This document pertains to the following 7Ci, 7Di, D700, S800 Rev A-O:

The part number (P/N) is labeled inside the battery compartment for the CHS 7 Series.

<table>
<thead>
<tr>
<th>Model</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>7Ci</td>
<td>Blue 8550-00071</td>
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<tr>
<td>7Ci</td>
<td>Gray 8550-00062</td>
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<tr>
<td>7Ci</td>
<td>Green 8550-00088</td>
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<tr>
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<td>Red 8550-00070</td>
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<td>White 8550-00073</td>
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<td>Yellow 8550-00068</td>
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<tbody>
<tr>
<td>S800</td>
<td>Black 8550-00069</td>
</tr>
</tbody>
</table>

Rev A-O
TABLE OF CONTENTS

Factory Defaults —3
Bluetooth Connection Mode —4
Data Suffix —5
Rumble/Beep Modes —6
HID Keyboard Language Settings —7
Advanced Users Only —8
Apple iOS Onscreen Keyboard —8
Bluetooth Connection Mode —10
Bluetooth Connection Roles —10
Automatic Reconnection Settings —11
Data Mode - For SPP Mode Only —11
Power Button Double key Press —12
Scanner Engine Command Barcodes —13
INSTRUCTIONS: Scan command barcode(s) to quickly configure the barcode scanner.

⚠️ Make sure the scanner is not connected to a host computer or device before scanning a command barcode!

⚠️ To use the scanner on multiple hosts, perform the unpair sequence.

1. Power on the scanner.
2. Press and hold down the trigger button.
3. Press and hold down the power button.
4. After you hear 3 beeps, release both buttons.

*NOTE: You may have to “Forget” or “Delete” the pairing on your host device, as well.

ℹ️ By default, the scanner is in Basic Mode (HID) as a Keyboard device.

ℹ️ For scanners in Application Mode (SPP) or Application Mode (MFi-SPP), you can alternatively configure some settings by using the Scanner Settings app. You can download the app from iTunes, and Google Play.

FACTORY DEaulT$ FACTORY DEFAULTS

**Factory Reset**
Configures the CHS to revert all settings to factory defaults. The CHS powers off after scanning this barcode.

```
#FNB00F0#
```
Download Companion App or scan one of the configuration command barcode(s). Refer to User Guide for the full set of command barcodes: socketmobile.com/downloads

**Note:** Disconnect scanner from host device before scanning a command barcode.

**Basic Mode (HID) (default)**

![Supported Devices](image)

(All host devices)

Configures scanner to Basic Mode. Scanner will be discoverable as a keyboard to Bluetooth host devices.

```
#FNB00F40001#
```

**Application Mode (MFi-SPP) for Apple iOS devices**

![Supported Devices](image)

*Configures scanner to work with an application.

```
#FNB00F40002#
```

**Application Mode (SPP) for Windows or Android 8.0 and later**

![Supported Devices](image)

(Auto Connect - No configuration required for Application pairing)

*Configures scanner to Serial Port Profile.

```
#FNB00F40003#
```

**Application Mode (SPP) for Windows or Android 7.0 and lower**

![Supported Devices](image)

(Requires compatible application for Bluetooth pairing)

*Configures the Scanner to Serial Port Profile (SPP).

```
#FNB00F40000#
```

*For compatible applications developed with Socket Mobil SDK: socketmobile.com/partners/app
All Bluetooth connection modes OK.

You can configure the scanner to automatically add a suffix and/or prefix to each scan of data.

*Note: Scanning multiple commands in a single instance will overwrite (not append) the previous command.*

**Suffix - Carriage Return (default)**
Configures the scanner to add a carriage return after decoded data.

![](https://example.com/barcode1)

**Suffix - Tab**
Configures the scanner to add a tab after decoded data

![](https://example.com/barcode2)

**Suffix - Carriage Return & Line Feed**
Configures the scanner to add a carriage return and line feed after decoded data.

![](https://example.com/barcode3)

**Data As Is**
Configures the scanner to return only the decoded data (i.e., no prefix or suffix).

![](https://example.com/barcode4)
Scan one of the barcodes below and reconfigure the scanner to remain on longer.

*Note: Turn off the host device’s Bluetooth prior to scanning one of the alternate timer barcodes. Then turn the Bluetooth back on.*

*Power cycle the scanner (turn off/on).*

**Scanner Always On**
Configures the scanner to never power off.

![Barcode Image](#FNBO12100000000#)

**Continuous Power for 8 hours**
Scan Barcode to configure the scanner to remain on for 8 hours.

![Barcode Image](#FNBO12101E001E0#)

**Continuous Power for 4 hours**
Scan Barcode to configure the scanner to remain on for 4 hours.

![Barcode Image](#FNBO12100F000F0#)

*These settings drain the battery faster. It is assumed you will charge the scanner within a 24-hour period or overnight. If you don’t, the scanner’s battery will drain completely.*

**Return Scanner to Default Setting**
Turns the scanner off when it is not in use - 3 to 5 minutes after being disconnected from host device.

![Barcode Image](#FNBO12100780005#)
All Bluetooth connection modes OK.

**IMPORTANT! Make sure the scanner is not connected to a host computer before scanning a command barcode.**

**Vibrate “On”**
Enables scanner to vibrate to indicate successful scan

![Vibrate On barcode](#)

#FNB01310001000100FA0000#

**Vibrate “Off”**
Disables scanner from vibrating to indicate successful scan

![Vibrate Off barcode](#)

#FNB013100010000#

**Beep “On”**
Enables scanner to beep to indicate successful scan

![Beep On barcode](#)

#FNB01190E000100030078004B#

**Beep “Off”**
Disables scanner from beeping to indicate successful scans

![Beep Off barcode](#)

#FNB01190E000100000078004B#
Scan only with scanner in Basic Mode (HID).

Scan barcode to enable language.

**English (Default)**

![Barcode for English]

#FNB01430001#

**French**

![Barcode for French]

#FNB01430002#

**German**

![Barcode for German]

#FNB01430003#

**Spanish**

![Barcode for Spanish]

#FNB01430004#
Scan only with scanner in Basic Mode (HID).

Apple iOS Onscreen Keyboard and Beep Enabled (Default) Configures the scanner to activate the iOS onscreen keyboard when connected to an iOS device and the scanner power button is double-pressed.

**Disable both Onscreen Keyboard and Beep**

![Barcode Image]

#FNB013A000000000000000000000000000000#

**Enable Beep**

![Barcode Image]

#FNB013A050000000000000000000000000000#

**Disable Beep**

![Barcode Image]

#FNB013A010000000000000000000000000000#
BLUETOOTH CONNECTION ROLES

Scan only with scanner in Application Mode (SPP) or Application Mode (MFi-SPP)
Advanced users only.

**Acceptor (default)**
Configures the scanner to accept a Bluetooth connection puts the scanner in discoverable mode.

![Barcode for Acceptor](#FNA#)

**Initiator**
Configures the scanner to initiate a connection to a computer/device with the Bluetooth Device Address specified in the barcode.

The barcode must be formatted in Code 128 and contain the data `#FNIaabbccddeeff#` such that `aabbccddeeфф` is the Bluetooth Device Address of the computer/device you want to connect to the scanner. Required for Windows when using SPP mode.

You must create a custom barcode for each computer/device that you want to connect to the scanner.

Use barcode generating software or website (e.g., http://barcode.tec-it.com))

DATA MODE - FOR SPP MODE ONLY

All Bluetooth Connection Modes OK.
Advanced users only.

**Packet Mode (default)**
Configures the scanner to transmit decoded data in packet format.

![Barcode for Packet Mode](#FNB013401#)

**Raw Mode**
Configures the scanner to transmit decoded data in raw (unpacketeted) format. Do not scan this barcode in Application Mode (MFi-SPP).

![Barcode for Raw Mode](#FNB013400#)
AUTOMATIC RECONNECTION SETTINGS

All Bluetooth Connection Modes OK.

Important! After scanning this command barcode, power off and power on the scanner to make sure it is configured properly.

Enable Automatic Reconnection from scanner (default)
Configures the scanner to automatically initiate a connection to the last paired computer/device after the scanner is powered on.

[Scan barcode]

#FNB012650#

Disable Automatic Reconnection from scanner
Configures the scanner to wait for a computer/device to initiate a Bluetooth connection after the scanner is powered on.

[Scan barcode]

#FNB012610#
For Basic Mode (HID) only
Scanner Engine Command Barcodes

**Ctrl + Z**
Scan to Enable WITH BEEP

![Barcode Image]

Scan to Enable NO BEEP

![Barcode Image]

**Ctrl + A**
Scan to Enable WITH BEEP

![Barcode Image]

Scan to Enable NO BEEP

![Barcode Image]

**Shift + Tab**
Scan to Enable WITH BEEP

![Barcode Image]

Scan to Enable NO BEEP

![Barcode Image]
SCANNER ENGINE COMMAND BARCODES

INSTRUCTIONS: Scan command barcode(s) to quickly configure the barcode scanner.

⚠️ Make sure the scanner is not connected to a host computer or device before scanning a command barcode!

⚠️ To use the scanner on multiple hosts, perform the unpair sequence. For instructions, see User’s Guide.

ℹ️ By default, the scanner is in Basic Mode (HID) as a Keyboard device.

ℹ️ You may want to cover adjacent barcodes before scanning a command barcode to prevent scanning the wrong code.

ℹ️ For scanners in Application Mode (SPP) or Application Mode (MFi-SPP), you can alternatively configure some settings by using the Scanner Settings app.
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)*
Enable/Disable UPC-E1

Parameter # 0x0C
To enable or disable UPC-E1, scan the appropriate bar code below.
NOTE: 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.
NOTE: If you enable Bookland EAN, select a Bookland ISBN Format on page 49. Also select either Decode UPC/EAN Supplementals, Autodiscriminate UPC/EAN Supplementals, or Enable 978/979 Supplemental Mode in Decode UPC/EAN Supplementals on page 50.

**Bookland ISBN Format**

*Parameter # 0xF1 0x40*

If Bookland EAN is enabled, select one of the following formats for Bookland data:

- **Bookland ISBN-10** - The digital scanner reports Bookland data starting with 978 in traditional 10-digit format with the special Bookland check digit for backward-compatibility. Data starting with 979 is not considered Bookland in this mode.


NOTE: For Bookland EAN to function properly, ensure Bookland EAN is enabled (see Enable/Disable Bookland EAN), then select either Decode UPC/EAN Supplementals, Autodiscriminate UPC/EAN Supplementals, or Enable 978/979 Supplemental Mode in Decode UPC/EAN Supplementals.
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 SM1 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, then select a value from the numeric bar codes beginning on page 93. A value of 5 or more is recommended.
- Select **Enable 978/979 Supplemental Mode** to enable the SM1 to identify supplementals for EAN-13 bar codes starting with a ‘978’ or ‘979’ prefix only. All other UPC/EAN bar codes are decoded immediately and the supplemental characters ignored.

**NOTE:** 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.

*Ignore UPC/EAN With Supplementals*
Decode UPC/EAN With Supplementals
(0x00)

Autodiscriminate UPC/EAN Supplementals
(0x01)

Enable 978/979 Supplemental Mode
(0x02)

Decode UPC/EAN Supplemental Redundancy

**Parameter # 0x50**

With Autodiscriminate UPC/EAN Supplementals selected, this option adjusts the number of times a symbol without supplemental 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 93. Single digit numbers must have a leading zero. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.
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
(<DATA>)
(0x00)

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

System Character & Country Code
(< COUNTRY CODE> <SYSTEM CHARACTER> <DATA>)
(0x02)

**UPC-E Preamble**

*Parameter # 0x23*

Preamble character (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 or transmit no preamble.
UPC-E1 Preamble

*Parameter # 0x24*

Preamble character (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 or transmit no preamble.
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-E to UPC-A (Enable)
(0x01)

*Do Not Convert UPC-E to UPC-A (Disable)
(0x00)

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 and code type would be changed to EAN-13.

Disable this parameter to transmit EAN-8 symbols as is.
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 GS1-128 (formerly UCC/EAN-128)

*Parameter # 0x0E*
To enable or disable GS1-128, scan the appropriate bar code below.

*Enable GS1-128 (0x01)*
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)

Code 39

Enable/Disable Code 39

*Parameter # 0x00*

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

*Enable Code 39*
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.

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.
**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.

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

**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 93. 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 94.

**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 93. For example, to decode only Code 39 symbols with 12 or 13 characters, scan **Code 39 - Two Discrete Lengths**, then scan 12 followed by 13. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 94.
codes beginning on page 93. 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 94.

Code 39 – Two Discrete Lengths

**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 93. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 94.

Code 39 – Lengths Within Range

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

Code 39 – Any Length

**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)

Scan this symbol to transmit data without the check digit.

*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.
Enable Code 39 Full ASCII
(0x01)

*Disable Code 39 Full ASCII
(0x00)

Code 93

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

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.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.
Any Length - Scan this option to decode Code 93 symbols containing any number of characters.

Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5

*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.

NOTE: 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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 94.

![I 2 of 5 – One Discrete Length](image1)

**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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 94.

![I 2 of 5 – Two Discrete Lengths](image2)

**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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 94.

![I 2 of 5 – Length Within Range](image3)
**Any Length** - Scan this option to decode I 2 of 5 symbols containing any number of characters.

NOTE: 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)](image)

![OPCC Check Digit (0x02)](image)
Transmit I 2 of 5 Check Digit

*Parameter # 0x2C*
Scan this symbol to transmit the check digit with the data.

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

Scan this symbol to transmit data without the check digit.

*Do Not Transmit I 2 of 5 Check Digit (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)
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.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.
Any Length - Scan this option to decode D 2 of 5 symbols containing any number of characters.

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

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.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.
Codabar – Length Within Range

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

Codabar – Any Length

**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.

NOTE: Symbol length does not include start and stop characters.

Enable CLSI Editing

(0x01)

*Disable CLSI Editing

(0x00)

**NOTIS Editing**

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

Enable NOTIS Editing
(0x01)

*Disable NOTIS Editing
(0x00)

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. To set lengths via serial commands, see Setting Code Lengths Via Serial Commands.

**One Discrete Length** - Select this option to decode only those codes containing a selected length. For example, select **MSI One Discrete Length**, then scan 1, 4, to decode only MSI symbols containing 14 characters. Numeric bar codes beginning on page 93. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 94.

![MSI - One Discrete Length](image)

Two Discrete Lengths - Select this option to decode only those codes containing two selected lengths. For example, select **MSI Two Discrete Lengths**, then scan 0, 6, 1, 4, to decode only MSI symbols containing 6 or 14 characters. Numeric bar codes beginning on page 93. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 94.

![MSI - Two Discrete Lengths](image)

**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 beginning on page 93. To change the selection or cancel an incorrect entry, scan the **Cancel** bar code on page 94.
Any Length - Scan this option to decode MSI symbols containing any number of characters.

NOTE: 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.

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)*
GS1 DataBar

Enable/Disable GS1 DataBar-14

Parameter # 0xF0 0x52
To enable or disable GS1 DataBar-14, scan the appropriate bar code below.

Enable GS1 DataBar-14
(0x01)

*Disable GS1 DataBar-14
(0x00)

Enable/Disable GS1 DataBar Limited

Parameter # 0xF0 0x53
To enable or disable GS1 DataBar Limited, scan the appropriate bar code below.

Enable GS1 DataBar Limited
(0x01)
Enable/Disable GS1 DataBar Expanded

**Parameter # 0xF0 0x54**

To enable or disable GS1 DataBar Expanded, scan the appropriate bar code below.

*Enable GS1 DataBar Expanded
(0x01)*

*Disable GS1 DataBar Expanded
(0x00)*

Matrix 2 of 5

Enable/Disable Matrix 2 of 5

**Parameter # 0xF1 0x6A**

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

*Enable Matrix 2 of 5
(0x01)*
Set Lengths for Matrix 2 of 5

Parameter # $L_1 = 0xF1 \ 0x6B \ L_2 = 0xF1 \ 0x6C$

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 Matrix 2 of 5 to any length, one or two discrete lengths, or lengths within a specific range.

**One Discrete Length** - Select this option to decode only Matrix 2 of 5 symbols containing a selected length. Select the length using the numeric bar codes beginning on page 93. For example, to decode only Matrix 2 of 5 symbols with 14 characters, scan **Matrix 2 of 5 - One Discrete Length**, then scan 1 followed by 4. To correct an error or to change the selection, scan **Cancel** bar code on page 94.

**Two Discrete Lengths** - Select this option to decode only Matrix 2 of 5 symbols containing either of two selected lengths. Select lengths using the numeric bar codes beginning on page 93. For example, to decode only Matrix 2 of 5 symbols containing either 2 or 14 characters, select **Matrix 2 of 5 - Two Discrete Lengths**, then scan 0, 2, 1, and then 4. To correct an error or to change the selection, scan **Cancel** bar code on page 94.

**Length Within Range** - Select this option to decode a Matrix 2 of 5 symbol with a specific length range. Select lengths using the numeric bar codes beginning on page
93. For example, to decode Matrix 2 of 5 symbols containing between 4 and 12 characters, first scan **Matrix 2 of 5 - Length Within Range**. Then scan 0, 4, 1, and 2 (enter a leading zero for single digit numbers). To correct an error or change the selection, scan **Cancel** bar code on page 94.

Matrix 2 of 5 - Length Within Range

**Any Length** - Scan this option to decode Matrix 2 of 5 symbols containing any number of characters within the digital scanner’s capability.

Matrix 2 of 5 - Any Length

**Matrix 2 of 5 Redundancy**

**Parameter # 0xF1 0x6D**

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

Enable Matrix 2 of 5 Redundancy

(0x01)

*Disable Matrix 2 of 5 Redundancy

(0x00)
Matrix 2 of 5 Check Digit

*Parameter # 0xF1 0x6E*

The check digit is the last character of the symbol used to verify the integrity of the data. Scan the appropriate bar code below to transmit the bar code data with or without the Matrix 2 of 5 check digit.

Enable Matrix 2 of 5 Check Digit
(0x01)

*Disable Matrix 2 of 5 Check Digit
(0x00)

Transmit Matrix 2 of 5 Check Digit

*Parameter # 0xF1 0x6F*

Scan a bar code below to transmit Matrix 2 of 5 data with or without the check digit.

Transmit Matrix 2 of 5 Check Digit
(0x01)
Plessey

Enable/Disable Plessey

*Parameter # 0xF1 0xC4*

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

Enable Plessey
(0x01)

*Disable Plessey
(0x00)*

UK Plessey Conversion

*Parameter # 0xF1 0xC5*

Decide whether to change each occurrence of the character ‘A’ to character ‘X’ in the decoded data.

Convert to UK Plessey
(0x01)
Transmit Plessey Check Digit

*Parameter # 0xF1 0xC6*
Scan a bar code below to transmit Plessey data with or without the check digit.

Transmit Plessey Check Digit
(0x01)

*Do Not Transmit Plessey Check Digit
(0x00)*

Set Lengths for Plessey

*Parameter # L1 = 0xF1 0xC7, L2 = 0xF1 0xC8*
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 Plessey 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.

**One Discrete Length** - Select this option to decode only those codes containing a selected length. For example, select Plessey One Discrete Length, then scan 1, 4, to
decode only Plessey symbols containing 14 characters. Numeric bar codes beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

Plessey – One Discrete Length

**Two Discrete Lengths** - Select this option to decode only those codes containing two selected lengths. For example, select Plessey Two Discrete Lengths, then scan 0, 2, 1, 4, to decode only Plessey symbols containing 2 or 14 characters. Numeric bar codes beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

Plessey – Two Discrete Length

**Length Within Range** - Select this option to decode codes within a specified range. For example, to decode Plessey symbols containing between 4 and 12 characters, first scan Plessey Length Within Range, then scan 0, 4, 1 and 2 (single digit numbers must be preceded by a leading zero). Numeric bar codes beginning on page 93. To change the selection or cancel an incorrect entry, scan the Cancel bar code on page 94.

Plessey – Length Within Range

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

Plessey – Any Length
Numeric Bar Codes

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

0
1
2
3
4
5
Numeric Bar Codes (continued)

6

7

8

9

**Cancel**
To change the selection or cancel an incorrect entry, scan the bar code below.

Cancel