AsReader

AsReader PADDLE-Type (ASR-P252B)

Barcode Setting Manual

Asterisk Inc.

Ver. 1.0

※This information is subject to change without notice.

Revision History

Version	Date	Item
1.0	2024/1/5	First revision

Before Setting Parameters

Make sure the battery of the AsReader is fully charged before setting any parameters.

How to Change Parameters

Choose the applicable "setting barcodes" of the settings you wish to change and scan them with the AsReader. The settings will be saved in the AsReader.

Steps to change Parameters

1. Connect the AsReader to your smart device (iOS / Android / Windows).

2. Launch an application on your smart device that is used with this AsReader, such as the AsReader PADDLE-Type demo app or ASR-P252B demo app.

3. Scan the **Enter Setup** setting barcode (pictured below) to enter setup mode.

4. Scan the setting barcode for the item with the settings you want to change.

    *Nothing will be displayed on the screen of the smart device connected to AsReader when "setting barcodes" are scanned.

5. To exit setup mode, scan the **Exit Setup** barcode or a non-setting barcode.

@SETUPE1

Enter Setup

@SETUPE0

Exit Setup

Setting Barcode (sample):

@128ENA1

Programming command

"*" Indicates a default setting

*Enable Code 128

Features or options

Contents

1. Default Settings

1.1. Custom Defaults

By scanning the **Restore All Custom Defaults** setting barcode, users can reset all parameters to the custom defaults. By scanning the **Save as Custom Defaults** setting barcode, the user can set the current settings as custom defaults.

@CUSSAV

Save as Custom Defaults

@CUSDEF

Restore All Custom Defaults

2. Parameter Default settings

Parameter	Value
Global Settings	
Enable All Symbologies	-
Disable All Symbologies	-
Enable 1D Symbologies	-
Disable 1D Symbologies	-
Enable 2D Symbologies	-
Disable 2D Symbologies	-
Surround GS1 AI's with Parentheses	Do Not Surround GS1 AI's with Parentheses
Code 128	
Restore Factory Defaults	-
Enable/Disable Code 128	Enabled
Set Length Range for Code 128	Max:48 Min:1
Transmit Check Character	Do Not Transmit
FNC1 Output	On
EAN 8	
Restore Factory Defaults	-
Enable/Disable EAN 8	Enabled
Transmit Check Character	Transmit
2-Digit Add-On Code	Disabled
5-Digit Add-On Code	Disabled
Add-On Code Required	Not Required
EAN 13	
Restore Factory Defaults	-
Enable/Disable EAN 13	Enabled
Transmit Check Character	Transmit
2-Digit Add-On Code	Disabled
5-Digit Add-On Code	Disabled
Add-On Code Required	Not Required
EAN-13 Beginning with 290 Add-On Code Required	Do Not Require Add-On Code
EAN-13 Beginning with 378/379 Add-On Code Required	Do Not Require Add-On Code
EAN-13 Beginning with 414/419 Add-On Code Required	Do Not Require Add-On Code
EAN-13 Beginning with 434/439 Add-On Code Required	Do Not Require Add-On Code
EAN-13 Beginning with 977 Add-On Code Required	Do Not Require Add-On Code

EAN-13 Beginning with 978 Add-On Code Required	Do Not Require Add-On Code
EAN-13 Beginning with 979 Add-On Code Required	Do Not Require Add-On Code
UPC-E	
Restore Factory Defaults	-
Enable/Disable UPC-E	Enabled
Transmit Check Character	Transmit
2-Digit Add-On Code	Disabled
5-Digit Add-On Code	Disabled
Add-On Code Required	Not Required
Transmit Preamble Character	System Character
UPC-A	
Restore Factory Defaults	-
Enable/Disable UPC-A	Enabled
Transmit Check Character	Transmit
2-Digit Add-On Code	Disabled
5-Digit Add-On Code	Disabled
Add-On Code Required	Not Required
Transmit Preamble Character	System Character
Interleaved 2 of 5	
Restore Factory Defaults	-
Enable/Disable Interleaved 2 of 5	Enabled
Set Length Range for Interleaved 2 of 5	Max:80 Min:6
Check Character Verification	Disabled
Febraban	Disabled
ITF-14	
Restore Factory Defaults	-
Disable/Enable ITF-14	Disabled
ITF-6	
Restore Factory Defaults	-
Disable/Enable ITF-6	Disabled
Matrix 2 of 5	
Restore Factory Defaults	-
Enable/Disable Matrix 2 of 5	Enabled
Set Length Range for Matrix 2 of 5	Max:80 Min:4
Check Character Verification	Disabled

Code 39	
Restore Factory Defaults	-
Enable/Disable Code 39	Enabled
Set Length Range for Code 39	Max:48 Min:1
Check Character Verification	Disabled
Transmit Start/Stop Character	Do not transmit
Enable/Disable Code 39 Full ASCII	Disabled
Enable/Disable Code 32 (Italian Pharma Code)	Disabled
Code 32 Prefix	Disabled
Transmit Code 32 Start/Stop Character	Do not transmit
Transmit Code 32 Check Character	Do not transmit
Codabar	
Restore Factory Defaults	-
Enable/Disable Codebar	Enabled
Set Length Range for Codebar	Max:60 Min:2
Check Character Verification	Disabled
Start/Stop Character	Do not transmit
Format of Start/Stop Character	ABCD/ABCD
Code 93	
Restore Factory Defaults	-
Enable/Disable Code 93	Disabled
Set Length Range for Code 93	Max:48 Min:1
Check Character Verification	Do Not Transmit Check Character After Verification
GS1-128 (UCC/EAN-128)	
Restore Factory Defaults	-
Enable/Disable GS1-128	Enabled
Set Length Range for GS1-128	Max:48 Min:1
Transmit Check Character	Do Not Transmit
FNC1 Output	On
Code 11	
Restore Factory Defaults	-
Enable/Disable Code 11	Disabled
Set Length Range for Code 11	Max:48 Min:4
Check Character Verification	Disabled
Transmit Check Character	Transmit

ISBN	
Restore Factory Defaults	-
Enable/Disable ISBN	Disabled
Set ISBN Format	ISBN-10
2-Digit Add-On Code	Disabled
5-Digit Add-On Code	Disabled
Add-On Code Required	Not Required
ISSN	
Restore Factory Defaults	-
Enable/Disable ISSN	Disabled
2-Digit Add-On Code	Disabled
5-Digit Add-On Code	Disabled
Add-On Code Required	Not Required
Industrial 25	
Restore Factory Defaults	-
Enable/Disable Industrial 25	Disabled
Set Length Range for Industrial 25	Max:48 Min:6
Check Character Verification	Disabled
Plessey	
Restore Factory Defaults	-
Enable/Disable Plessey	Disabled
Set Length Range for Plessey	Max:48 Min:4
Check Character Verification	Disabled
MSI-Plessey	
Restore Factory Defaults	-
Enable/Disable MSI-Plessey	Disabled
Set Length Range for MSI-Plessey	Max:48 Min:4
Check Character Verification	One Check Character, MOD10
Transmit Check Character	Transmit
PDF 417	
Restore Factory Defaults	-
Enable/Disable PDF 417	Enabled
Set Length Range for PDF 417	Max:6144 Min:1
PDF417 Twin Code	Single PDF417 Only
Character Encoding	Default Character Encoding
PDF417 ECI Output	Enabled

QR Code	
Restore Factory Defaults	-
Enable/Disable QR Code	Enabled
Set Length Range for QR Code	Max:6144 Min:1
QR Twin Code	Single QR Only
Character Encoding	Default Character Encoding
QR ECI Output	Enabled
Micro QR Code	
Restore Factory Defaults	-
Enable/Disable Micro QR	Disabled
Set Length Range for Micro QR	Max:6144 Min:1
Data Matrix	
Restore Factory Defaults	-
Enable/Disable Data Matrix	Enabled
Set Length Range for Data Matrix	Max:6144 Min:1
Data Matrix Twin Code	Single Data Matrix Only
Rectangular Barcode	Enabled
Character Encoding	Default Character Encoding
Data Matrix ECI Output	Enabled

3. Basic Settings

3.1. Decode Area

Whole Area Decoding: The engine attempts to decode barcode(s) within its field of view, from the center to the periphery, and transmits the barcode that has been first decoded.

Center Decoding: The engine only decodes the barcode in the center of its field of view.

*Whole Area Decoding

Center Decoding

4. Symbologies

4.1. Global Settings

4.1.1. Enable All Symbologies

If the **Enable All Symbologies** feature is enabled, the engine will be able to read all supported barcodes, but is slower.

Enable All Symbologies

4.1.2. Disable All Symbologies

If the **Disable All Symbologies** feature is enabled, the engine will not be able to read any barcodes, except these "setting barcodes."

Disable All Symbologies

4.1.3. Enable 1D Symbologies

If the **Enable 1D Symbologies** feature is enabled, the engine will be able to read all supported 1D barcodes.

Enable 1D Symbologies

4.1.4. Disable 1D Symbologies

If the **Disable 1D Symbologies** feature is enabled, the engine will not be able to read any 1D barcodes except the setting barcodes.

Disable 1D Symbologies

4.1.5. Enable 2D Symbologies

If the **Enable 2D Symbologies** feature is enabled, the engine will be able to read all supported 2D barcodes.

Enable 2D Symbologies

4.1.6. Disable 2D Symbologies

If the **Disable 2D Symbologies** feature is enabled, the engine will not be able to read any 2D barcodes.

Disable 2D Symbologies

4.1.7. Surround GS1 Application Identifiers (AI's) with Parentheses

When **Surround GS1 AI's with Parentheses** is selected, each application identifier (AI) contained in scanned data will be enclosed in parentheses in the output message.

*Do Not Surround GS1 AI's with Parentheses

Surround GS1 AI's with Parentheses

(01) 0 0614141 99999 6 (10) 10ABCEDF123456
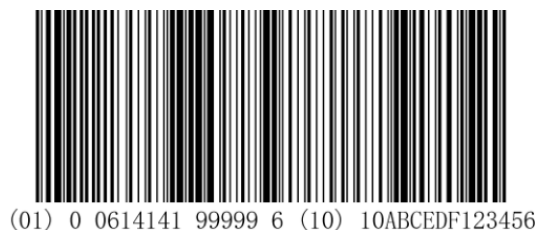
EXAMPLE: If **Surround GS1 AI's with Parentheses** is selected, the barcode above is output as (01)00614141999996(10)10ABCEDF123456.
If **Do Not Surround GS1 AI's with Parentheses** is selected, the barcode above is output as 010061414199999610.10ABCEDF123456.

4.2. Code 128

4.2.1. Restore Factory Defaults

Restore the Factory Defaults of Code 128

4.2.2. Enable/Disable Code 128

*Enable Code 128

Disable Code 128

NOTE: If the engine fails to identify Code 128 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Code 128** setting barcode.

4.2.3. Set Length Range for Code 128

The engine can be configured to only decode Code 128 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 1)

Set the Maximum Length (Default: 48)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Code 128 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 128 barcodes with that length will be decoded.

To set the engine to decode Code 128 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set the Minimum Length** setting barcode.

3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Set the Maximum Length** setting barcode.

6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.

7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

8. Scan the **Exit Setup** barcode.

4.2.4. Transmit Check Character

Transmit Code 128 Check Character

*Do Not Transmit Code 128 Check Character

4.2.5. FNC1 Output

Off

*On

4.3. EAN 8

4.3.1. Restore Factory Defaults

Restore the Factory Defaults of EAN-8

4.3.2. Enable/Disable EAN-8

*Enable EAN-8

Disable EAN-8

NOTE: If the engine fails to identify EAN-8 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable EAN-8** setting barcode.

4.3.3. Transmit Check Character

EAN-8 is 8 digits in length with the last one as its check character used to verify the integrity of the data.

*Transmit EAN-8 Check Character

Do Not Transmit EAN-8 Check Character

4.3.4. 2-Digit Add-On Code

An EAN-8 barcode can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by a wider, blue dotted line is an EAN-8 barcode while the part surrounded by a smaller red dotted line is a two-digit add-on code.

*Disable 2-Digit Add-On Code

Enable 2-Digit Add-On Code

NOTE:

Disable 2-Digit Add-On Code: The engine decodes EAN-8 and ignores the add-on code when presented with an EAN-8 plus 2-digit add-on barcode. It can also decode EAN-8 barcodes without 2-digit add-on codes.

Enable 2-Digit Add-On Code: The engine decodes a mix of EAN-8 barcodes with and without 2-digit add-on codes.

4.3.5. 5-Digit Add-On Code

An EAN-8 barcode can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is an EAN-8 barcode while the part surrounded by a smaller red dotted line is a five-digit add-on code.

*Disable 5-Digit Add-On Code

Enable 5-Digit Add-On Code

NOTE:

Disable 5-Digit Add-On Code: The engine decodes EAN-8 and ignores the add-on code when presented with an EAN-8 plus 5-digit add-on barcode. It can also decode EAN-8 barcodes without 5-digit add-on codes.

Enable 5-Digit Add-On Code: The engine decodes a mix of EAN-8 barcodes with and without 5-digit add-on codes.

4.3.6. Add-On Code Required

When **EAN-8 Add-On Code Required** is selected, the engine will only read EAN-8 barcodes that contain add-on codes.

*EAN-8 Add-On Code Not Required

EAN-8 Add-On Code Required

4.4. EAN 13

4.4.1. Restore Factory Defaults

Restore the Factory Defaults of EAN-13

4.4.2. Enable/Disable EAN-13

*Enable EAN-13

Disable EAN-13

NOTE: If the engine fails to identify EAN-13 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable EAN-13** setting barcode.

4.4.3. Transmit Check Character

*Transmit EAN-13 Check Character

Do Not Transmit EAN-13 Check Character

4.4.4. 2-Digit Add-On Code

An EAN-13 barcode can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is an EAN-13 barcode while the part surrounded by a smaller red dotted line is a two-digit add-on code.

*Disable 2-Digit Add-On Code

Enable 2-Digit Add-On Code

NOTE:

Disable 2-Digit Add-On Code: The engine decodes EAN-13 and ignores the add-on code when presented with an EAN-13 plus 2-digit add-on barcode. It can also decode EAN-13 barcodes without 2- digit add-on codes.

Enable 2-Digit Add-On Code: The engine decodes a mix of EAN-13 barcodes with and without 2-digit add-on codes.

4.4.5. 5-Digit Add-On Code

An EAN-13 barcode can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is an EAN-13 barcode while the part surrounded by a smaller red dotted line is a five-digit add-on code.

*Disable 5-Digit Add-On Code

Enable 5-Digit Add-On Code

NOTE:

Disable 5-Digit Add-On Code: The engine decodes EAN-13 and ignores the add-on code when presented with an EAN-13 plus 5-digit add-on barcode. It can also decode EAN-13 barcodes without 5- digit add-on codes.

Enable 5-Digit Add-On Code: The engine decodes a mix of EAN-13 barcodes with and without 5-digit add-on codes.

4.4.6. Add-On Code Required

When **EAN-13 Add-On Code Required** is selected, the engine will only read EAN-13 barcodes that contain add-on codes.

@E13REQ0

*EAN-13 Add-On Code Not Required

@E13REQ1

EAN-13 Add-On Code Required

4.4.7. EAN-13 Beginning with 290 Add-On Code Required

This setting programs the engine to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with "290". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with "290" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the "Add-On Code Required" feature.

@E132900

*Do Not Require Add-On Code

@E132901

Require Add-On Code

4.4.8. EAN-13 Beginning with 378/379 Add-On Code Required

This setting programs the engine to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with "290". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with "290" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the "Add-On Code Required" feature.

@E133780

*Do Not Require Add-On Code

@E133781

Require Add-On Code

4.4.9. EAN-13 Beginning with 414/419 Add-On Code Required

This setting programs the engine to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with a "414" or "419". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with a "414" or "419" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the "Add-On Code Required" feature.

@E134140

*Do Not Require Add-On Code

@E134141

Require Add-On Code

4.4.10. EAN-13 Beginning with 434/439 Add-On Code Required

This setting programs the engine to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with a "434" or "439". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with a "434" or "439" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the "Add-On Code Required" feature.

@E134340

*Do Not Require Add-On Code

@E134341

Require Add-On Code

4.4.11. EAN-13 Beginning with 977 Add-On Code Required

This setting programs the engine to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with "977". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with "977" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled depending on your selection for the "Add-On Code Required" feature.

@E139770

*Do Not Require Add-On Code

@E139771

Require Add-On Code

4.4.12. EAN-13 Beginning with 978 Add-On Code Required

This setting programs the engine to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with "978". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with "978" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the "Add-On Code Required" feature.

@E139780

*Do Not Require Add-On Code

@E139781

Require Add-On Code

4.4.13. EAN-13 Beginning with 979 Add-On Code Required

This setting programs the engine to require an add-on code (2-digit or 5-digit) on EAN-13 barcodes that begin with "979". The following settings can be programmed:

Require Add-On Code: All EAN-13 barcodes that begin with "979" must have a 2-digit or 5-digit add-on code. The EAN-13 barcode with the add-on code is then transmitted. If the required add-on code is not found, the EAN-13 barcode is discarded.

Do Not Require Add-On Code: If you have selected **Require Add-On Code**, and you want to disable this feature, scan **Do Not Require Add-On Code**. EAN-13 barcodes are handled, depending on your selection for the "Add-On Code Required" feature.

@E139790

*Do Not Require Add-On Code

@E139791

Require Add-On Code

4.5. UPC-E

4.5.1. Restore Factory Defaults

Restore the Factory Defaults of UPC-E

4.5.2. Enable/Disable UPC-E

*Enable UPC-E

Disable UPC-E

NOTE: If the engine fails to identify UPC-E barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable UPC-E** setting barcode.

4.5.3. Transmit Check Character

UPC-E is 8 digits in length with the last one as its check character used to verify the integrity of the data.

*Transmit UPC-E Check Character

Do Not Transmit UPC-E Check Character

4.5.4. 2-Digit Add-On Code

A UPC-E barcode can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is a UPC-E barcode while the part surrounded by a smaller red dotted line is a two-digit add-on code.

*Disable 2-Digit Add-On Code

Enable 2-Digit Add-On Code

NOTE:

Disable 2-Digit Add-On Code: The engine decodes UPC-E and ignores the add-on code when presented with a UPC-E plus 2-digit add-on barcode. It can also decode UPC-E barcodes without 2-digit add-on codes.

Enable 2-Digit Add-On Code: The engine decodes a mix of UPC-E barcodes with and without 2-digit add-on codes.

4.5.5. 5-Digit Add-On Code

A UPC-E barcode can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is a UPC-E barcode while the part surrounded by a smaller red dotted line is a five-digit add-on code.

*Disable 5-Digit Add-On Code

Enable 5-Digit Add-On Code

NOTE:

Disable 5-Digit Add-On Code: The engine decodes UPC-E and ignores the add-on code when presented with a UPC-E plus 5-digit add-on barcode. It can also decode UPC-E barcodes without 5-digit add-on codes.

Enable 5-Digit Add-On Code: The engine decodes a mix of UPC-E barcodes with and without 5-digit add-on codes.

4.5.6. Add-On Code Required

When **UPC-E Add-On Code Required** is selected, the engine will only read UPC-E barcodes that contain add-on codes.

*UPC-E Add-On Code Not Required

UPC-E Add-On Code Required

4.5.7. Transmit Preamble Characters

Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-E barcode. Select one of the following options for transmitting a UPC-E preamble to the host device: transmit system character ("0" or "1") only, transmit system character and country code ("0" for USA), or transmit no preamble.

*System Character

No Preamble

System Character & Country Code

4.6. UPC-A

4.6.1. Restore Factory Defaults

Restore the Factory Defaults of UPC-A

4.6.2. Enable/Disable UPC-A

*Enable UPC-A

Disable UPC-A

NOTE: If the engine fails to identify UPC-A barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable UPC-A** setting barcode.

4.6.3. Transmit Check Character

UPC-A is 13 digits in length with the last digit as its check character used to verify the integrity of the data.

*Transmit UPC-A Check Character

Do Not Transmit UPC-A Check Character

4.6.4. 2-Digit Add-On Code

A UPC-A barcode can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is a UPC-A barcode while the part surrounded by a smaller red dotted line is a two-digit add-on code.

*Disable 2-Digit Add-On Code

Enable 2-Digit Add-On Code

NOTE:

Disable 2-Digit Add-On Code: The engine decodes UPC-A and ignores the add-on code when presented with a UPC-A plus 2-digit add-on barcode. It can also decode UPC-A barcodes without 2-digit add-on codes.

Enable 2-Digit Add-On Code: The engine decodes a mix of UPC-A barcodes with and without 2-digit add-on codes.

4.6.5. 5-Digit Add-On Code

A UPC-A barcode can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is a UPC-A barcode while the part surrounded by a smaller red dotted line is a five-digit add-on code.

*Disable 5-Digit Add-On Code

Enable 5-Digit Add-On Code

NOTE:

Disable 5-Digit Add-On Code: The engine decodes UPC-A and ignores the add-on code when presented with a UPC-A plus 5-digit add-on barcode. It can also decode UPC-A barcodes without 5-digit add-on codes.

Enable 5-Digit Add-On Code: The engine decodes a mix of UPC-A barcodes with and without 5-digit add-on codes.

4.6.6. Add-On Code Required

When **UPC-A Add-On Code Required** is selected, the engine will only read UPC-A barcodes that contain add-on codes.

*UPC-A Add-On Code Not Required

UPC-A Add-On Code Required

4.6.7. Transmit Preamble Characters

Preamble characters (Country Code and System Character) can be transmitted as part of a UPC-A barcode. Select one of the following options for transmitting a UPC-A preamble to the host device: transmit system character ("0" or "1") only, transmit system character and country code ("0" for USA), or transmit no preamble.

@UPAPRE0

No Preamble

@UPAPRE1

*System Character

@UPAPRE2

System Character & Country Code

4.7. Interleaved 2 of 5

4.7.1. Restore Factory Defaults

@I25DEF

Restore the Factory Defaults of Interleaved 2 of 5

4.7.2. Enable/Disable Interleaved 2 of 5

@I25ENA1

*Enable Interleaved 2 of 5

@I25ENA0

Disable Interleaved 2 of 5

NOTE: If the engine fails to identify Interleaved 2 of 5 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Interleaved 2 of 5** setting barcode.

4.7.3. Set Length Range for Interleaved 2 of 5

The engine can be configured to only decode Interleaved 2 of 5 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 6)

Set the Maximum Length (Default: 80)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Interleaved 2 of 5 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Interleaved 2 of 5 barcodes with that length will be decoded.

Set the engine to decode Code 128 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** setting barcode.
3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Set the Maximum Length** setting barcode.
6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.
7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
8. Scan the **Exit Setup** barcode.

4.7.4. Check Character Verification

A check character is optional for Interleaved 2 of 5 and can be added as the last character. It is a calculated value used to verify the integrity of the data.

Disable: The engine transmits Interleaved 2 of 5 barcodes as is.

Do Not Transmit Check Character After Verification: The engine checks the integrity of all Interleaved 2 of 5 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The engine checks the integrity of all Interleaved 2 of 5 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted. Since Interleaved 2 of 5 must always have an even number of digits, a zero may need to be added as the first digit when the check character is added. The check character is automatically generated when making Interleaved 2 of 5 barcodes.

@I25CHK0

*Disable

@I25CHK1

Do Not Transmit Check Character After Verification

@I25CHK2

Transmit Check Character After Verification

NOTE: If the **Do Not Transmit Check Character After Verification** option is enabled, Interleaved 2 of 5 barcodes with a length that is less than the configured minimum length after having the check character excluded will not be decoded. (For example, when the **Do Not Transmit Check Character After Verification** option is enabled and the minimum length is set to 4, Interleaved 2 of 5 barcodes with a total length of 4 characters including the check character cannot be read.)

4.7.5. Febraban

@I25FBB0

*Disable Febraban

@I25FBB1

Enable Febraban, Do Not Expand

@I25FBB2

Enable Febraban, Expand

4.8. ITF-14

ITF-14 is a special kind of Interleaved 2 of 5 with a length of 14 characters and the last character as the check character.

ITF-14 priority principle: For the Interleaved 2 of 5 barcodes with a length of 14 characters and the last character as the check character, the ITF-14 configurations shall take precedence over the Interleaved 2 of 5 settings.

4.8.1. Restore Factory Defaults

Restore the Factory Defaults of ITF-14

4.8.2. Enable/Disable ITF-14

*Disable ITF-14

Enable ITF-14 But Do Not Transmit Check Character

Enable ITF-14 and Transmit Check Character

NOTE: An example of the ITF-14 priority principle: when ITF-14 is enabled and Interleaved 2 of 5 is disabled, the engine only decodes Interleaved 2 of 5 barcodes with a length of 14 characters and the last character as the check character.

4.9. ITF-6

ITF-6 is a special kind of Interleaved 2 of 5 with a length of 6 characters and the last character as the check character.

ITF-6 priority principle: For the Interleaved 2 of 5 barcodes with a length of 6 characters and the last character as the check character, the ITF-6 configurations shall take precedence over the Interleaved 2 of 5 settings.

4.9.1. Restore Factory Defaults

@IT6DEF

Restore the Factory Defaults of ITF-6

4.9.2. Enable/Disable ITF-6

@IT6ENA0

*Disable ITF-6

@IT6ENA1

Enable ITF-6 But Do Not Transmit Check Character

@IT6ENA2

Enable ITF-6 and Transmit Check Character

NOTE: An example of the ITF-6 priority principle: when ITF-6 is enabled and Interleaved 2 of 5 is disabled, the engine only decodes Interleaved 2 of 5 barcodes with a length of 6 characters and the last character as the check character.

4.10. Matrix 2 of 5

4.10.1. Restore Factory Defaults

Restore the Factory Defaults of Matrix 2 of 5

4.10.2. Enable/Disable Matrix 2 of 5

*Enable Matrix 2 of 5

Disable Matrix 2 of 5

NOTE: If the engine fails to identify Matrix 2 of 5 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Matrix 2 of 5** setting barcode.

4.10.3. Set Length Range for Matrix 2 of 5

The engine can be configured to only decode Matrix 2 of 5 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 4)

Set the Maximum Length (Default: 8)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Matrix 2 of 5 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Matrix 2 of 5 barcodes with that length will be decoded.

Set the engine to decode Matrix 2 of 5 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set the Minimum Length** setting barcode.

3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Set the Maximum Length** setting barcode.

6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.

7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

8. Scan the **Exit Setup** barcode.

4.10.4. Check Character Verification

A check character is optional for Matrix 2 of 5 and can be added as the last character. It is a calculated value used to verify the integrity of the data.

Disable: The engine transmits Matrix 2 of 5 barcodes as is.

Do Not Transmit Check Character After Verification: The engine checks the integrity of all Matrix 2 of 5 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The engine checks the integrity of all Matrix 2 of 5 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.

Since Matrix 2 of 5 must always have an even number of digits, a zero may need to be added as the first digit when the check character is added. The check character is automatically generated when making Matrix 2 of 5 barcodes.

@M25CHK0

*Disable

@M25CHK1

Do Not Transmit Check Character After Verification

@M25CHK2

Transmit Check Character After Verification

NOTE: If the **Do Not Transmit Check Character After Verification** option is enabled, Matrix 2 of 5 barcodes with a length that is less than the configured minimum length after having the check character excluded will not be decoded. (For example, when the **Do Not Transmit Check Character After Verification** option is enabled and the minimum length is set to 4, Matrix 2 of 5 barcodes with a total length of 4 characters including the check character cannot be read.)

4.11. Code 39

4.11.1. Restore Factory Defaults

Restore the Factory Defaults of Code 39

4.11.2. Enable/Disable Code 39

*Enable Code 39

Disable Code 39

NOTE: If the engine fails to identify Code 39 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Code 39** setting barcode.

4.11.3. Set Length Range for Code 39

The engine can be configured to only decode Code 39 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 1)

Set the Maximum Length (Default: 48)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Code 39 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 39 barcodes with that length will be decoded.

To set the engine to decode Code 39 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set the Minimum Length** setting barcode.

3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Set the Maximum Length** setting barcode.

6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.

7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

8. Scan the **Exit Setup** barcode.

4.11.4. Check Character Verification

A check character is optional for Code 39 and can be added as the last character. It is a calculated value used to verify the integrity of the data.

Disable: The engine transmits Code 39 barcodes as is.

Do Not Transmit Check Character After Verification: The engine checks the integrity of all Code 39 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The engine checks the integrity of all Code 39 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.

@C39CHK0

*Disable

@C39CHK1

Do Not Transmit Check Character After Verification

@C39CHK2

Transmit Check Character After Verification

NOTE: If the **Do Not Transmit Check Character After Verification** option is enabled, Code 39 barcodes with a length that is less than the configured minimum length after having the check character excluded will not be decoded. (For example, when the **Do Not Transmit Check Character After Verification** option is enabled and the minimum length is set to 4, Code 39 barcodes with a total length of 4 characters including the check character cannot be read.)

4.11.5. Transmit Start/Stop Character

Code 39 uses an asterisk (*) for both the start and the stop characters. You can choose whether or not to transmit the start/stop characters by scanning the appropriate setting barcode below.

*Do Not Transmit Start/Stop Character

Transmit Start/Stop Character

4.11.6. Enable/Disable Code 39 Full ASCII

The engine can be configured to identify all ASCII characters by scanning the appropriate setting barcode below.

*Disable Code 39 Full ASCII

Enable Code 39 Full ASCII

4.11.7. Code 32 Pharmaceutical (PARAF)

Code 32 is a variant of Code 39 used by the Italian pharmaceutical industry.

4.11.7.1. Enable/Disable Code 32 (Italian Pharma Code)

Scan the appropriate barcode below to enable or disable Code 32. Code 39 must be enabled and Code 39 check character verification must be disabled for this parameter to function.

@C39E320

*Disable Code 32

@C39E321

Enable Code 32

4.11.7.2. Code 32 Prefix

Scan the appropriate setting barcode below to enable or disable adding the prefix character "A" to all Code 32 barcodes. Code 32 must be enabled for this parameter to function.

@C39S320

*Disable Code 32 Prefix

@C39S321

Enable Code 32 Prefix

4.11.7.3. Transmit Code 32 Start/Stop Character

Code 32 must be enabled for this parameter to function.

@C39T320

*Do Not Transmit Code 32 Start/Stop Character

@C39T321

Transmit Code 32 Start/Stop Character

4.11.7.4. Transmit Code 32 Check Character

Code 32 must be enabled for this parameter to function.

@C39C320

*Do Not Transmit Code 32 Check Character

@C39C321

Transmit Code 32 Check Character

4.12. Codabar

4.12.1. Restore Factory Defaults

Restore the Factory Defaults of Codabar

4.12.2. Enable/Disable Codabar

*Enable Codabar

Disable Codabar

NOTE: If the engine fails to identify Codabar barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Codabar** setting barcode.

4.12.3. Set Length Range for Codabar

The engine can be configured to only decode Codabar barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 2)

Set the Maximum Length (Default: 60)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Codabar barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Codabar barcodes with that length will be decoded.

To set the engine to decode Code 39 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set the Minimum Length** setting barcode.

3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Set the Maximum Length** setting barcode.

6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.

7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

8. Scan the **Exit Setup** barcode.

4.12.4. Check Character Verification

A check character is optional for Codabar and can be added as the last character. It is a calculated value used to verify the integrity of the data.

Disable: The engine transmits Codabar barcodes as is.

Do Not Transmit Check Character After Verification: The engine checks the integrity of all Codabar barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The engine checks the integrity of all Codabar barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.

@CBACHK0
*Disable

@CBACHK1
Do Not Transmit Check Character After Verification

@CBACHK2
Transmit Check Character After Verification

NOTE: If the **Do Not Transmit Check Character After Verification** option is enabled, Codabar barcodes with a length that is less than the configured minimum length after having the check character excluded will not be decoded. (For example, when the **Do Not Transmit Check Character After Verification** option is enabled and the minimum length is set to 4, Codabar barcodes with a total length of 4 characters including the check character cannot be read.)

4.12.5. Start/Stop Character

You can set the start/stop characters and choose whether or not to transmit the start/stop characters by scanning the appropriate setting barcode below.

@CBATSC0

*Do Not Transmit Start/Stop Character

@CBATSC1

Transmit Start/Stop Character

4.12.6. Format of Start/Stop Character

@CBASCF0

*ABCD/ABCD as the Start/Stop Character

@CBASCF1

ABCD/TN*E as the Start/Stop Character

@CBASCF2

abcd/abcd as the Start/Stop Character

@CBASCF3

abcd/tn*e as the Start/Stop Character

4.13. Code 93

4.13.1. Restore Factory Defaults

![barcode @C93DEF]

Restore the Factory Defaults of Code 93

4.13.2. Enable/Disable Code 93

![barcode @C93ENA1]

Enable Code 93

![barcode @C93ENA0]

*Disable Code 93

NOTE: If the engine fails to identify Code 93 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Code 93** setting barcode.

4.13.3. Set Length Range for Code 93

The engine can be configured to only decode Code 93 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

![barcode @C93MIN]

Set the Minimum Length (Default: 1)

![barcode @C93MAX]

Set the Maximum Length (Default: 48)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Code 93 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 93 barcodes with that length will be decoded.

Set the engine to decode Code 93 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set the Minimum Length** setting barcode.

3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Set the Maximum Length** setting barcode.

6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.

7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

8. Scan the **Exit Setup** barcode.

4.13.4. Check Character Verification

Check characters are optional for Code 93 and can be added as the last two characters, which are calculated values used to verify the integrity of the data.

Disable: The engine transmits Code 93 barcodes as is.

Do Not Transmit Check Character After Verification: The engine checks the integrity of all Code 93 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the checks will be transmitted except the last two digits, whereas those failing them will not be transmitted.

Transmit Check Character After Verification: The engine checks the integrity of all Code 93 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the checks will be transmitted, whereas those failing them will not be transmitted.

@C93CHK0

Disable

@C93CHK1

***Do Not Transmit Check Character After Verification**

@C93CHK2

Transmit Check Character After Verification

NOTE: If the **Do Not Transmit Check Character After Verification** option is enabled, Code 93 barcodes with a length that is less than the configured minimum length after having the two check characters excluded will not be decoded. (For example, when the **Do Not Transmit Check Character After Verification** option is enabled and the minimum length is set to 4, Code 93 barcodes with a total length of 4 characters including the two check characters cannot be read.)

4.14. GS1-128 (UCC/EAN-128)

4.14.1. Restore Factory Defaults

Restore the Factory Defaults of GS1-128

4.14.2. Enable/Disable GS1-128

*Enable GS1-128

Disable GS1-128

NOTE: If the engine fails to identify GS1-128 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable GS1-128** setting barcode.

4.14.3. Set Length Range for GS1-128

The engine can be configured to only decode GS1-128 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

@GS1MIN

Set the Minimum Length (Default: 1)

@GS1MAX

Set the Maximum Length (Default: 48)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes GS1-128 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only GS1- 128 barcodes with that length will be decoded.

Set the engine to decode GS1-128 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** setting barcode.
3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Set the Maximum Length** setting barcode.
6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.
7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
8. Scan the **Exit Setup** barcode.

4.14.4. Transmit Check Character

Transmit GS1-128 Check Character

*Do Not Transmit GS1-128 Check Character

4.14.5. FNC1 Output

Off

*On

4.15. Code 11

4.15.1. Restore Factory Defaults

@C11DEF

Restore the Factory Defaults of Code 11

4.15.2. Enable/Disable Code 11

@C11ENA1

Enable Code 11

@C11ENA0

*Disable Code 11

NOTE: If the engine fails to identify Code 11 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Code 11** setting barcode.

4.15.3. Set Length Range for Code 11

The engine can be configured to only decode Code 11 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 4)

Set the Maximum Length (Default: 48)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Code 11 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Code 11 barcodes with that length will be decoded.

Set the engine to decode GS1-128 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** setting barcode.
3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Set the Maximum Length** setting barcode.
6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.
7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
8. Scan the **Exit Setup** barcode.

4.15.4. Check Character Verification

Check characters are optional for Code 11 and can be added as the last one or two characters, which are calculated values used to verify the integrity of the data.

If the **Disable** option is enabled, the engine transmits Code 11 barcodes as is.

@C11CHK0
*Disable

@C11CHK1
One Check Character, MOD11

@C11CHK2
Two Check Characters, MOD11/MOD11

@C11CHK3
Two Check Characters, MOD11/MOD9

@C11CHK4
One Check Character, MOD11 (Len<=10)
Two Check Characters, MOD11/MOD11(Len>10)

@C11CHK5
One Check Character, MOD11 (Len<=10)
Two Check Characters, MOD11/MOD9 (Len>10)

4.15.5. Transmit Check Character

Do Not Transmit Code 11 Check Character

*Transmit Code 11 Check Character

NOTE: If you select a check character algorithm and the **Do Not Transmit Check Character** option, Code 11 barcodes with a length that is less than the configured minimum length after having the check character(s) excluded will not be decoded. (For example, when the **One Check Character, MOD11** and **Do Not Transmit Check Character** options are enabled and the minimum length is set to 4, Code 11 barcodes with a total length of 4 characters including the check character cannot be read.)

4.16. ISBN

4.16.1. Restore Factory Defaults

@ISBDEF

Restore the Factory Defaults of ISBN

4.16.2. Enable/Disable ISBN

@ISBENA1

Enable ISBN

@ISBENA0

*Disable ISBN

NOTE: If the engine fails to identify ISBN barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable ISBN** setting barcode.

4.16.3. Set ISBN Format

@ISBT101

*ISBN-10

@ISBT100

ISBN-13

4.16.4. 2-Digit Add-On Code

A barcode can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is a barcode while the part surrounded by a smaller red dotted line is a two-digit add-on code.

@ISBAD20

*Disable 2-Digit Add-On Code

@ISBAD21

Enable 2-Digit Add-On Code

NOTE:

Disable 2-Digit Add-On Code: The engine decodes ISBN and ignores the add-on code when presented with an ISBN plus 2-digit add-on barcode. It can also decode ISBN barcodes without 2-digit add-on codes.

Enable 2-Digit Add-On Code: The engine decodes a mix of ISBN barcodes with and without 2-digit add-on codes.

4.16.5. 5-Digit Add-On Code

A barcode can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is a barcode while the part surrounded by a smaller red dotted line is a five-digit add-on code.

@ISBAD50

*Disable 5-Digit Add-On Code

@ISBAD51

Enable 5-Digit Add-On Code

NOTE:

Disable 5-Digit Add-On Code: The engine decodes ISBN and ignores the add-on code when presented with an ISBN plus 5-digit add-on barcode. It can also decode ISBN barcodes without 5-digit add-on codes.

Enable 5-Digit Add-On Code: The engine decodes a mix of ISBN barcodes with and without 5-digit add-on codes.

4.16.6. Add-On Code Required

When **ISBN Add-On Code Required** is selected, the engine will only read ISBN barcodes that contain add-on codes.

@ISBREQ0

*ISBN Add-On Code Not Required

@ISBREQ1

ISBN Add-On Code Required

4.17. ISSN

4.17.1. Restore Factory Defaults

@ISSDEF

Restore the Factory Defaults of ISSN

4.17.2. Enable/Disable ISSN

@ISSENA1

Enable ISSN

@ISSENA0

*Disable ISSN

NOTE: If the engine fails to identify ISSN barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then **Enable ISSN** barcode.

4.17.3. 2-Digit Add-On Code

A barcode can be augmented with a two-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is a barcode while the part surrounded by a smaller red dotted line is a two-digit add-on code.

@ISSAD20

*Disable 2-Digit Add-On Code

@ISSAD21

Enable 2-Digit Add-On Code

NOTE:

Disable 2-Digit Add-On Code: The engine decodes ISSN and ignores the add-on code when presented with an ISSN plus 2-digit add-on barcode. It can also decode ISSN barcodes without 2-digit add-on codes.

Enable 2-Digit Add-On Code: The engine decodes a mix of ISSN barcodes with and without 2-digit add-on codes.

4.17.4. 5-Digit Add-On Code

A barcode can be augmented with a five-digit add-on code to form a new one. In the example below, the part surrounded by a wider blue dotted line is a barcode while the part surrounded by a smaller red dotted line is a five-digit add-on code.

*Disable 5-Digit Add-On Code

Enable 5-Digit Add-On Code

NOTE:

Disable 5-Digit Add-On Code: The engine decodes ISSN and ignores the add-on code when presented with an ISSN plus 5-digit add-on barcode. It can also decode ISSN barcodes without 5-digit add-on codes.

Enable 5-Digit Add-On Code: The engine decodes a mix of ISSN barcodes with and without 5-digit add-on codes.

4.17.5. Add-On Code Required

When **ISSN Add-On Code Required** is selected, the engine will only read ISSN barcodes that contain add-on codes.

@ISSREQ0

*ISSN Add-On Code Not Required

@ISSREQ1

ISSN Add-On Code Required

4.18. Industrial 25

4.18.1. Restore Factory Defaults

Restore the Factory Defaults of Industrial 25

4.18.2. Enable/Disable Industrial 25

Enable Industrial 25

*Disable Industrial 25

NOTE: If the engine fails to identify Industrial 25 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Industrial 25** setting barcode.

4.18.3. Set Length Range for Industrial 25

The engine can be configured to only decode Industrial 25 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

@L25MIN

Set the Minimum Length (Default: 6)

@L25MAX

Set the Maximum Length (Default: 48)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Industrial 25 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Industrial 25 barcodes with that length will be decoded.

Set the engine to decode Industrial 25 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** setting barcode.
3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Set the Maximum Length** setting barcode.
6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.
7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
8. Scan the **Exit Setup** barcode.

4.18.4. Check Character Verification

A check character is optional for Industrial 25 and can be added as the last character. It is a calculated value used to verify the integrity of the data.

Disable: The engine transmits Industrial 25 barcodes as is.

Do Not Transmit Check Character After Verification: The engine checks the integrity of all Industrial 25 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

Transmit Check Character After Verification: The engine checks the integrity of all Industrial 25 barcodes to verify that the data complies with the check character algorithm. Barcodes passing the check will be transmitted, whereas those failing it will not be transmitted.

@L25CHK0

***Disable**

@L25CHK1

Do Not Transmit Check Character After Verification

@L25CHK2

Transmit Check Character After Verification

NOTE: If the **Do Not Transmit Check Character After Verification** option is enabled, Industrial 25 barcodes with a length that is less than the configured minimum length after having the check character excluded will not be decoded. (For example, when the **Do Not Transmit Check Character After Verification** option is enabled and the minimum length is set to 4, Industrial 25 barcodes with a total length of 4 characters including the check character cannot be read.)

4.19. Plessey

4.19.1. Restore Factory Defaults

Restore the Factory Defaults of Plessey

4.19.2. Enable/Disable Plessey

Enable Plessey

*Disable Plessey

NOTE: If the engine fails to identify Plessey barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Plessey** setting barcode*.*

4.19.3. Set Length Range for Plessey

The engine can be configured to only decode Plessey barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 4)

Set the Maximum Length (Default: 48)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes Plessey barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only Plessey barcodes with that length will be decoded.

Set the engine to decode Plessey barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set the Minimum Length** setting barcode.

3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Set the Maximum Length** setting barcode.

6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.

7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

8. Scan the **Exit Setup** barcode.

4.19.4. Check Character Verification

Check characters are optional for Plessey and can be added as the last two characters, which are calculated values used to verify the integrity of the data.

Disable: The engine transmits Plessey barcodes as is.

Do Not Transmit Check Character After Verification: The engine checks the integrity of all Plessey barcodes to verify that the data complies with the check character algorithm. Barcodes passing the checks will be transmitted except the last two digits, whereas those failing them will not be transmitted.

Transmit Check Character After Verification: The engine checks the integrity of all Plessey barcodes to verify that the data complies with the check character algorithm. Barcodes passing the checks will be transmitted, whereas those failing them will not be transmitted.

@PLYCHK0

*Disable

@PLYCHK1

Do Not Transmit Check Character After Verification

@PLYCHK2

Transmit Check Character After Verification

NOTE: If the **Do Not Transmit Check Character After Verification** option is enabled, Plessey barcodes with a length that is less than the configured minimum length after having the check characters excluded will not be decoded. (For example, when the **Do Not Transmit Check Character After Verification** option is enabled and the minimum length is set to 4, Plessey barcodes with a total length of 4 characters including the check characters cannot be read.)

4.20. MSI-Plessey

4.20.1. Restore Factory Defaults

Restore the Factory Defaults of MSI-Plessey

4.20.2. Enable/Disable MSI-Plessey

Enable MSI-Plessey

*Disable MSI-Plessey

NOTE: If the engine fails to identify MSI-Plessey barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable MSI-Plessey** setting barcode.

4.20.3. Set Length Range for MSI-Plessey

The engine can be configured to only decode MSI-Plessey barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 4)

Set the Maximum Length (Default: 48)

NOTE: If minimum length is set to be greater than maximum length, the engine only decodes MSI-Plessey barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only MSI-Plessey barcodes with that length will be decoded.

Set the engine to decode MSI-Plessey barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set the Minimum Length** setting barcode.

3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Set the Maximum Length** setting barcode.

6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.

7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

8. Scan the **Exit Setup** barcode.

4.20.4. Check Character Verification

Check characters are optional for MSI-Plessey and can be added as the last one or two characters, which are calculated values used to verify the integrity of the data.

If the **Disable** option is enabled, the engine transmits MSI-Plessey barcodes as is.

@MSICHK0
Disable

@MSICHK1
*One Check Character, MOD10

@MSICHK2
One Check Character, MOD10

@MSICHK3
Two Check Characters, MOD10/MOD11

4.20.5. Transmit Check Character

*Transmit MSI-Plessey Check Character

Do Not Transmit MSI-Plessey Check Character

NOTE: If you select a check character algorithm and the **Do Not Transmit Check Character** option, MSI-Plessey barcodes with a length that is less than the configured minimum length after having the check character(s) excluded will not be decoded. (For example, when the **One Check Character, MOD10** and **Do Not Transmit Check Character** options are enabled and the minimum length is set to 4, MSI-Plessey barcodes with a total length of 4 characters including the check character cannot be read.)

4.21. PDF417

4.21.1. Restore Factory Defaults

Restore the Factory Defaults of PDF417

4.21.2. Enable/Disable PDF417

*Enable PDF417

Disable PDF417

NOTE: If the engine fails to identify PDF417 barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable PDF417** setting barcode.

4.21.3. Set Length Range for PDF417

The engine can be configured to only decode PDF417 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 1)

Set the Maximum Length (Default: 6144)

NOTE: Minimum length is not allowed to be greater than maximum length. If you only want to read PDF417 barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the engine to decode PDF417 barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** setting barcode.
3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Set the Maximum Length** setting barcode.
6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.
7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
8. Scan the **Exit Setup** barcode.

4.21.4. PDF417 Twin Code

PDF417 twin code is 2 PDF417 barcodes paralleled vertically or horizontally. They must both be either regular or inverse barcodes. They must have similar specifications and be placed closely together.

There are 3 options for reading PDF417 twin codes:

Single PDF417 Only: Read either PDF417 code.

Twin PDF417 Only: Read both PDF417 codes.

Both Single & Twin: Read both PDF417 codes. If successful, transmit as twin PDF417 only. Otherwise, try single PDF417 only.

@PDFDOU0

*Single PDF417 Only

@PDFDOU1

Twin PDF417 Only

@PDFDOU2

Both Single & Twin

4.21.5. Character Encoding

@PDFENC0

*Default Character Encoding

@PDFENC1

UTF-8

4.21.6. PDF417 ECI Output

Disable PDF417 ECI Output

*Enable PDF417 ECI Output

4.22. QR Code

4.22.1. Restore Factory Defaults

Restore the Factory Defaults of QR Code

4.22.2. Enable/Disable QR Code

*Enable QR Code

Disable QR Code

NOTE: If the engine fails to identify QR Code barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable QR Code** setting barcode.

4.22.3. Set Length Range for QR Code

The engine can be configured to only decode QR Code barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 1)

Set the Maximum Length (Default: 6144)

NOTE: Minimum length is not allowed to be greater than maximum length. If you only want to read QR Code barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the engine to QR Code barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** setting barcode.
3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Set the Maximum Length** setting barcode.
6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.
7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
8. Scan the **Exit Setup** barcode.

4.22.4. QR Twin Code

QR twin code is 2 QR barcodes paralleled vertically or horizontally. They must both be either regular or inverse barcodes. They must have similar specifications and be placed closely together.

There are 3 options for reading QR twin codes:

Single QR Only: Read either QR code.

Twin QR Only: Read both QR codes. Transmission sequence: left (upper) QR code followed by right (lower) QR code.

Both Single & Twin: Read both QR codes. If successful, transmit as twin QR only. Otherwise, try single QR only.

@QRCDOU0

*Single QR Only

@QRCDOU1

Twin QR Only

@QRCDOU2

Both Single & Twin

4.22.5. Character Encoding

@QRCENC0

*Default Character Encoding

@QRCENC1

UTF-8

4.22.6. QR ECI Output

Disable QR ECI Output

*Enable QR ECI Output

4.23. Micro QR Code

4.23.1. Restore Factory Defaults

Restore the Factory Defaults of Micro QR

4.23.2. Enable/Disable Micro QR

Enable Micro QR

*Disable Micro QR

NOTE: If the engine fails to identify Micro QR barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Micro QR** setting barcode.

4.23.3. Set Length Range for Micro QR

The engine can be configured to only decode Micro QR barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 1)

Set the Maximum Length (Default: 6144)

NOTE: Minimum length is not allowed to be greater than maximum length. If you only want to read Micro QR barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the engine to Micro QR Code barcodes containing between 8 and 12 characters:
1. Scan the **Enter Setup** barcode.
2. Scan the **Set the Minimum Length** setting barcode.
3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Set the Maximum Length** setting barcode.
6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.
7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
8. Scan the **Exit Setup** barcode.

4.24. Data Matrix

4.24.1. Restore Factory Defaults

Restore the Factory Defaults of Data Matrix

4.24.2. Enable/Disable Data Matrix

*Enable Data Matrix

Disable Data Matrix

NOTE: If the engine fails to identify Data Matrix barcodes, you may first try this solution by scanning the **Enter Setup** barcode and then the **Enable Data Matrix** setting barcode.

4.24.3. Set Length Range for Data Matrix

The engine can be configured to only decode Data Matrix barcodes with lengths that fall between (inclusive) the minimum and maximum lengths. To accomplish this, you need to set the minimum and maximum lengths.

Set the Minimum Length (Default: 1)

Set the Maximum Length (Default: 6144)

NOTE: Minimum length is not allowed to be greater than maximum length. If you only want to read Data Matrix barcodes with a specific length, set both minimum and maximum lengths to be that desired length.

Set the engine to decode Data Matrix barcodes containing between 8 and 12 characters:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set the Minimum Length** setting barcode.

3. Scan the numeric barcode "8" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Set the Maximum Length** setting barcode.

6. Scan the numeric barcodes "1" and "2" from the "Digit Barcodes" section in Appendix.

7. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

8. Scan the **Exit Setup** barcode.

4.24.4. Data Matrix Twin Code

Data Matrix twin code is 2 Data Matrix barcodes paralleled vertically or horizontally. They must both be either regular or inverse barcodes. They must have similar specifications and be placed close together.

There are 3 options for reading Data Matrix twin codes:

Single Data Matrix Only: Read either Data Matrix code.

Twin Data Matrix Only: Read both Data Matrix codes. Transmission sequence: left (upper) Data Matrix code followed by right (lower) Data Matrix code.

Both Single & Twin: Read both Data Matrix codes. If successful, transmit as twin Data Matrix only. Otherwise, try single Data Matrix only.

*Single Data Matrix Only

Twin Data Matrix Only

Both Single & Twin

4.24.5. Rectangular Barcode

Data Matrix has two formats:

Square barcodes having the same amount of modules in length and width: 10*10,12*12.... 144*144.

Rectangular barcodes having different amounts of modules in length and width: 6*16,6*14...14*22.

*Enable Rectangular Barcode

Disable Rectangular Barcode

4.24.6. Character Encoding

@DMCENC0

*Default Character Encoding

@DMCENC1

UTF-8

4.24.7. Data Matrix ECI Output

@DMCECI0

Disable Data Matrix ECI Output

@DMCECI1

*Enable Data Matrix ECI Output

5. Prefix & Suffix

5.1. Global Settings

5.1.1. Enable/Disable All Prefixes/Suffixes

Disable All Prefixes/Suffixes: Transmit barcode data with no prefix/suffix.

Enable All Prefixes/Suffixes: Allow to append Code ID prefix, AIM ID prefix, custom prefix/suffix and terminating character to the barcode data before the transmission.

Disable All Prefixes/Suffixes

Enable All Prefixes/Suffixes

5.2. Prefix Sequence

Code ID+ Custom +AIM ID

Custom + Code ID + AIM ID

5.3. Custom Prefix

If custom prefix is enabled, you can append the data to a user-defined prefix that cannot exceed 10 characters. For example, if the custom prefix is "AB" and the barcode data is "123", the Host will receive "AB123".

Disable Custom Prefix

Enable Custom Prefix

5.3.1. Set Custom Prefix

To set a custom prefix, scan the **Set Custom Prefix** setting barcode, then the numeric barcodes corresponding to the hexadecimal value of the desired prefix, then the **Save** barcode. **Note:** A custom prefix cannot exceed 10 characters. The character value ranges from 0x00 to 0xFF.

Set Custom Prefix

Set the custom prefix to "CODE" (HEX: 0x43/0x4F/0x44/0x45):

1. Scan the **Enter Setup** barcode.
2. Scan the **Set Custom Prefix** setting barcode.
3. Scan the numeric barcodes "4", "3", "4", "F", "4", "4", "4" and "5" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Enable Custom Prefix** setting barcode.
6. Scan the **Exit Setup** barcode.

5.4. AIM ID Prefix

AIM (Automatic Identification Manufacturers) ID defines symbology identifier (For the details, see the "AIM ID Table" section in Appendix). If AIM ID prefix is enabled, the engine will add the symbology identifier before the scanned data after decoding.

@AIDENA0

Disable AIM ID Prefix

@AIDENA1

Enable AIM ID Prefix

Note: AIM ID is not user programmable.

5.5. Code ID Prefix

Code ID can also be used to identify barcode type. Unlike AIM ID, Code ID is user programmable. Code ID can only consist of one or two English letters.

@CIDENA0

Disable Code ID Prefix

@CIDENA1

Enable Code ID Prefix

5.5.1. Restore All Default Code IDs

For the information of default Code IDs, see the "Code ID Table" section in the Appendix.

@CIDDEF

Restore All Default Code IDs

5.5.2. Modify Code ID

See the examples below to learn how to modify a Code ID and restore the default Code IDs of all symbologies.

Modify PDF417 Code ID to be "p" (HEX: 0x70):

1. Scan the **Enter Setup** barcode.
2. Scan the **Modify PDF417 Code ID** setting barcode.
3. Scan the numeric barcodes "7" and "0" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.
5. Scan the **Exit Setup** barcode.

Restore the default Code IDs of all symbologies:

1. Scan the **Enter Setup** barcode.
2. Scan the **Restore All Default Code IDs** setting barcode.
3. Scan the **Exit Setup** barcode.

5.5.2.1. 1D symbologies:

Code 128

GS1-128(UCC/EAN-128)

EAN-8

EAN-13

UPC-E

@CID007

UPC-A

@CID008

Interleaved 2 of 5

@CID009

ITF-14

@CID010

ITF-6

@CID011

Matrix 2 of 5

@CID013

Code 39

@CID015

Codabar

@CID017

Code 93

@CID023

ISSN

||||||| @CID024

ISBN

||||||| @CID025

Industrial 25

||||||| @CID027

Plessey

||||||| @CID028

Code 11

||||||| @CID029

MSI Plessy

5.5.2.2. 2D symbologies:

||||||| @CID032

PDF 417

||||||| @CID033

QR

||||||| @CID043

Micro QR

||||||| @CID035

Data Matrix

5.6. Custom Suffix

If custom suffix is enabled, you can append the data to a user-defined suffix that cannot exceed 10 characters. For example, if the custom suffix is "AB" and the barcode data is "123", the Host will receive "123AB".

Disable Custom Suffix

Enable Custom Suffix

5.6.1. Set Custom Suffix

To set a custom suffix, scan the **Set Custom Suffix** setting barcode, then the numeric barcodes corresponding to the hexadecimal value of a desired suffix, then the **Save** barcode.

Note: A custom suffix cannot exceed 10 characters.

Set Custom Suffix

Set the custom suffix to "CODE" (HEX: 0x43/0x4F/0x44/0x45):

1. Scan the **Enter Setup** barcode.
2. Scan the **Set Custom Suffix** setting barcode.
3. Scan the numeric barcodes "4", "3", "4", "F", "4", "4", "4" and "5" from the "Digit Barcodes" section in Appendix.
4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in the Appendix.
5. Scan the **Enable Custom Suffix** setting barcode.
6. Scan the **Exit Setup** barcode.

5.7. Terminating Character Suffix

A terminating character such as carriage return (CR) or carriage return/line feed pair (CRLF) can only be used to mark the end of data, which means nothing can be added after it.

Disable Terminating Character Suffix

Enable Terminating Character Suffix

5.7.1. Set Terminating Character Suffix

To set a terminating character suffix, scan the **Set Terminating Character Suffix** setting barcode, then the numeric barcodes corresponding to the hexadecimal value of a desired terminating character, then the **Save** barcode.

Note: A terminating character suffix cannot exceed 2 characters.

Set Terminating Character Suffix

Set Terminating Character to CR (0x0D)

Set Terminating Character to CRLF (0x0D,0x0A)

Set the terminating character suffix to 0x0A:

1. Scan the **Enter Setup** barcode.

2. Scan the **Set Terminating Character Suffix** setting barcode.

3. Scan the numeric barcodes "0" and "A" from the "Digit Barcodes" section in Appendix.

4. Scan the **Save** barcode from the "Save/Cancel Barcodes" section in Appendix.

5. Scan the **Enable Terminating Character Suffix** setting barcode.

6. Scan the **Exit Setup** barcode.

6. Appendix

6.1. Digit Barcodes

0~9

@DIGIT0

0

@DIGIT1

1

@DIGIT2

2

@DIGIT3

3

@DIGIT4

4

@DIGIT5

5

@DIGIT6

6

||||| ||||| ||||| |||||
@DIGIT7

7

||||| ||||| ||||| |||||
@DIGIT8

8

||||| ||||| ||||| |||||
@DIGIT9

9

A~F

||||| ||||| ||||| |||||
@DIGITA

A

||||| ||||| ||||| |||||
@DIGITB

B

||||| ||||| ||||| |||||
@DIGITC

C

||||| ||||| ||||| |||||
@DIGITD

D

||||| ||||| ||||| |||||
@DIGITE

E

||||| ||||| ||||| |||||
@DIGITF
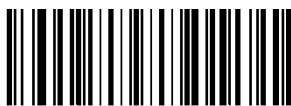
F

6.2. Save/Cancel Barcodes

After reading numeric barcode(s), you need to scan the **Save** barcode to save the data. If you scan the wrong digit(s), you can either scan the **Cancel** barcode and then start the configuration all over again, or scan **the Delete the Last Digit** barcode and then the correct digit, or scan the **Delete All Digits** barcode and then the digits you want.

For instance, after reading the **Maximum Length** barcode and numeric barcodes "1", "2" and "3", you scan:

Delete the Last Digit: The last digit "3" will be removed.

Delete All Digits: All digits "123" will be removed.

Cancel: The maximum length configuration will be cancelled. And the engine is still in setup mode.

@DIGSAV
Save

@DIGCAN
Cancel

@DIGDEL
Delete the Last Digit

@DIGDAL
Delete All Digits

6.3. AIM ID Table

Symbology	AIM ID	Possible AIM ID Modifiers (m)
Code 128	]C0	
GS1-128 (UCC/EAN-128)	]C1	
EAN-8	]E4	
EAN-13	]E0	
EAN-13 with Addon	]E3	
UPC-E	]E0	
UPC-E with Addon	]E3	
UPC-A	]E0	
UPC-A with Addon	]E3	
Interleaved 2 of 5	]Im	0，1，3
ITF-14	]Im	1，3
ITF-6	]Im	1，3
Matrix 2 of 5	]X0	
Code 39	]Am	0，1，3，4，5，7
Codabar	]Fm	0，2，4
Code 93	]G0	
ISSN	]X0	
ISBN	]X0，]E0，]E3	
Industrial 25	]S0	
Plessey	]P0	
Code 11	]Hm	0，1，3
MSI Plessey	]Mm	0，1
PDF417	]Lm	0-5
QR Code	]Qm	0-6
Data Matrix	]dm	0-6
Micro QR	]Qm	0-6

6.4. Code ID Table

Symbology	Code ID
Code128	j
GS1-128 (UCC/EAN-128)	j
EAN-8	d
EAN-13	d
UPC-E	c
UPC-A	c
Interleaved 2 of 5,	e
ITF-14	e
ITF-6	e
Matrix 2 of 5	v
Code 39	b
Codabar	a
Code 93	i
ISSN	g
ISBN	B
Industrial 25	l
Plessey	n
Code 11	H
MSI Plessey	m
PDF417	r
QR Code	s
Data Matrix	u
Micro QR	X

6.5. Symbology ID Number

Symbology	ID Number
Code 128	002
GS1-128 (UCC/EAN-128)	003
EAN-8	004
EAN-13	005
UPC-E	006
UPC-A	007
Interleaved 2 of 5	008
ITF-14	009
ITF-6	010
Matrix 2 of 5	011
Code 39, Code 32	013
Codabar	015
Code 93	017
ISSN	023
ISBN	024
Industrial 25	025
Plessey	027
Code11	028
MSI-Plessey	029
PDF417	032
QR Code	033
Data Matrix	035
Micro QR	043

6.6. ASCII Table

Hex	Dec	Char
00	0	NUL (Null char.)
01	1	SOH (Start of Header)
02	2	STX (Start of Text)
03	3	ETX (End of Text)
04	4	EOT (End of Transmission)
05	5	ENQ (Enquiry)
06	6	ACK (Acknowledgment)
07	7	BEL (Bell)
08	8	BS (Backspace)
09	9	HT (Horizontal Tab)
0a	10	LF (Line Feed)
0b	11	VT (Vertical Tab)
0c	12	FF (Form Feed)
0d	13	CR (Carriage Return)
0e	14	SO (Shift Out)
0f	15	SI (Shift In)
10	16	DLE (Data Link Escape)
11	17	DC1 (XON) (Device Control 1)
12	18	DC2 (Device Control 2)
13	19	DC3 (XOFF) (Device Control 3)
14	20	DC4 (Device Control 4)
15	21	NAK (Negative Acknowledgment)
16	22	SYN (Synchronous Idle)
17	23	ETB (End of Trans. Block)
18	24	CAN (Cancel)
19	25	EM (End of Medium)
1a	26	SUB (Substitute)
1b	27	ESC (Escape)
1c	28	FS (File Separator)
1d	29	GS (Group Separator)
1e	30	RS (Request to Send)
1f	31	US (Unit Separator)
20	32	SP (Space)
21	33	! (Exclamation Mark)
22	34	" (Double Quote)
23	35	# (Number Sign)
24	36	$ (Dollar Sign)
25	37	% (Percent)

26	38	& (Ampersand)
27	39	` (Single Quote)
28	40	((Left/ Opening Parenthesis)
29	41	) (Right/ Closing Parenthesis)
2a	42	* (Asterisk)
2b	43	+ (Plus)
2c	44	, (Comma)
2d	45	- (Minus/ Dash)
2e	46	. (Dot)
2f	47	/ (Forward Slash)
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3a	58	: (Colon)
3b	59	; (Semi-colon)
3c	60	< (Less Than)
3d	61	= (Equal Sign)
3e	62	> (Greater Than)
3f	63	? (Question Mark)
40	64	@ (AT Symbol)
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4a	74	J
4b	75	K
4c	76	L
4d	77	M
4e	78	N

4f	79	O
50	80	P
51	81	Q
52	82	R
53	83	S
54	84	T
55	85	U
56	86	V
57	87	W
58	88	X
59	89	Y
5a	90	Z
5b	91	[(Left/ Opening Bracket)
5c	92	\ (Back Slash)
5d	93	] (Right/ Closing Bracket)
5e	94	^ (Caret/ Circumflex)
5f	95	_ (Underscore)
60	96	' (Grave Accent)
61	97	a
62	98	b
63	99	c
64	100	d
65	101	e
66	102	f
67	103	g
68	104	h
69	105	i
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	{ (Left/ Opening Brace)
7c	124	| (Vertical Bar)
7d	125	} (Right/ Closing Brace)
7e	126	~ (Tilde)
7f	127	DEL (Delete)