	0x53	Disable	9
<b>Code 128</b>			
USS-128	0x08	Enable	10
UCC/EAN-128	0x0E	Enable	11
ISBT 128	0x54	Enable	12
<b>Code 39</b>			
Code 39	0x00	Enable	13
Set Length(s) for Code 39	0x12 0x13	2-55	15
Code 39 Check Digit Verification	0x30	Disable	16
Transmit Code 39 Check Digit	0x2B	Disable	17

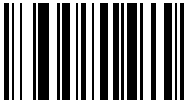
Table 1. Default Table (Continued)

Parameter	Parameter Number	Default	Page Number
<b>Code 93</b>			
Code 93	0x09	Disable	18
Set Length(s) for Code 93	0x1A 0x1B	4-55	19
<b>Interleaved 2 of 5</b>			
Interleaved 2 of 5	0x06	Enable	21
Set Length(s) for I 2 of 5	0x16 0x17	14	22
I 2 of 5 Check Digit Verification	0x31	Disable	24
Transmit I 2 of 5 Check Digit	0x2C	Disable	25
<b>Codabar</b>			
Codabar	0x07	Disable	26
Set Lengths for Codabar	0x18 0x19	5-55	28
<b>Data Options</b>			
Transmit Code ID Character	0x2D	None	30

# Set Default Parameter

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Scanning this bar code returns all parameters to the values listed in Table 1 on page 2.



**SET ALL DEFAULTS**

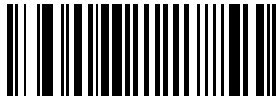
# UPC/EAN

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## *Enable/Disable UPC-A*

### *Parameter # 0x01*

To enable or disable UPC-A, scan the appropriate bar code below.



ENABLE UPC-A

(0x01)



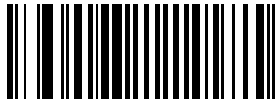
DISABLE UPC-A

(0x00)

## ***Enable/Disable UPC-E***

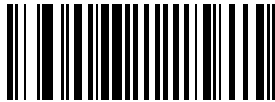
### ***Parameter # 0x02***

To enable or disable UPC-E, scan the appropriate bar code below.



**ENABLE UPC-E**

**(0x01)**



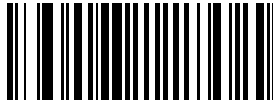
**DISABLE UPC-E**

**(0x00)**

## **Enable/Disable EAN-8**

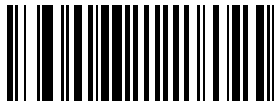
### **Parameter # 0x04**

To enable or disable EAN-8, scan the appropriate bar code below.



**ENABLE EAN-8**

**(0x01)**



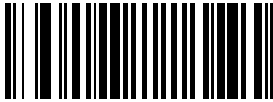
**DISABLE EAN-8**

**(0x00)**

## ***Enable/Disable EAN-13***

### ***Parameter # 0x03***

To enable or disable EAN-13, scan the appropriate bar code below.



**ENABLE EAN-13**

**(0x01)**



**DISABLE EAN-13**

**(0x00)**



## **Enable/Disable Bookland EAN**

### **Parameter # 0x53**

To enable or disable EAN Bookland, scan the appropriate bar code below.



**ENABLE BOOKLAND EAN**

(0x01)



**DISABLE BOOKLAND EAN**

(0x00)

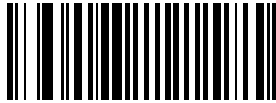
# Code 128

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## *Enable/Disable USS-128*

### *Parameter # 0x08*

To enable or disable Code 128, scan the appropriate bar code below.



**ENABLE USS-128**

**(0x01)**



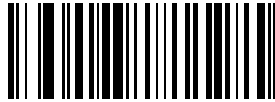
**DISABLE USS-128**

**(0x00)**

## **Enable/Disable UCC/EAN-128**

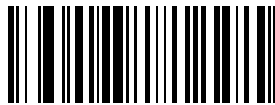
### **Parameter # 0x0E**

To enable or disable UCC/EAN-128, scan the appropriate bar code below.



**ENABLE UCC/EAN-128**

**(0x01)**



**DISABLE UCC/EAN-128**

**(0x00)**

## ***Enable/Disable ISBT 128***

### ***Parameter # 0x54***

To enable or disable ISBT 128, scan the appropriate bar code below.



**ENABLE ISBT 128**

**(0x01)**



**DISABLE ISBT 128**

**(0x00)**

### ***Lengths for Code 128***

No length setting is required for Code 128. The default setting is Any Length.

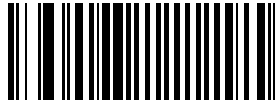
## Code 39

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### *Enable/Disable Code 39*

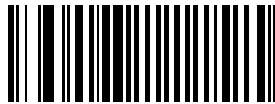
#### *Parameter # 0x00*

To enable or disable Code 39, scan the appropriate bar code below.



ENABLE CODE 39

(0x01)



DISABLE CODE 39

(0x00)

## Set Lengths for Code 39

### Parameter # L1 = 0x12, L2 = 0x13

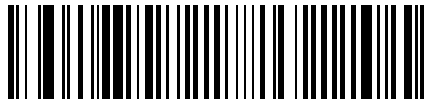
Lengths for Code 39 may be set for any length, one or two discrete lengths, or lengths within a specific range. The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains.

**One Discrete Length** - This option allows you to decode only those codes containing a selected length. For example, if you select **Code 39 One Discrete Length**, then scan **1, 4**, only Code 39 symbols containing 14 characters are decoded. Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODE 39 - ONE DISCRETE LENGTH

**Two Discrete Lengths** - This option allows you to decode only those codes containing two selected lengths. For example, if you select **Code 39 Two Discrete Lengths**, then scan **0, 2, 1, 4**, only Code 39 symbols containing 2 or 14 characters are decoded. Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODE 39 - TWO DISCRETE LENGTHS

## Set Lengths for Code 39

**Length Within Range** - This option allows you to decode a code type within a specified range. For example, to decode Code 39 symbols containing between 4 and 12 characters, first scan **Code 39 Length Within Range**. Then scan **0, 4, 1** and **2** (single digit numbers must always be preceded by a leading zero). Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODE 39 - LENGTH WITHIN RANGE

**Any Length** - Scanning this option allows you to decode Code 39 symbols containing any number of characters.



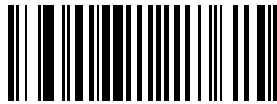
CODE 39 - ANY LENGTH

## ***Code 39 Check Digit Verification***

### ***Parameter # 0x30***

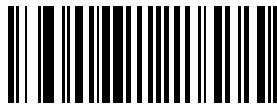
When enabled, this parameter checks the integrity of a Code 39 symbol to ensure it complies with specified algorithms.

Only those Code 39 symbols which include a modulo 43 check digit are decoded when this parameter is enabled.



**ENABLE CODE 39 CHECK DIGIT**

**(0x01)**



**DISABLE CODE 39 CHECK DIGIT**

**(0x00)**



## **Transmit Code 39 Check Digit**

### **Parameter # 0x2B**

Scan this symbol if you want to transmit the check digit with the data.



**TRANSMIT CODE 39 CHECK DIGIT  
(ENABLE)**

**(0x01)**

Scan this symbol if you want to transmit the data without the check digit.



**DO NOT TRANSMIT CODE 39 CHECK DIGIT  
(DISABLE)**

**(0x00)**

# Code 93

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## *Enable/Disable Code 93*

### *Parameter # 0x09*

To enable or disable Code 93, scan the appropriate bar code below.



ENABLE CODE 93

(0x01)



DISABLE CODE 93

(0x00)

## Set Lengths for Code 93

### Parameter # L1 = 0x1A, L2 = 0x1B

Lengths for Code 93 may be set for any length, one or two discrete lengths, or lengths within a specific range. The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains.

**One Discrete Length** - This option allows you to decode only those codes containing a selected length. For example, if you select **Code 93 One Discrete Length**, then scan **1, 4**, only Code 93 symbols containing 14 characters are decoded. Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODE 93 - ONE DISCRETE LENGTH

**Two Discrete Lengths** - This option allows you to decode only those codes containing two selected lengths. For example, if you select **Code 93 Two Discrete Lengths**, then scan **0, 2, 1, 4**, only Code 93 symbols containing 2 or 14 characters are decoded. Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODE 93 - TWO DISCRETE LENGTHS

## Set Lengths for Code 93

**Length Within Range** - This option allows you to decode a code type within a specified range. For example, to decode Code 93 symbols containing between 4 and 12 characters, first scan **Code 93 Length Within Range**. Then scan **0, 4, 1** and **2** (single digit numbers must always be preceded by a leading zero). Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODE 93 - LENGTH WITHIN RANGE

**Any Length** - Scanning this option allows you to decode Code 93 symbols containing any number of characters.



CODE 93 - ANY LENGTH

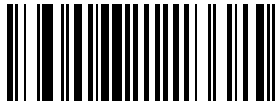
## Interleaved 2 of 5

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### *Enable/Disable Interleaved 2 of 5*

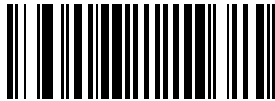
#### *Parameter # 0x06*

To enable or disable Interleaved 2 of 5, scan the appropriate bar code below.



ENABLE INTERLEAVED 2 OF 5

(0x01)



DISABLE INTERLEAVED 2 OF 5

(0x00)

## ***Set Lengths for Interleaved 2 of 5***

### **Parameter # L1 = 0x16, L2 = 0x17**

Lengths for I 2 of 5 may be set for any length, one or two discrete lengths, or lengths within a specific range. The length of a code refers to the number of characters (i.e., human readable characters) the code contains, and includes check digits.

**One Discrete Length** - This option allows you to decode only those codes containing a selected length. For example, if you select **I 2 of 5 One Discrete Length**, then scan **1, 4**, the only I 2 of 5 symbols decoded are those containing 14 characters. Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



**I 2 of 5 - ONE DISCRETE LENGTH**

**Two Discrete Lengths** - This option allows you to decode only those codes containing two selected lengths. For example, if you select **I 2 of 5 Two Discrete Lengths**, then scan **0, 2, 1, 4**, the only I 2 of 5 symbols decoded are those containing 2 or 14 characters. Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



**I 2 of 5 - TWO DISCRETE LENGTHS**

## Set Lengths for Interleaved 2 of 5

**Length Within Range** - This option allows you to decode a code type within a specified range. For example, to decode I 2 of 5 symbols containing between 4 and 12 characters, first scan **I 2 of 5 Length Within Range**. Then scan **0, 4, 1** and **2** (single digit numbers must always be preceded by a leading zero). Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



I 2 of 5 - LENGTH WITHIN RANGE

**Any Length** - Scanning this option allows you to decode I 2 of 5 symbols containing any number of characters.

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**Note:** *Selecting this option may lead to misdecodes for I 2 of 5 codes.*

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I 2 of 5 - ANY LENGTH

## ***I 2 of 5 Check Digit Verification***

### ***Parameter # 0x31***

When enabled, this parameter checks the integrity of an I 2 of 5 symbol to ensure it complies with a specified algorithm, either USS (Uniform Symbology Specification), or OPCC (Optical Product Code Council).



**DISABLE**

**(0x00)**



**USS CHECK DIGIT**

**(0x01)**



**OPCC CHECK DIGIT**

**(0x02)**



## **Transmit 1 2 of 5 Check Digit**

### **Parameter # 0x2C**

Scan this symbol if you want to transmit the check digit with the data.



**TRANSMIT 1 2 of 5 CHECK DIGIT  
(ENABLE)**

**(0x01)**

Scan this symbol if you want to transmit the data without the check digit.



**DO NOT TRANSMIT 1 2 of 5 CHECK DIGIT  
(DISABLE)**

**(0x00)**

# Codabar

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## *Enable/Disable Codabar*

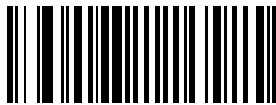
### *Parameter # 0x07*

To enable or disable Codabar, scan the appropriate bar code below.



**ENABLE CODABAR**

(0x01)



**DISABLE CODABAR**

(0x00)

## Set Lengths for Codabar

### Parameter # L1 = 0x18, L2 = 0x19

Lengths for Codabar may be set for any length, one or two discrete lengths, or lengths within a specific range. The length of a code refers to the number of characters (i.e., human readable characters) the code contains. It also includes any start or stop characters.

**One Discrete Length** - This option allows you to decode only those codes containing a selected length. For example, if you select **Codabar One Discrete Length**, then scan **1, 4**, the only Codabar symbols decoded are those containing 14 characters. Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODABAR - ONE DISCRETE LENGTH

**Two Discrete Lengths** - This option allows you to decode only those codes containing two selected lengths. For example, if you select **Codabar Two Discrete Lengths**, then scan **0, 2, 1, 4**, the only Codabar symbols decoded are those containing 2 or 14 characters. Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODABAR - TWO DISCRETE LENGTHS

**Length Within Range** - This option allows you to decode a code type within a specified range. For example, to decode Codabar symbols containing between 4 and 12 characters, first scan **Codabar Length Within Range**. Then scan **0, 4, 1** and **2** (single digit numbers must always be preceded by a leading zero). Numeric bar codes begin on page 31. If you make an error, or wish to change your selection, scan the *CANCEL* bar code on page 33.



CODABAR - LENGTH WITHIN RANGE

**Any Length** - Scanning this option allows you to decode Codabar symbols containing any number of characters.



CODABAR - ANY LENGTH

## Transmit Code ID Character

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### ***Parameter # 0x2D***

A code ID character identifies the code type of a scanned bar code. This may be useful when the scanner is decoding more than one code type. In addition to any single character prefix already selected, the code ID character is inserted between the prefix and the decoded symbol.

The user may select no code ID character, a Symbol Code ID character, or an AIM Code ID character. The Symbol Code ID characters are listed below.

A = UPC-A, UPC-E, UPC-E1, EAN-8, EAN-13

B = Code 39, Code 32

C = Codabar

D = Code 128, ISBT 128

E = Code 93

F = Interleaved 2 of 5

G = Discrete 2 of 5, or Discrete 2 of 5 IATA

J = MSI Plessey

K = UCC/EAN-128

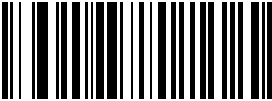
L = Bookland EAN

M = Trioptic Code 39

N = Coupon Code

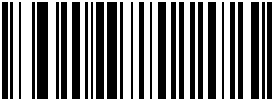
# Transmit Code ID Character (cont'd)

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SYMBOL CODE ID CHARACTER

(0x02)



AIM CODE ID CHARACTER

(0x01)



NONE

(0x00)

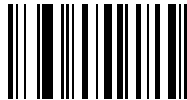
## Numeric Bar Codes

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For parameters requiring specific numeric values, scan the appropriately numbered bar code(s).



0



1



2



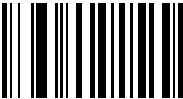
3

# Numeric Bar Codes (cont'd)

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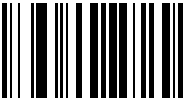
4



5



6



7



## Numeric Bar Codes (cont'd)

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8



9

### ***Cancel***

If you make an error, or wish to change your selection, scan the bar code below.



CANCEL

