UPC/EAN

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 UPC-E1

Parameter # 0x0C
To enable or disable UPC-E1, scan the appropriate bar code below.

UPC-E1 is not a UCC (Uniform Code Council) approved symbology.

Enable UPC-E1
(0x01)

*Disable UPC-E1
(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)
**Decode UPC/EAN Supplementals**

**Parameter # 0x10**

Supplementals are appended characters (2 or 5) according to specific code format conventions (e.g., UPC A+2, UPC E+2). Several options are available:

- If **Decode UPC/EAN with Supplemental** characters is selected, the scan engine does not decode UPC/EAN symbols without supplemental characters.
- If **Ignore UPC/EAN with Supplemental** characters is selected, and the SE-955 is presented with a UPC/EAN symbol with a supplemental, the scan engine decodes the UPC/EAN and ignores the supplemental characters.
- If **Autodiscriminate UPC/EAN Supplementals** is selected, scan **Decode UPC/EAN Supplemental Redundancy on page 8-22**, then select a value from the numeric bar codes beginning on **page 8-73**. A value of 5 or more is recommended.
- Select **Enable 378/379 Supplemental Mode** to enable the SE-955 to identify supplementals for EAN-13 bar codes starting with a ‘378’ or ‘379’ prefix only. All other UPC/EAN bar codes are decoded immediately and the supplemental characters ignored.
- Select **Enable 978 Supplemental Mode** to enable the SE-955 to identify supplementals for EAN-13 bar codes starting with a ‘978’ prefix only. All other UPC/EAN bar codes are decoded immediately and the supplemental characters ignored.
- Select **Enable Smart Supplemental Mode** to enable the SE-955 to identify supplementals for EAN-13 bar codes starting with a ‘378’, ‘379’, or ‘978’ prefix only. All other UPC/EAN bar codes are decoded immediately and the supplemental characters ignored.

To minimize the risk of invalid data transmission, we recommend selecting whether to read or ignore supplemental characters.

Select the desired option by scanning one of the following bar codes.

![Decode UPC/EAN With Supplementals (0x01)](image1)

![*Ignore UPC/EAN With Supplementals (0x00)](image2)
Decode UPC/EAN Supplementals (continued)

**Autodiscriminate UPC/EAN Supplementals**

(0x02)

**Enable 378/379 Supplemental Mode**

(0x04)

**Enable 978 Supplemental Mode**

(0x05)

**Enable Smart Supplemental Mode**

(0x03)

---

**Decode UPC/EAN Supplemental Redundancy**

**Parameter # 0x50**

With Autodiscriminate UPC/EAN Supplementals selected, this option adjusts the number of times a symbol without supplementals are decoded before transmission. The range is from 2 to 30 times. Five or above is recommended when decoding a mix of UPC/EAN symbols with and without supplementals, and the autodiscriminate option is selected.

Scan the bar code below to select a decode redundancy value. Next scan two numeric bar codes beginning on page 8-73. Single digit numbers must have a leading zero. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

**Decode UPC/EAN Supplemental Redundancy**

(Default: 7)
**Transmit UPC-A Check Digit**

**Parameter # 0x28**

Scan the appropriate bar code below to transmit the symbol with or without the UPC-A check digit.

- **Transmit UPC-A Check Digit**
  - 0x01

- **Do Not Transmit UPC-A Check Digit**
  - 0x00

**Transmit UPC-E Check Digit**

**Parameter # 0x29**

Scan the appropriate bar code below to transmit the symbol with or without the UPC-E check digit.

- **Transmit UPC-E Check Digit**
  - 0x01

- **Do Not Transmit UPC-E Check Digit**
  - 0x00
Transmit UPC-E1 Check Digit

Parameter # 0x2A

Scan the appropriate bar code below to transmit the symbol with or without the UPC-E1 check digit.

*Transmit UPC-E1 Check Digit
(0x01)

Do Not Transmit UPC-E1 Check Digit
(0x00)
**UPC-A Preamble**

**Parameter # 0x22**

Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-A symbol. Select one of the following options for transmitting UPC-A preamble to the host device: transmit system character only, transmit system character and country code ("0" for USA), or transmit no preamble.

- **No Preamble**
  - \(<\text{DATA}\>)
  - (0x00)

- **System Character**
  - \(<\text{SYSTEM CHARACTER}\>\ <\text{DATA}\>)
  - (0x01)

- **System Character & Country Code**
  - \(<\text{COUNTRY CODE}\>\ <\text{SYSTEM CHARACTER}\>\ <\text{DATA}\>)
  - (0x02)
**UPC-E Preamble**

**Parameter # 0x23**

Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-E symbol. Select one of the following options for transmitting UPC-E preamble to the host device: transmit system character only, transmit system character and country code (“0” for USA), or transmit no preamble.

- **No Preamble**
  - `<DATA>`
  - (0x00)

- **System Character**
  - `<SYSTEM CHARACTER> <DATA>`
  - (0x01)

- **System Character & Country Code**
  - `<COUNTRY CODE> <SYSTEM CHARACTER> <DATA>`
  - (0x02)
**UPC-E1 Preamble**

**Parameter # 0x24**

Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-E1 symbol. Select one of the following options for transmitting UPC-E1 preamble to the host device: transmit system character only, transmit system character and country code (“0” for USA), or transmit no preamble.

- **No Preamble**
  - `<DATA>`
  - (0x00)

- **System Character**
  - `<SYSTEM CHARACTER> <DATA>`
  - (0x01)

- **System Character & Country Code**
  - `<COUNTRY CODE> <SYSTEM CHARACTER> <DATA>`
  - (0x02)
**Convert UPC-E to UPC-A**

*Parameter # 0x25*

Enable this parameter to convert UPC-E (zero suppressed) decoded data to UPC-A format before transmission. After conversion, data follows UPC-A format and is affected by UPC-A programming selections (e.g., Preamble, Check Digit).

Scan **DO NOT CONVERT UPC-E TO UPC-A** to transmit UPC-E (zero suppressed) decoded data.

---

**Convert UPC-E1 to UPC-A**

*Parameter # 0x26*

Enable this parameter to convert UPC-E1 (zero suppressed) decoded data to UPC-A format before transmission. After conversion, data follows UPC-A format and is affected by UPC-A programming selections (e.g., Preamble, Check Digit).

Scan **DO NOT CONVERT UPC-E TO UPC-A** to transmit UPC-E1 (zero suppressed) decoded data.
**EAN Zero Extend**

**Parameter # 0x27**

When enabled, this parameter adds five leading zeros to decoded EAN-8 symbols to make them compatible in format to EAN-13 symbols.

Disable this parameter to transmit EAN-8 symbols as is.

---

**Enable EAN Zero Extend**

(0x01)

---

**Disable EAN Zero Extend**

(0x00)

---

**Convert EAN-8 to EAN-13 Type**

**Parameter # 0xE0**

When EAN Zero Extend is enabled, you can label the extended symbol as either an EAN-13 bar code, or an EAN-8 bar code. This affects *Transmit Code ID Character* and *DECODE_DATA* message.

When EAN Zero Extend is disabled, this parameter has no effect on bar code data.

---

**Type Is EAN-13**

(0x00)

---

**Type Is EAN-8**

(0x01)
**UPC/EAN Security Level**

**Parameter # 0x4D**

The SE-955 offers four levels of decode security for UPC/EAN bar codes. Increasing levels of security are provided for decreasing levels of bar code quality. Select higher levels of security for decreasing levels of bar code quality. Increasing security decreases the scan engine’s aggressiveness, so choose only that level of security necessary for the application.

UPC/EAN Security Level 0

This default setting allows the scan engine to operate in its most aggressive state, while providing sufficient security in decoding most “in-spec” UPC/EAN bar codes.

![UPC/EAN Security Level 0](image)

*UPC/EAN Security Level 0 (0x00)*

UPC/EAN Security Level 1

As bar code quality levels diminish, certain characters become prone to mis-decodes before others (i.e., 1, 2, 7, 8). If mis-decodes of poorly printed bar codes occur, and the mis-decodes are limited to these characters, select this security level.

![UPC/EAN Security Level 1](image)

UPC/EAN Security Level 1 (0x01)

UPC/EAN Security Level 2

If mis-decodes of poorly printed bar codes occur, and the mis-decodes are not limited to characters 1, 2, 7, and 8, select this security level.

![UPC/EAN Security Level 2](image)

UPC/EAN Security Level 2 (0x02)

UPC/EAN Security Level 3

If misdecodes still occur after selecting Security Level 2, select this security level. Be advised, selecting this option is an extreme measure against mis-decoding severely out of spec bar codes. Selection of this level of security significantly impairs the decoding ability of the scan engine. If this level of security is necessary, try to improve the quality of the bar codes.

![UPC/EAN Security Level 3](image)

UPC/EAN Security Level 3 (0x03)
**UCC Coupon Extended Code**

**Parameter # 0x55**

The UCC Coupon Extended Code is an additional bar code adjacent to a UCC Coupon Code. To enable or disable UCC Coupon Extended Code, scan the appropriate bar code below.

- **Enable UCC Coupon Extended Code**
  (0x01)

- **Disable UCC Coupon Extended Code**
  (0x00)
Code 128

Enable/Disable Code 128

Parameter # 0x08
To enable or disable Code 128, scan the appropriate bar code below.

*Enable Code 128
(0x01)

Disable Code 128
(0x00)

Enable/Disable UCC/EAN-128

Parameter # 0x0E
To enable or disable UCC/EAN-128, scan the appropriate bar code below. (See Appendix B, Miscellaneous Code Information for details on UCC/EAN-128.)

*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.
**Code 39**

*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)

*Enable/Disable Trioptic Code 39*

**Parameter # 0x0D**

Trioptic Code 39 is a variant of Code 39 used in marking computer tape cartridges. Trioptic Code 39 symbols always contain six characters.

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

- Enable Trioptic Code 39 (0x01)
- Disable Trioptic Code 39 (0x00)

A **Note**

**Convert Code 39 to Code 32 (Italian Pharma Code)**

**Parameter # 0x56**

Code 32 is a variant of Code 39 used by the Italian pharmaceutical industry. Scan the appropriate bar code below to enable or disable converting Code 39 to Code 32.

*Note*

Code 39 must be enabled in order for this parameter to function.

---

![Enable Convert Code 39 to Code 32 (0x01)]

---

![Disable Convert Code 39 to Code 32 (0x00)]

---

**Code 32 Prefix**

**Parameter # 0xE7**

Enable this parameter to add the prefix character “A” to all Code 32 bar codes. Convert Code 39 to Code 32 (Italian Pharma Code) must be enabled for this parameter to function.

---

![Enable Code 32 Prefix (0x01)]

---

![Disable Code 32 Prefix (0x00)]
Set Lengths for Code 39

Parameter # L1 = 0x12, L2 = 0x13

The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Code 39 may be set for any length, one or two discrete lengths, or lengths within a specific range. If Code 39 Full ASCII is enabled, **Length Within a Range** or **Any Length** are the preferred options. To set lengths via serial commands, see *Setting Code Lengths Via Serial Commands* on page B-6.

When setting lengths, single digit numbers must always be preceded by a leading zero.

**Note**

- **One Discrete Length** - This option limits decodes to only those Code 39 symbols containing a selected length. Lengths are selected from the numeric bar codes beginning on page 8-73. For example, to decode only Code 39 symbols with 14 characters, scan **Code 39 - One Discrete Length**, then scan 1 followed by 4. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 8-74.

  ![Code 39 - One Discrete Length](image)

- **Two Discrete Lengths** - This option limits decodes to only those Code 39 symbols containing either of two selected lengths. Lengths are selected from the numeric bar codes beginning on page 8-73. For example, to decode only those Code 39 symbols containing either 2 or 14 characters, select **Code 39 - Two Discrete Lengths**, then scan 0, 2, 1, and then 4. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 8-74.

  ![Code 39 - Two Discrete Lengths](image)

- **Length Within Range** - This option limits decodes to only those Code 39 symbols 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. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 8-74.

  ![Code 39 - Length Within Range](image)

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

  ![Code 39 - Any Length](image)
**Code 39 Check Digit Verification**

**Parameter # 0x30**

When this feature is enabled, the scan engine checks the integrity of all Code 39 symbols to verify that the data complies with specified check digit algorithm. Only those Code 39 symbols which include a modulo 43 check digit are decoded. Only enable this feature if your Code 39 symbols contain a module 43 check digit.

- **Verify Code 39 Check Digit**
  - (0x01)

- **Do Not Verify Code 39 Check Digit**
  - (0x00)

**Transmit Code 39 Check Digit**

**Parameter # 0x2B**

Scan this symbol to transmit the check digit with the data.

- ** Transmit Code 39 Check Digit (Enable)**
  - (0x01)

- **Do Not Transmit Code 39 Check Digit (Disable)**
  - (0x00)
Enable/Disable Code 39 Full ASCII

Parameter # 0x11

Code 39 Full ASCII is a variant of Code 39 which pairs characters to encode the full ASCII character set. To enable or disable Code 39 Full ASCII, scan the appropriate bar code below.

Refer to Table B-3 on page B-5 for the mapping of Code 39 characters to ASCII values.

Enable Code 39 Full ASCII
(0x00)

*Disable Code 39 Full ASCII
(0x00)

Note: Trioptic Code 39 and Code 39 Full ASCII cannot be enabled simultaneously. If you get an error beep when enabling Code 39 Full ASCII, disable Trioptic Code 39 and try again.
**Code 93**

*Enable/Disable Code 93*

**Parameter # 0x09**

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

![Enable Code 93 (0x01)](enable_code_93)

![Disable Code 93 (0x00)](disable_code_93)
Set Lengths for Code 93

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

The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Code 93 may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see Setting Code Lengths Via Serial Commands on page B-6.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select Code 93 One Discrete Length, then scan 1, 4, to limit the decoding to only Code 93 symbols containing 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select Code 93 Two Discrete Lengths, then scan 0, 2, 1, 4, to limit the decoding to only Code 93 symbols containing 2 or 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Length Within Range - This option sets the unit 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 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Any Length - Scan this option to decode Code 93 symbols containing any number of characters.
**Code 11**

**Enable/Disable Code 11**

**Parameter # 0x0A**

To enable or disable Code 11, scan the appropriate bar code below.

![Enable Code 11](0x01)

![Disable Code 11](0x00)

**Set Lengths for Code 11**

**Parameter # L1 = 0x1C, L2 = 0x1D**

The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Set lengths for Code 11 to any length, one or two discrete lengths, or lengths within a specific range.

- **One Discrete Length** - Select this option to decode only Code 11 symbols containing a selected length. Select the length using the numeric bar codes beginning on page 8-73. For example, to decode only Code 11 symbols with 14 characters, scan **Code 11 - One Discrete Length**, then scan 1 followed by 4. To correct an error or to change the selection, scan the **Cancel** bar code on page 8-74.

- **Two Discrete Lengths** - Select this option to decode only Code 11 symbols containing either of two selected lengths. Select lengths using numeric bar codes beginning on page 8-73. For example, to decode only those Code 11 symbols containing either 2 or 14 characters, select **Code 11 - Two Discrete Lengths**, then scan 0, 2, 1, and then 4. To correct an error or to change the selection, scan the **Cancel** bar code on page 8-74.

- **Length Within Range** - Select this option to decode a Code 11 symbol with a specific length range. Select lengths using numeric bar codes beginning on page 8-73. For example, to decode Code 11 symbols containing between 4 and 12 characters, first scan **Code 11 - Length Within Range**. Then scan 0, 4, 1, and 2 (single digit numbers must always be preceded by a leading zero). To correct an error or change the selection, scan the **Cancel** bar code on page 8-74.

- **Any Length** - Scan this option to decode Code 11 symbols containing any number of characters within the scan engine capability.
Set Lengths for Code 11 (continued)

Code 11 - One Discrete Length

Code 11 - Two Discrete Lengths

Code 11 - Length Within Range

Code 11 - Any Length
**Code 11 Check Digit Verification**

**Parameter # 0x34**

This feature allows the scan engine to check the integrity of all Code 11 symbols to verify that the data complies with the specified check digit algorithm. This selects the check digit mechanism for the decoded Code 11 bar code. The options are to check for one check digit, check for two check digits, or disable the feature.

To enable this feature, scan the bar code below corresponding to the number of check digits encoded in your Code 11 symbols.

- **Disable** (0x00)
- **One Check Digit** (0x01)
- **Two Check Digits** (0x02)

**Transmit Code 11 Check Digits**

**Parameter # 0x2F**

This feature selects whether or not to transmit the Code 11 check digit(s).

- **Transmit Code 11 Check Digit(s) (Enable)** (0x01)
- **Do Not Transmit Code 11 Check Digit(s) (Disable)** (0x00)

*Code 11 Check Digit Verification must be enabled for this parameter to function.*
Interleaved 2 of 5

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

The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for I 2 of 5 may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see Setting Code Lengths Via Serial Commands on page B-8.

When setting lengths, single digit numbers must always be preceded by a leading zero.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select I 2 of 5 One Discrete Length, then scan 1, 4, to decode only I 2 of 5 symbols containing 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select I 2 of 5 Two Discrete Lengths, then scan 0, 6, 1, 4, to decode only I 2 of 5 symbols containing 6 or 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.
Set Lengths for Interleaved 2 of 5 (continued)

**Length Within Range** - Select this option to decode only codes 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 8-73. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 8-74.

![I 2 of 5 - Length Within Range](image)

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

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

![I 2 of 5 - Any Length](image)
**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 I 2 of 5 Check Digit

Parameter # 0x2C

Scan this symbol to transmit the check digit with the data.

![](Barcode1.png)

Transmit I 2 of 5 Check Digit (Enable)  
(0x01)

Scan this symbol to transmit data without the check digit.

![](Barcode2.png)

*Do Not Transmit I 2 of 5 Check Digit (Disable)  
(0x00)

Convert I 2 of 5 to EAN-13

Parameter # 0x52

This parameter converts a 14 character I 2 of 5 code into EAN-13, and transmits to the host as EAN-13. To accomplish this, I 2 of 5 must be enabled, one length must be set to 14, and the code must have a leading zero and a valid EAN-13 check digit.

![](Barcode3.png)

Convert I 2 of 5 to EAN-13 (Enable)  
(0x01)

![](Barcode4.png)

*Do Not Convert I 2 of 5 to EAN-13 (Disable)  
(0x00)
**Discrete 2 of 5**

*Enable/Disable Discrete 2 of 5*

**Parameter # 0x05**

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

- Enable Discrete 2 of 5  
  (0x01)

- *Disable Discrete 2 of 5  
  (0x00)*
Set Lengths for Discrete 2 of 5

Parameter # L1 = 0x14, L2 = 0x15

The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for D 2 of 5 may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see Setting Code Lengths Via Serial Commands on page B-8.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select D 2 of 5 One Discrete Length, then scan 1, 4, to decode only D 2 of 5 symbols containing 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select D 2 of 5 Two Discrete Lengths, then scan 0, 2, 1, 4, to decode only D 2 of 5 symbols containing 2 or 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Length Within Range - Select this option to decode codes within a specified range. For example, to decode D 2 of 5 symbols containing between 4 and 12 characters, first scan D 2 of 5 Length Within Range, then scan 0, 4, 1 and 2 (single digit numbers must be preceded by a leading zero). Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Any Length - Scan this option to decode D 2 of 5 symbols containing any number of characters.

Selecting this option may lead to misdecodes for D 2 of 5 codes.
Chinese 2 of 5

Enable/Disable Chinese 2 of 5

Parameter # 0xF0 0x98

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

Enable Chinese 2 of 5
(0x01)

*Disable Chinese 2 of 5
(0x00)
Codabar

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

The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Codabar may be set for any length, one or two discrete lengths, or lengths within a specific range. To set lengths via serial commands, see Setting Code Lengths Via Serial Commands on page B-8.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select Codabar One Discrete Length, then scan 1, 4, to decode only Codabar symbols containing 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Two Discrete Lengths - This option sets the unit to decode only those codes containing two selected lengths. For example, select Codabar Two Discrete Lengths, then scan 0, 2, 1, 4, to decode only Codabar symbols containing 6 or 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Length Within Range - Select this option to decode a code 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 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Any Length - Scan this option to decode Codabar symbols containing any number of characters.
**CLSI Editing**

**Parameter # 0x36**
When enabled, this parameter strips the start and stop characters and inserts a space after the first, fifth, and tenth characters of a 14-character Codabar symbol.

Symbol length does not include start and stop characters.

---

**NOTIS Editing**

**Parameter # 0x37**
When enabled, this parameter strips the start and stop characters from decoded Codabar symbol.
MSI

Enable/Disable MSI

Parameter # 0x0B

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

Enable MSI
(0x01)

*Disable MSI
(0x00)
Set Lengths for MSI

Parameter # L1 = 0x1E, L2 = 0x1F

The length of a code refers to the number of characters (i.e., human readable characters) the code contains, and includes check digits. Lengths for MSI can be set for any length, one or two discrete lengths, or lengths within a specific range. See Table B-5 on page B-9 for ASCII equivalents. To set lengths via serial commands, see Setting Code Lengths Via Serial Commands on page B-8.

One Discrete Length - Select this option to decode only those codes containing a selected length. For example, select MSI Plessey One Discrete Length, then scan 1, 4, to decode only MSI Plessey symbols containing 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select MSI Plessey Two Discrete Lengths, then scan 0, 6, 1, 4, to decode only MSI Plessey symbols containing 6 or 14 characters. Numeric bar codes begin on page 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Length Within Range - Select this option to decode codes within a specified range. For example, to decode MSI symbols containing between 4 and 12 characters, first scan MSI 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 8-73. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 8-74.

Any Length - Scan this option to decode MSI Plessey symbols containing any number of characters. Selecting this option may lead to misdecodes for MSI codes.
**MSI Check Digits**

**Parameter # 0x32**

These check digits at the end of the bar code verify the integrity of the data. At least one check digit is always required. Check digits are not automatically transmitted with the data.

*One MSI Check Digit*

(0x00)

If two check digits are selected, also select an **MSI Check Digit Algorithm on page 8-58**.

Two MSI Check Digit

(0x01)

**Transmit MSI Check Digit**

**Parameter # 0x2E**

Scan this symbol to transmit the check digit with the data.

Transmit MSI Check Digit (Enable)

(0x01)

Scan this symbol to transmit data without the check digit.

*Do Not Transmit MSI Check Digit (Disable)*

(0x00)
**MSI Check Digit Algorithm**

**Parameter # 0x33**

When the Two MSI check digits option is selected, an additional verification is required to ensure integrity. Select one of the following algorithms.

- **MOD 10/ MOD 11**
  - (0x00)

- ***MOD 10/ MOD 10**
  - (0x01)
RSS

*Enable/Disable RSS-14*

*Parameter # 0xF0 0x52*

To enable or disable RSS-14, scan the appropriate bar code below.

Enable RSS-14
(0x01)

*Disable RSS-14*
(0x00)

*Enable/Disable RSS-Limited*

*Parameter # 0xF0 0x53*

To enable or disable RSS-Limited, scan the appropriate bar code below.

Enable RSS-Limited
(0x01)

*Disable RSS-Limited*
(0x00)
Enable/Disable RSS-Expanded

Parameter # 0xF0 0x54

To enable or disable RSS-Expanded, scan the appropriate bar code below.

Enable RSS-Expanded (0x01)

*Disable RSS-Expanded (0x00)

Convert RSS to UPC/EAN

Parameter # 0xF0 0x8D

This parameter only applies to RSS-14 and RSS Limited symbols. When this conversion is enabled, RSS-14 and RSS Limited symbols encoding a single zero as the first digit have the leading ‘010’ stripped and the bar code reported as EAN-13.

Bar codes beginning with two or more zeros but not six zeros have the leading ‘0100’ stripped and the bar code reported as UPC-A. The UPC-A Preamble parameter to transmit the system character and country code applies to converted bar codes. Note that neither the system character nor the check digit can be stripped.

Enable Convert RSS to UPC/EAN

*Disable Convert RSS to UPC/EAN