7A Series Scanner

User Guide

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## Chapter 1 Getting Started

Introduction

The 7A Series Scanner, armed with the patented computerized image recognition system, bring about a new era of 1D barcode scanning.

The 7A Series Scanner's 1D barcode decoder chip ingeniously blends technology and advanced chip design & manufacturing, which significantly simplifies application design and delivers superior performance and solid reliability with low power consumption.

The 7A Series Scanner supports EAN-13, EAN-8, UPC-A, UPC-E, ISSN, ISBN, Codabar, Code 128, Code 93,ITF-6, ITF-14, Interleaved 2 of 5, Industrial 2 of 5, Matrix 2 of 5, GS1 Databar, Code 39, Code 11, MSI-Plessey, Plessey.

W010F00

Exit Setup

About This Guide

This guide provides programming instructions for the 7A Series Scanner. Users can configure the scanner by scanning the programming barcodes included in this manual.

The 7A Series Scanner has been properly configured for most applications and can be put into use without further configuration.

Barcode Scanning

Powered by imaging technology and patented technology, the 7A Series Scanner features fast scanning and accurate decoding. When scanning a barcode, simply center the aiming beam projected by the scanner over the barcode.
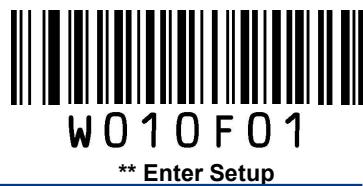
Barcode Programming

The 7A Series Scanner can be configured by scanning programming barcodes. All user programmable features/options are described along with their programming barcodes/commands in the following sections.

W030000 ——— Program
——— Program

** Manual Mode ——— Feature/

Enter/Exit Setup

W010F01

** Enter Setup

W010F00

Exit Setup

Chapter 2 Scan Mode

Manual Mode

Manual Mode (default): A trigger pull activates a decode session. The decode session continues until the barcode is decoded or the trigger is released or the decode session timeout expires.

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** Manual Mode

Decode Session Timeout: This parameter sets the maximum time decode session continues during a scan attempt. It is programmable in 1s increments from 1s to 255s. The default timeout is 15s. If the parameter is set to 0, the decode session timeout is infinite.

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Decode Session Timeout

Example: Set the decode session timeout to 5s

1. Scan the **Enter Setup** barcode.
2. Scan the **Decode Session Timeout** barcode.
3. Scan the numeric barcode "5". (See the **Digit Barcodes** section in Appendix)
4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)
5. Scan the **Exit Setup** barcode.

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Exit Setup

Continuous Mode

Continuous Mode: A trigger press activates the engine to scan and decode at user-specified intervals, i.e. the timeout between decodes. Each decode session lasts until barcode is decoded or the decode session timeout expires. To suspend/resume the operation, simply press the trigger.

Continuous Mode

Decode Session Timeout: This parameter sets the maximum time decode session continues during a scan attempt. It is programmable in 1s increments from 1s to 255s. The default timeout is 15s. If the parameter is set to 0, the decode session timeout is infinite.

Decode Session Timeout

Example: Set the decode session timeout to 5s

1. Scan the **Enter Setup** barcode.
2. Scan the **Decode Session Timeout** barcode.
3. Scan the numeric barcode "5". (See the **Digit Barcodes** section in Appendix)
4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)
5. Scan the **Exit Setup** barcode.

Timeout between Decodes:This parameter sets the timeout between decode sessions. When a decode session ends, next session will not happen until the timeout between decodes expires. It is programmable in 0.1s increments from 0.0s to 25.5s. The default timeout is 1.0s.

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Timeout between Decodes

Example: Set the timeout between decodes to 5s

1. Scan the **Enter Setup** barcode.
2. Scan the **Timeout between Decodes** barcode.
3. Scan the numeric barcodes "5" and "0". (See the **Digit Barcodes** section in Appendix)
4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)
5. Scan the **Exit Setup** barcode.

Timeout between Decodes (Same Barcode) can avoid undesired rereading of same barcode in a given period of time. This parameter sets the timeout between decodes for same barcode. It is programmable in 0.1s increments from 0.1s to 25.5s. The default timeout is 3.0s. If the parameter is set to 0, the timeout between decodes (same barcode) is infinite.

Note: This parameter is only valid when the **Disallow Rereading Same Barcode** is enabled.

M00031E

Timeout between Decodes (Same Barcode)

Allow Rereading Same Barcode: The engine is allowed to re-read same barcode, ignoring the timeout between decodes (same barcode).

Disallow Rereading Same Barcode: The engine is not allowed to re-read same barcode before the timeout between decodes (same barcode) expires.

W100A00

Allow Rereading Same Barcode

W100A10

** **Disallow Rereading Same Barcode**

Example: Set the timeout between decodes (same barcode) to 5s
1. Scan the **Enter Setup** barcode.
2. Scan the **Timeout between Decodes (Same Barcode)** barcode.
3. Scan the numeric barcodes "5" and "0". (See the **Digit Barcodes** section in Appendix)
4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)
5. Scan the **Exit Setup** barcode.

W010F00

Exit Setup

Sense Mode

Sense Mode: The engine activates a decode session every time when it detects a change in ambient illumination and meets the requirement of the image stabilization timeout. Decode session continues until barcode is decoded or the decode session timeout expires.

Sense Mode

Decode Session Timeout: This parameter sets the maximum time decode session continues during a scan attempt. It is programmable in 1s increments from 1s to 255s. The default timeout is 15s. If the parameter is set to 0, the decode session timeout is infinite.

Decode Session Timeout

Example: Set the decode session timeout to 5s

1. Scan the **Enter Setup** barcode.
2. Scan the **Decode Session Timeout** barcode.
3. Scan the numeric barcode "5". (See the **Digit Barcodes** section in Appendix)
4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)
5. Scan the **Exit Setup** barcode.

Image Stabilization Timeout: The engine waits for the image stabilization timeout to expire before activating a decode session every time it detects a change in ambient illumination. This parameter is programmable in 0.1s increments from 0.0s to 25.5s.

Image Stabilization Timeout

Example: Set the Image Stabilization Timeout to 5s

1. Scan the **Enter Setup** barcode.
2. Scan the **Image Stabilization Timeout** barcode.
3. Scan the numeric barcodes "5" and "0". (See the **Digit Barcodes** section in Appendix)
4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)
5. Scan the **Exit Setup** barcode.

Timeout between Decodes (Same Barcode) can avoid undesired rereading of same barcode in a given period of time. This parameter sets the timeout between decodes for same barcode. It is programmable in 0.1s increments from 0.1s to 25.5s. The default timeout is 3.0s. If the parameter is set to 0, the timeout between decodes (same barcode) is infinite.

Note: This parameter is only valid when the **Disallow Rereading Same Barcode** is enabled.

M00031E

Timeout between Decodes (Same Barcode)

Allow Rereading Same Barcode: The engine is allowed to re-read same barcode, ignoring the timeout between decodes (same barcode).

Disallow Rereading Same Barcode: The engine is not allowed to re-read same barcode before the timeout between decodes (same barcode) expires.

W100A00

Allow Rereading Same Barcode

W100A10

** Disallow Rereading Same Barcode

Example: Set the timeout between decodes (same barcode) to 5s
1. Scan the **Enter Setup** barcode.
2. Scan the **Timeout between Decodes (Same Barcode)** barcode.
3. Scan the numeric barcodes "5" and "0". (See the **Digit Barcodes** section in Appendix)
4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)
5. Scan the **Exit Setup** barcode.

Sensitivity: This parameter specifies the degree of acuteness of the engine's response to changes in ambient illumination. The higher the sensitivity, the lower requirement in illumination change to trigger the engine. You can select an appropriate degree of sensitivity that fits the ambient environment.

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High Sensitivity

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** Medium Sensitivity

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** Medium Sensitivity

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Custom Sensitivity

Sensitivity levels range from 0 to 255. The smaller the number, the higher the sensitivity.

Example: Set the sensitivity level to 10

1. Scan the **Enter Setup** barcode.
2. Scan the **Custom Sensitivity** barcode.
3. Scan the numeric barcodes "1" and "0". (See the **Digit Barcodes** section in Appendix)
4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)
5. Scan the **Exit Setup** barcode.

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W010F01
** Enter Setup

Good Read Beep

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W041204
** Good Read Beep On
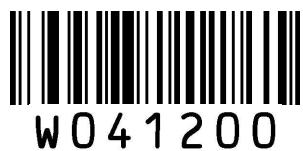
||| ||||| ||| ||||| |||||
W041200
Good Read Beep Off

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WFF10DA
Low Frequency

||| ||||| ||| ||||| |||||
WFF104B
** Medium Frequency

||||| |||| ||| ||||| |||||
WFF1025
High Frequency

||| ||||| ||| ||||| |||||
WFF111F
Beep Duration: 40ms

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WFF113E
** Beep Duration: 80ms
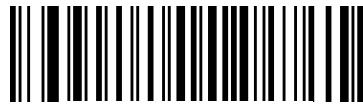
||| ||||| ||| ||||| |||||
WFF115D
Beep Duration: 120ms
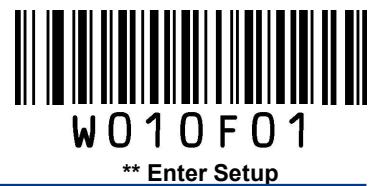
||||| |||| ||| ||||| |||||
W010F00
Exit Setup

Decode Result Notification

When enabled, if a barcode does not decode, "F" is transmitted; if a barcode is decoded, "S" is appended to the barcode data as the most left character.

Enable Decode Result Notification

** Disable Decode Result Notification

Other Settings

You can change the following parameter settings temporarily and the changes will be lost when you power down or reboot the engine.

Silent Mode

Silent Mode On

** Silent Mode Off

Note: This feature is only applicable to decode beep and will be automatically disabled when the engine is powered down or rebooted.

Illumination

WOC0000

Off

Always On

** On When Scanning
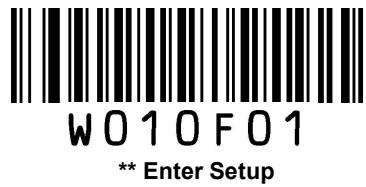
Chapter 4 Symbologies

Introduction

Every symbology (barcode type) has its own unique attributes. This chapter provides programming barcodes for configuring the engine so that it can identify various barcode symbologies. It is recommended to disable those that are rarely used in order to increase the efficiency of the engine.

Global Settings

Enable/Disable All Symbologies

If all symbologies are disabled, the engine can only identify programming barcodes.

Enable All Symbologies

Disable All Symbologies

Code 128

Restore Factory Defaults

Restore the Factory Defaults of Code 128

Enable/Disable Code 128

** Enable Code 128

Disable Code 128

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.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length

Set the Maximum Length

Example: Set the engine to decode Code128 barcodes containing between 8 and 12 characters

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

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

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcodes "1" and "2".

7. Scan the **Save** barcode.

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

W010F00

Exit Setup

UCC/EAN-128

Restore Factory Defaults

Restore the Factory Defaults of UCC/EAN-128

Enable/Disable UCC/EAN-128

** Enable UCC/EAN-128

Disable UCC/EAN-128

Decode as Code 128
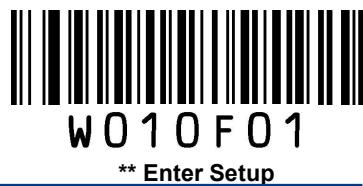
Set Length Range for UCC/EAN-128

The engine can be configured to only decode UCC/EAN-128 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths.

The supported maximum length is 255 characters. If minimum length is set to be greater than maximum length, the engine only decodes UCC/EAN-128 barcodes with either the minimum or maximum length. If minimum length is same as maximum length, only UCC/EAN-128 barcodes with that length are to be decoded.

Set the Minimum Length   **Set the Maximum Length**

Example: Set the engine to decode UCC/EAN-128 barcodes containing between 8 and 12 characters

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

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

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcodes "1" and "2".

7. Scan the **Save** barcode.

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

EAN-8

Restore Factory Defaults

Restore the Factory Defaults of EAN-8

Enable/Disable EAN-8

** Enable EAN-8

Disable EAN-8

Transmit Check Digit

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

** Transmit EAN-8 Check Digit

Do Not Transmit EAN-8 Check Digit
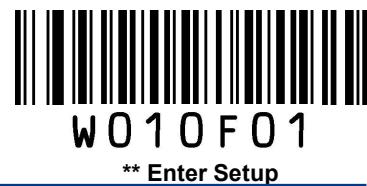
Add-On Code

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

Enable 2-Digit Add-On Code

** Disable 2-Digit Add-On Code

Enable 5-Digit Add-On Code

** Disable 5-Digit Add-On Code

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The engine decodes a mix of EAN-8 barcodes with and without 2-digit/5-digit add-on codes.

Disable 2-Digit Add-On Code/ Disable 5-Digit Add-On Code: The engine decodes EAN-8 and ignores the add-on code when presented with an EAN-8 plus add-on barcode. It can also decode EAN-8 barcodes without add-on codes.

Add-On Code Required

This parameter is only valid when **Enable 2-Digit Add-On Code** and/or **Enable 5-Digit Add-On Code** is selected.

EAN-8 Add-On Code Required

** EAN-8 Add-On Code Not Required

EAN-8 Extension

Disable EAN-8 Zero Extend: Transmit EAN-8 barcodes as is.

Enable EAN-8 Zero Extend: Add five leading zeros to decoded EAN-8 barcodes to extend to13 digits.

Convert EAN-8 to EAN-13: Add five leading zeros to decoded EAN-8 barcodes to make them compatible in format to EAN-13 barcodes.

Enable EAN-8 Zero Extend

** Disable EAN-8 Zero Extend

Convert EAN-8 to EAN-13
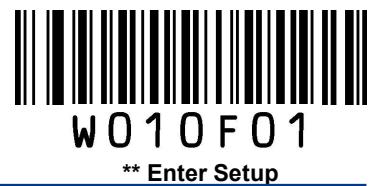
EAN-13

Restore Factory Defaults

Restore the Factory Defaults of EAN-13

Enable/Disable EAN-13

** Enable EAN-13   Disable EAN-13

Transmit Check Digit

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

** Transmit EAN-13 Check Digit   Do Not Transmit EAN-13 Check Digit

Add-On Code

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

Enable 2-Digit Add-On Code

** Disable 2-Digit Add-On Code

Enable 5-Digit Add-On Code

** Disable 5-Digit Add-On Code

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The engine decodes a mix of EAN-13 barcodes with and without 2-digit/5-digit add-on codes.

Disable 2-Digit Add-On Code/ Disable 5-Digit Add-On Code: The engine decodes EAN-13 and ignores the add-on code when presented with an EAN-13 plus add-on barcode. It can also decode EAN-13 barcodes without add-on codes.

Add-On Code Required

This parameter is only valid when **Enable 2-Digit Add-On Code** and/or **Enable 5-Digit Add-On Code** is selected.

EAN-13 Add-On Code Required

** EAN-13 Add-On Code Not Required

ISSN

Restore Factory Defaults

Restore the Factory Defaults of ISSN

Enable/Disable ISSN

Enable ISSN

** Disable ISSN

Decode as EAN-13

ISBN

Restore Factory Defaults

Restore the Factory Defaults of ISBN

Enable/Disable ISBN

Enable ISBN

** Disable ISBN

Decode as EAN-13

Set ISBN Format

** ISBN-13

ISBN-10
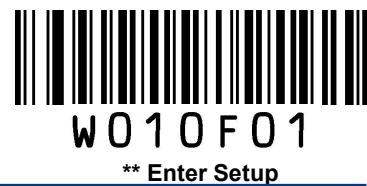
UPC-E

Restore Factory Defaults

Restore the Factory Defaults of UPC-E

Enable/Disable UPC-E

** Enable UPC-E

Disable UPC-E

Transmit Check Digit

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

** Transmit UPC-E Check Digit

Do Not Transmit UPC-E Check Digit

Add-On Code

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

Enable 2-Digit Add-On Code	**** Disable 2-Digit Add-On Code**

Enable 5-Digit Add-On Code	**** Disable 5-Digit Add-On Code**

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The engine decodes a mix of UPC-E barcodes with and without 2-digit/5-digit add-on codes.

Disable 2-Digit Add-On Code/ Disable 5-Digit Add-On Code: The engine decodes UPC-E and ignores the add-on code when presented with a UPC-E plus add-on barcode. It can also decode UPC-E barcodes without add-on codes.
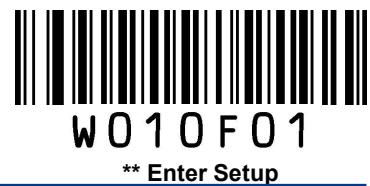
Add-On Code Required

This parameter is only valid when **Enable 2-Digit Add-On Code** and/or **Enable 5-Digit Add-On Code** is selected.

UPC-E Add-On Code Required

** UPC-E Add-On Code Not Required

Transmit System Character

The first character of UPC-E barcode is the system character.

** Do Not Transmit System Character

Transmit System Character

W010F00

Exit Setup

UPC-E Extension

Disable UPC-E Extend: Transmit UPC-E barcodes as is.

Enable UPC-E Extend: Extend UPC-E barcodes to make them compatible in length to UPC-A.

Convert UPC-E to UPC-A: Extend UPC-E barcodes to make them compatible in format to UPC-A.

Enable UPC-E Extend

**Disable UPC-E Extend

Convert UPC-E to UPC-A

UPC-A

Restore Factory Defaults

Restore the Factory Defaults of UPC-A

Enable/Disable UPC-A

** Enable UPC-A

Disable UPC-A

Decode as EAN-13

Transmit Check Digit

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

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

Transmit Preamble Character

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 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   **** System Character**

System Character & Country Code
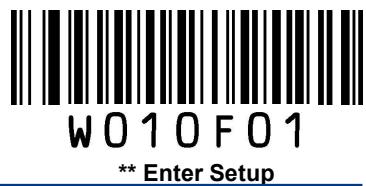
Add-On Code

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

Enable 2-Digit Add-On Code

**** Disable 2-Digit Add-On Code**

Enable 5-Digit Add-On Code

**** Disable 5-Digit Add-On Code**

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The engine decodes a mix of UPC-A barcodes with and without 2-digit/5-digit add-on codes.

Disable 2-Digit Add-On Code/ Disable 5-Digit Add-On Code: The engine decodes UPC-A and ignores the add-on code when presented with a UPC-A plus add-on barcode. It can also decode UPC-A barcodes without add-on codes.

Add-On Code Required

This parameter is only valid when **Enable 2-Digit Add-On Code** and/or **Enable 5-Digit Add-On Code** is selected.

UPC-A Add-On Code Required

** UPC-A Add-On Code Not Required

Interleaved 2 of 5

Restore Factory Defaults

Restore the Factory Defaults of Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5

** Enable Interleaved 2 of 5

Disable Interleaved 2 of 5

Check Digit Verification

A check digit is optional for Interleaved 2 o 5 and can be added as the last digit. 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 Digit After Verification: The engine checks the integrity of all Interleaved 2 of 5 barcodes to verify that the data complies with the check digit algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

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

Disable

** Do Not Transmit Check Digit After Verification

Transmit Check Digit After Verification

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.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length   **Set the Maximum Length**

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

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

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

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcodes "1" and "2".

7. Scan the **Save** barcode.

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

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.

Restore Factory Defaults

Restore the Factory Defaults of ITF-6

Enable/Disable ITF-6

By default, ITF-6 is decoded as Interleaved 2 of 5.

Disable ITF-6

Enable ITF-6 But Do Not Transmit Check Digit

Enable ITF-6 and Transmit Check Digit

Note: It is advised not to enable ITF-6 and Interleaved 2 of 5 at the same time.

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.

Restore Factory Defaults

Restore the Factory Defaults of ITF-14

Enable/Disable ITF-14

By default, ITF-14 is decoded as Interleaved 2 of 5.

Disable ITF-14

Enable ITF-14 But Do Not Transmit Check Digit

Enable ITF-14 and Transmit Check Digit

Note: It is advised not to enable ITF-14 and Interleaved 2 of 5 at the same time.

Matrix 2 of 5 (European Matrix 2 of 5)

Restore Factory Defaults

Restore the Factory Defaults of Matrix 2 of 5

Enable/Disable Matrix 2 of 5

** Enable Matrix 2 of 5

Disable Matrix 2 of 5
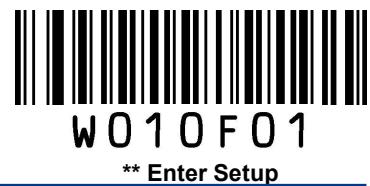
Check Digit Verification

A check digit is optional for Matrix 2 of 5 and can be added as the last digit. 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 Digit After Verification: The engine checks the integrity of all Matrix 2 of 5 barcodes to verify that the data complies with the check digit algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

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

** Disable

Do Not Transmit Check Digit After Verification

Transmit Check Digit After Verification

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.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length   **Set the Maximum Length**

Example: 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** barcode.

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcodes "1" and "2".

7. Scan the **Save** barcode.

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

Industrial 25

Restore Factory Defaults

Restore the Factory Defaults of Industrial 25

Enable/Disable Industrial 25

** Enable Industrial 25

Disable Industrial 25

Check Digit Verification

A check digit is optional for Industrial 25 and can be added as the last digit. 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 Digit After Verification: The engine checks the integrity of all Industrial 25 barcodes to verify that the data complies with the check digit algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

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

** Disable

Do Not Transmit Check Digit After Verification

Transmit Check Digit After Verification

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.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length

Set the Maximum Length

Example: 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** barcode.

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcodes "1" and "2".

7. Scan the **Save** barcode.

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

Code 39

Restore Factory Defaults

Restore the Factory Defaults of Code 39

Enable/Disable Code 39

** Enable Code 39

Disable Code 39
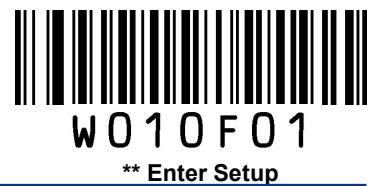
Check Digit Verification

A check digit is optional for Code 39 and can be added as the last digit. 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 Digit After Verification: The engine checks the integrity of all Code 39 barcodes to verify that the data complies with the check digit algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

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

** Disable

Do Not Transmit Check Digit After Verification

Transmit Check Digit After Verification

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 barcode below.

** Transmit Start/Stop Character

Do Not Transmit Start/Stop Character

Enable/Disable Code 39 Full ASCII

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

** Enable Code 39 Full ASCII

Disable Code 39 Full ASCII
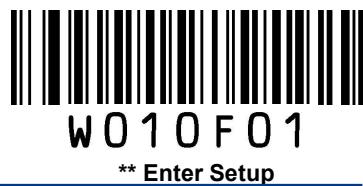
Set Length Range for Code 39

The engine can be configured to only decode Code 39 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length

Set the Maximum Length

Example: 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** barcode.

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcode "1".

7. Scan the numeric barcode "2".

8. Scan the **Save** barcode.

9. Scan the **Exit Setup** barcode.

Codabar

Restore Factory Defaults

Restore the Factory Defaults of Codabar

Enable/Disable Codabar

** Enable Codabar

Disable Codabar
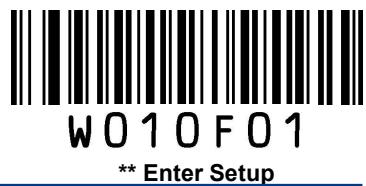
Check Digit Verification

A check digit is optional for Codabar and can be added as the last digit. 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 Digit After Verification: The engine checks the integrity of all Codabar barcodes to verify that the data complies with the check digit algorithm. Barcodes passing the check will be transmitted except the last digit, whereas those failing it will not be transmitted.

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

** Disable

Do Not Transmit Check Digit After Verification

Transmit Check Digit After Verification

Start/Stop Character

** Transmit Start/Stop Character

Do Not Transmit Start/Stop Character

** ABCD/ABCD as the Start/Stop Character

ABCD/TN*E as the Start/Stop Character

abcd/abcd as the Start/Stop Character

abcd/tn*e as the Start/Stop Character
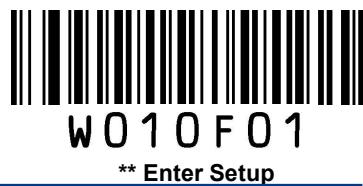
Set Length Range for Codabar

The engine can be configured to only decode Codabar barcodes with lengths that fall between (inclusive) the minimum and maximum lengths.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length   **Set the Maximum Length**

Example: Set the engine to decode Codabar barcodes containing between 8 and 12 characters.

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

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

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcode "1".

7. Scan the numeric barcode "2".

8. Scan the **Save** barcode.

9. Scan the **Exit Setup** barcode.

Code 93

Restore Factory Defaults

Restore the Factory Defaults of Code 93

Enable/Disable Code 93

** Enable Code 93

Disable Code 93
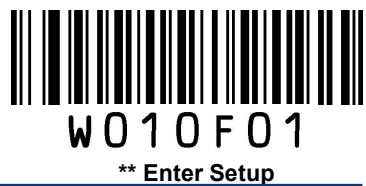
Check Digit Verification

Check digits are optional for Code 93 and can be added as the last two digits, 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 Digit After Verification: The engine checks the integrity of all Code 93 barcodes to verify that the data complies with the check digit algorithm. Barcodes passing the checks will be transmitted except the last two digits, whereas those failing them will not be transmitted.

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

Disable

** Do Not Transmit Check Digit After Verification

Transmit Check Digit After Verification

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.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length   **Set the Maximum Length**

Example: 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** barcode.

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcode "1".

7. Scan the numeric barcode "2".

8. Scan the **Save** barcode.

9. Scan the **Exit Setup** barcode.

Code 11

Restore Factory Defaults

Restore the Factory Defaults of Code 11

Enable/Disable Code 11

Enable Code 11

**** Disable Code 11**

Check Digit Verification

Check digits are optional for Code 11 and can be added as the last one or two digits, 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.

Disable

** One Check Digit, MOD11

Two Check Digits, MOD11/MOD11

Two Check Digits, MOD11/MOD9

One Check Digit, MOD11 (Len <= 10)
Two Check Digits, MOD11/MOD11 (Len > 10)

One Check Digit, MOD11 (Len <= 10)
Two Check Digits, MOD11/MOD9 (Len > 10)

Transmit Check Digit

** Do Not Transmit Check Digit
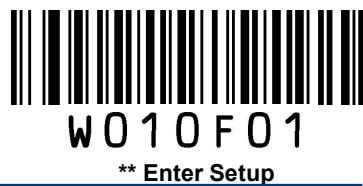
Set Length Range for Code 11

The engine can be configured to only decode Code 11 barcodes with lengths that fall between (inclusive) the minimum and maximum lengths.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length

Set the Maximum Length

Example: Set the engine to decode Code 11 barcodes containing between 8 and 12 characters.

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

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

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcode "1".

7. Scan the numeric barcode "2".

8. Scan the **Save** barcode.

9. Scan the **Exit Setup** barcode.

Plessey

Restore Factory Defaults

Restore the Factory Defaults of Plessey

Enable/Disable Plessey

Enable Plessey

**** Disable Plessey**
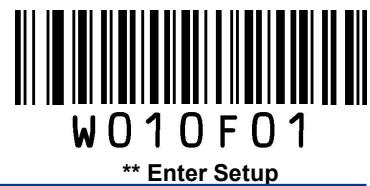
Check Digit Verification

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

Disable: The engine transmits Plessey barcodes as is.

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

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

Disable

**** Do Not Transmit Check Digit After Verification**

Transmit Check Digit After Verification

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.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length   **Set the Maximum Length**

Example: 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** barcode.

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcode "1".

7. Scan the numeric barcode "2".

8. Scan the **Save** barcode.

9. Scan the **Exit Setup** barcode.
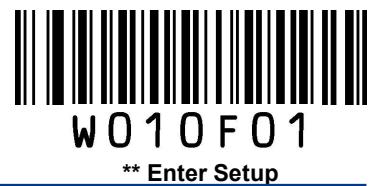
MSI-Plessey

Restore Factory Defaults

Restore the Factory Defaults of MSI-Plessey

Enable/Disable MSI-Plessey

Enable MSI-Plessey

** Disable MSI-Plessey

Check Digit Verification

Check digits are optional for MSI-Plessey and can be added as the last one or two digits, 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.

Disable

** One Check Digit, MOD10

Two Check Digits, MOD10/MOD10

Two Check Digits, MOD10/MOD11

Transmit Check Digit

** Do Not Transmit Check Digit
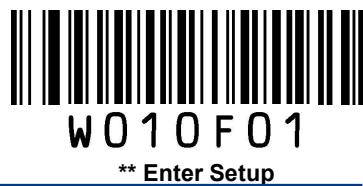
Set Length Range for MSI-Plessey

The engine can be configured to only decode MSI-Plessey barcodes with lengths that fall between (inclusive) the minimum and maximum lengths.

The supported maximum length is 255 characters. 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 are to be decoded.

Set the Minimum Length

Set the Maximum Length

Example: 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** barcode.

3. Scan the numeric barcode "8". (See the **Digit Barcodes** section in Appendix)

4. Scan the **Save** barcode. (See the **Save/Cancel Barcodes** section in Appendix)

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

6. Scan the numeric barcode "1".

7. Scan the numeric barcode "2".

8. Scan the **Save** barcode.

9. Scan the **Exit Setup** barcode.

RSS-14

Restore Factory Defaults

||||| |||| ||| |||| ||| |||||

Restore the Factory Defaults of RSS-14

Enable/Disable RSS-14

||||| |||| ||| |||| ||| |||||

** Enable RSS-14

||||| |||| ||| |||| ||| |||||

Disable RSS-14

Transmit Application Identifier "01"

||||| |||| ||| |||| ||| |||||

W047A04

** Transmit Application Identifier "01"

||||| |||| ||| |||| ||| |||||

W047A00

Do Not Transmit Application Identifier "01"

RSS-Limited

Restore Factory Defaults

Restore the Factory Defaults of RSS-Limited

Enable/Disable RSS-Limited

** Enable RSS-Limited

W017B00

Disable RSS-Limited

Transmit Application Identifier "01"

W047B04

** Transmit Application Identifier "01"

W047B00

Do Not Transmit Application Identifier "01"

W010F00

Exit Setup

RSS-Expand

Restore Factory Defaults

Restore the Factory Defaults of RSS-Expand

Enable/Disable RSS-Expand

** Enable RSS-Expand

Disable RSS-Expand
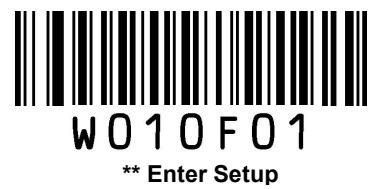
Appendix

Digit Barcodes

0 ~ 5

||||| D000000 |||||
0

||||| D000001 |||||
1

||||| D000002 |||||
2

||||| D000003 |||||
3

||||| D000004 |||||
4

||||| D000005 |||||
5

||||| W010F00 |||||
Exit Setup

6~ 9

||||| ||| |||||||| |||| |||||||| |||||

D000006

6

||||| ||| |||||||| |||| |||||||| |||||

D000007

7

||||| ||| |||||||| |||| |||||||| |||||

D000008

8

||||| ||| |||||||| |||| |||||||| |||||

D000009

9

A ~ F

||||||| D00000A
A

||||||| D00000B
B

||||||| D00000C
C

||||||| D00000D
D

||||||| D00000E
E

||||||| D00000F
F
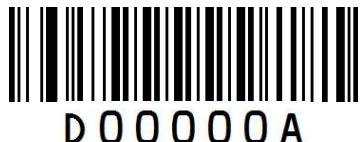
W010F00
Exit Setup

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 the Last Digit** barcode and then the correct digit, or scan the **Cancel All Digits** barcode and then the digits you want.

For instance, after reading the **Decode Session Timeout** barcode and numeric barcodes "1", "2" and "3", you scan:

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

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

||||| D000012 |||||

Save

||||| D000010 |||||

Cancel the Last Digit

||||| D000011 |||||

Cancel All Digits