



**unitech**

Barcode Scanner  
User Manual

**MS836**

V1.0

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### **Copyright**

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### **Responsibility Clause**

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## Chapter 1 System Setting

### Enable/Disable Barcode Programming

Scanning the Enter Setup/Exit Setup barcode can enable barcode programming. After barcode programming is enabled, you can scan a number of programming barcodes to configure your scanner. Barcode programming is on by default. In real application, programming barcodes hardly overlap with on- programming barcodes, so it is unnecessary to disable programming each time you finish the configuration.

### Programming Barcode Data



\*Enter Setup

W010F01



Exit Setup

W010F00



Transmit Programming  
Barcode Data

W060F06



\*Do Not Transmit  
Programming Barcode Data

W060F00

### Factory Defaults

Scanning the following barcode can restore the scanner to the factory defaults.

You may need to reset your scanner when:

1. scanner is not properly configured so that it fails to decode barcodes;
2. you forget previous configuration and want to avoid its impact;
3. functions that are rarely used have been enabled for the time being.



Restore All Factory  
Defaults

WFFD980

## Scan Mode

**Manual Mode:** 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.



\*Manual Mode

W030000

**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

M00031D

**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.

### Continuous Mode

Continuous Mode: A trigger press activates the scanner 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. By default, the scanner rereads same barcode with no delay.



Continuous Mode

W030002

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

M00031D

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.



Timeout between Decodes

M00031C

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.



Reread Delay sets the time period before the scanner can read the same barcode a second time. It protects against accidental rereads of the same barcode. This parameter is programmable in 0.1s increments from 0.1s to 25.5s. The default delay is 3.0s. If the parameter is set to 0, the delay is infinite.

Note: This parameter only applies when the Reread Same Barcode with a Delay is enabled.



Reread Delay

M00031E



\*Reread Same Barcode  
with No Delay

W100A00



Reread Same Barcode  
with a Delay

W100A10

Example: Set the reread delay to 5s

1. Scan the Enter Setup barcode.
2. Scan the Reread Delay 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.

## Sense Mode

**Sense Mode:** The scanner 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. A trigger pull can also activate a decode session. By default, the scanner rereads same barcode with no delay.



Sense Mode

W030003

**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

M00031D

**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 scanner 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. The default timeout is 0.4s.



Image Stabilization  
Timeout

M00031B

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.

Reread Delay sets the time period before the scanner can read the same barcode a second time. It protects against accidental rereads of the same barcode. This parameter is programmable in 0.1s increments from 0.1s to 25.5s. The default delay is 3.0s. If the parameter is set to 0, the delay is infinite.

Note: This parameter only applies when the Reread Same Barcode with a Delay is enabled.



Reread Delay

M00031E

Reread Same Barcode with No Delay: The scanner is allowed to reread same barcode, ignoring the

Reread Same Barcode with a Delay: The scanner is not allowed to reread same barcode before the reread delay expires.

To disable rereads of same barcode, enable the Reread Same Barcode with a Delay and set the delay to 0.



W100A00

\*Reread Same Barcode  
with No Delay



W100A10

Reread Same Barcode  
with a Delay

Example: Set the reread delay to 5s

1. Scan the Enter Setup barcode.
2. Scan the Reread Delay 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 scanner's response to changes in ambient illumination. The higher the sensitivity, the lower requirement in illumination change to trigger the scanner. You can select an appropriate degree of sensitivity that fits the ambient environment.



High Sensitivity



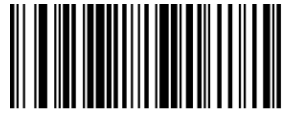
Medium Sensitivity

WFF0310



\* Low Sensitivity

WFF0330



Custom Sensitivity

M00031A

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

## Command Trigger Mode

Command Trigger Mode: Decode session is activated by a host command. The decode session continues until the barcode is decoded or the decode session time out expires.



W030001

Command Trigger 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.



M00031D

Decode Session Timeout

## Security Level

This parameter specifies the number of times to decode a barcode during a scan attempt. The higher the security level, the lower the error rate and decoding efficiency.



W030A00

Set Security Level to 0



W030A01

Set Security Level to 1



W030A02

Set Security Level to 2



W030A03

Set Security Level to 3

## Good Read Beep



W041200

Good Read Beep Off



W041204

\*Good Read Beep On

## Good Read Beep Frequency



WFF10DA

Low



WFF104B

\*Medium

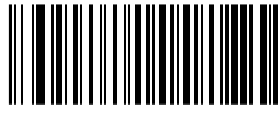


WFF1025

High



### Good Read Beep Duration



WFF111F

40ms



WFF111E

\*80ms



WFF111D

120ms

### Decode Result Notification



W203120

\*Enable Decode Result  
Notification



W203100

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 scanner.



W400000

Silent Mode On



W400040

\*Silent Mode Off

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

### Illumination



W0C0000

Off



W0C0004

On When Scanning



W0C0008

Always On

## Chapter 2 Communication Settings

### Introduction

The scanner provides an RS-232 interface, a USB interface and a PS/2 interface (hardware version: V2 or higher) to communicate with the host device. The host device can receive scanned data and send commands to control the scanner or to access/alter the configuration information of the scanner via the RS-232 or USB or PS/2 interface.

### RS-232 Interface

Serial communication interface is usually used to connect the scanner to a host device (like PC, POS). When the scanner is connected to a host device through its RS-232 interface, you need to set communication parameters to match the host device.

### Baud Rate



\*9600

WFFD9D3



1200

WFFD9D0



2400

WFFD9D1



4800

WFFD9D2



14400

WFFD9D4



19200

WFFD9D5



38400

WFFD9D6



57600

WFFD9D7



115200

WFFD9D8

**Parity Check**



W062900

\*None



W062906

Even Parity



W062904

Odd Parity

**Stop Bit**



W012900

\*Stop Bit



W012901

2 Stop Bits

**Data Bit**



W082908

8 Data Bits



W0F2908

\*8 Data Bits, No Parity,  
1 Stop Bit



W0F290E

8 Data Bits, Even Parity,  
1 Stop Bit



W0F290C

8 Data Bits, Odd Parity,  
1 Stop Bit



W0F2909

8 Data Bits, No Parity,  
2 Stop Bits



W0F290F

8 Data Bits, Even Parity ,  
2 Stop Bits



W0F290D

8 Data Bits, Odd Parity,  
2 Stop Bits



W082900

7 Data Bits



W0F2906

7 Data Bits, Even Parity,  
1 Stop Bit



W0F2904

7 Data Bits, Odd Parity,  
1 Stop Bit



W0F2907

7 Data Bits, Even Parity,  
2 Stop Bits



W0F2905

7 Data Bits, Odd Parity,  
2 Stop Bits

## USB Interface

When the scanner is connected to a host device through its USB interface, USB HID-KBW is enabled by default. User can switch between options – USB DATAPIPE, USB HID-KBW, USB COM Port Emulation and HID-POS, upon actual need.



\*USB HID-KBW

W070901



\*Standard Keyboard

W031A00

## Emulate ALT+Keypad

When Emulate ALT+Keypad is enabled, any ASCII character (0x00 - 0xFF) is sent over the numeric keypad no matter which keyboard type is selected. Since sending a character involves multiple keystroke emulations, this method appears less efficient.

1. ALT Make
2. Enter the number corresponding to the ASCII character on the keypad.
3. ALT Break



Emulate ALT+Keypad

W031A03



### Function Key Mapping

When Function Key Mapping is enabled, function character (0x00 - 0x1F) are sent as ASCII sequences over the numeric keypad.



Function Key Mapping

W031A01

1. CTRL Make
2. Press function key (Refer to the ASCII Function Key Mapping Table on the following page)

### USB Country Keyboard Types

Keyboard layouts vary from country to country. All supported keyboard types are listed below.



\*1 -U.S.

WFF1900



2 -Belgium

WFF1901



3-Brazil

WFF1902



4-Canada

WFF1903



5- Czech

WFF1904



6- Denmark

WFF1905



7- Finland

WFF1906



8- France

WFF1907



WFF1908

9- Austria



WFF1909

10- Greece



WFF190A

11- Hungary



WFF190B

12- Israel



WFF190C

13- Italy



WFF190D

14-Latin America



15-Netherland

WFF190E



16-Norway

WFF190F



17-Poland

WFF1910



18-Portugal

WFF1911



19-Romania

WFF1912



20-ussia

WFF1913



21-Slovakia

WFF1915



22-Spain

WFF1916



23-Sweden

WFF1917



24-Switzerland

WFF1918



25-Turkey1

WFF1919



26-Turkey2

WFF191A



27-UK

WFF191B



28-Japan

WFF191C

### Inter-Keystroke Delay

This parameter specifies the delay between emulated keystrokes.



\*No Delay

WC01A00



Short Delay (5ms)

WC01A40



Medium Delay (10ms)

WC01A80



Long Delay (15ms)

WC01AC0

## Convert Case

This parameter is valid when the Standard Keyboard or Function Key Mapping is enabled.



W381A00

No Case Conversion



W381A20

Convert All to Upper Case



W381A30

Convert All to Lower Case



W381A08

Invert Upper and Lower  
Case Characters

## Emulate Numeric Keypad

When this feature is disabled, sending barcode data is emulated as keystroke(s) on main keyboard. To enable this feature, scan the Emulate Numeric Keypad barcode. Sending a number (0-9) is emulated as keystroke on numeric keypad, whereas sending other character like “+”, “\_”, “\*”, “/” and “.” is still emulated as keystroke on main keyboard. However, this feature is influenced by the state of the Num Lock key on the host: if the Num Lock light on the host is ON, numbers are sent over numeric keypad, if it is OFF, numbers are sent over main keyboard.



Emulate Numeric Keypad

W041A04



\*Do Not Emulate Numeric Keypad

W041A00

Note: Make sure the Num Lock light of the Host is turned ON when using this feature. Emulate ALT+Keypad ON prevails over Emulate Numeric Keypad.



## USB COM Port Emulation

This feature allows the host to receive data in the way as a serial port does. However, you need to set communication parameters on the scanner to match the Host requirements. A driver is required for this feature.



W070902

USB COM Port Emulation

## USB DataPipe

A driver is required when using this protocol to communicate with the scanner .



W070900

USB Data Pipe

## HID-POS

The HID-POS interface is recommended for new application programs. It can send up to 56 characters in a single USB report and appears more efficient than USB HID-KBW.

### Features:

- ☐ HID based, no custom driver required.
- ☐ Way more efficient in communication than USB HID-KBW and traditional RS-232 interface.

Note: HID-POS does not require a custom driver. However, a HID interface on Windows 98 does. All HID interfaces employ standard driver provided by the operating system. Use defaults when installing the driver.



HID-POS

W070903

## PS/2 Interface (Hardware Version: V2 or higher)

When the scanner is connected to a host device through its PS/2 interface, users need to scan the following barcode to enable the PS/2 port.



PS/2-KBW

W100910

To switch from PS/2 to RS-232, scan the barcode below.



RS-232

W100900

## Chapter 3 Data Formatting

### Introduction

After a successful barcode read, a string containing numbers, letters or symbols will be returned.

In real applications, barcode data may be found insufficient for your needs. You may wish to include additional information such as barcode type, data acquisition time or delimiter in data being scanned.

Adding extra information to printed barcodes does not seem like a sensible solution since that will increase the barcode size and make them inflexible. Instead, we come up with the idea of appending prefix and suffix to the data without making any change to barcodes. We will show you how to conduct the configuration in the following sections.

Note: Customized data: <Prefix> <Data><Suffix>  
<Terminating Character>

### Prefix Sequence



W013100

\*Code ID+Custom+AIM ID



W013101

Custom+Code ID+ AIM ID

Prefix



W043104

Enable Custom Prefix



W043100

\*Disable Custom Prefix



W000100

Set Custom Prefix



W186018

Enable AIM ID Prefix



W186000

\*Disable AIM ID Prefix



W023102

Enable CODE ID Prefix



W023100

\*Disable CODE ID Prefix



WFFD9C2

Restore All Default Code IDs

Set Code ID Barcodes



M002000

Set Code 128 Code ID



M002001

Set UCC/EAN-128 Code ID

M002002



Set AIM 128 Code ID



M002004

Set EAN-8 Code ID



M002005

Set EAN-13 Code ID



M002006

Set ISSN Code ID



M002007

Set ISBN Code ID



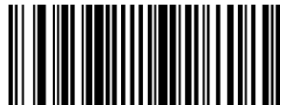
M002008

Set UPC-E Code ID



M002009

Set UPC-A Code ID



M00200A

Set Interleaved 2  
of 5 Code ID



M00200B

Set ITF-6 Code ID



M00200C

Set ITF-14 Code ID



M00200D

Set Deutsche 14 Code ID



M00200E

Set Deutsche 12 Code ID



M00200F

Set Matrix 2 of 5 Code ID





M002010

Set Industrial 25 Code ID



M002011

Set Standard 25 Code ID



M002012

Set Code 39 Code ID



M002013

Set Codabar Code ID



M002014

Set Code 93 Code ID



M002015

Set Code 11 Code ID



M000216

Set Plessey Code ID



M000217

Set MSI-Plessey Code ID



M000218

Set RSS-14 Code ID



M000219

Set RSS-Limited Code ID



M00021A

Set RSS-Expand Code ID

Suffix



W083108

Enable Custom Suffix



W083100

\*Disable Custom Suffix



M000101

Set Custom Suffix



W103110

\*Enable Terminating  
Character Suffix



W103100

Disable Terminating  
Character Suffix



WFFD9C3

Terminating Character 0x0D



WFFD9C4

TerminatingCharacter  
0x0D,0x0A



WFFD9C5

Terminating Character 0x0A



M000102

Set Terminating Character  
Suffix

## Chapter 4 Symbologies

### Introduction

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

### Global Settings



WFFD981

Enable All Symbologies



WFFD982

Disable All Symbologies



WFFD990

Restore the Factory Defaults  
of Code 128



W016101

\*Enable Code 128



W016100

Disable Code 128



WFFD991

Restore the Factory Defaults  
of UCC/EAN-128



W036203

Enable UCC/EAN-128



W036200

Disable UCC/EANI-128



W036201

Decode as Code 128



WFFD992

Restore the Factory Defaults  
of AIM128



W036302

Enable AIM128



W036301

\*Disable AIM128



W036300

Decode as Code 128



WFFD994

Restore the Factory Defaults  
of EAN-8



W016501

\*Enable EAN-8



W016500

Disable EAN-8



WFFD966

Restore the Factory Defaults  
of ISSN



W036702

Enable ISSN



W036700

\*Disable ISSN



W036701

Decode as EAN-13





WFFD997

Restore the Factory Defaults  
of ISBN



W036802

Enable ISBN



W036800

\*Disable ISBN



W036801

Decode as EAN-13



WFFD999

Restore the Factory Defaults  
of UPC-A



W036B02

\*Enable UPC-A



W036B00

Disable UPC-A



W036B01

Decode as EAN-13



WFFD99A

Restore the Factory Defaults  
of Interleaved 2 Of 5



W016C01

\*Enable Interleaved 2 of 5



W016C00

Disable Interleaved 2 of 5



WFFD99B

Restore the Factory Defaults  
of ITF-6



W036D01

Disable ITF-6



W036D02

Enable ITF-6 But Do Not  
Transmit Check Digit



W036D0A

Enable ITF-6 and Transmit  
Check Digit



WFFD99C

Restore the Factory Defaults  
of ITF-14



W036E01

Disable ITF-14



W036E02

Enable ITF-14 But Do Not  
Transmit Check Digit



W036E0A

Enable ITF-14 and Transmit  
Check Digit



WFFD99D

Restore theFactoryDefaults  
of Deutsche 14



W036F01

Disable Deutsche 14



W036F02

Enable Deutsche14 But  
Do Not Transmit Check Digit



W036F0A

Transmit Check Digit

Enable Deutsche 14 and



W036F0A

Transmit Check Digit



WFFD99E

Restore the Factory Defaults  
of Deutsche 12



W037001

Disable Deutsche 12



W0B7002

Enable Deutsche 12 But  
Do Not Transmit Check Digit



W0B700A

Enable Deutsche 12 and  
Transmit Check Digit

WFFD99F



W017101

\*Enable Matrix 2 of 5

Restore the Factory  
Defaults of Matrix 2  
of 5



W017101

\*Enable Matrix 2 of 5



W017100

Disable Matrix 2 of 5



WFFD9A0

Restore the Factory Defaults  
of Industrial 25



W017201

\*Enable Industrial 25



W017200

Disable Industrial 25

WFFD9A1



W017301

\*Enable Standard 25



Restore the Factory  
Defaults of  
Standard 25



W017301

\*Enable Standard 25



W017300

Disable Standard 25



WFFD922

Restore the Factory Defaults  
of Code 39



W017401

\*Enable Code 39



W017400

Disable Code 39



W207402

\*Enable Code 39 Full ASCII



W207400

Disable Code 39 Full ASCII



WFFD9A3

Restore the Factory  
Defaults of Codabar



W017501

\*Enable Codabar



W017500

Disable Codabar



WFFD9A4

Restore the Factory Defaults  
of Code 93



W017601

\*Enable Code 93



W017600

Disable Code 93



WFFD9A5

Restore the Factory Defaults  
of Code 11



W017701

Enable Code 11



W017700

\*Disable Code 11



WFFD9A6

Restore the Factory Defaults  
of Plessey



W017801

Enable Plessey



W017800

\*Disable Plessey



WFFD9A7

Restore the Factory Defaults  
of MSI-Plessey



W017901

Enable MSI-Plessey



W017900

\*Disable MSI-Plessey



WFFD9A8

Restore the Factory Defaults  
of RSS-14



W017A01

\*Enable RSS-14



W017A00

Disable RSS-14



WFFD9A9

Restore the Factory Defaults  
of RSS-Limited



W017B01

\*Enable RSS-Limited



W017B00

Disable RSS-Limited



WFFD9AA

Restore the Factory Defaults  
of RSS Expand



W017C01

\*Enable RSS-Expand



W017C00

Disable RSS-Expand



WC06540

Enable EAN-8 Zero Extend



WC06500

\*Disable EAN-8 Zero Extend



WC06580

Convert EAN-8 to EAN-13



WFFD995

Restore the Factory Defaults  
of EAN-13



W016601

\*Enable EAN-13



W016600

Disable EAN-13



WFFD998

Restore the Factory Defaults  
of UPC-E



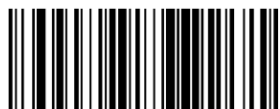
W016901

\*Enable UPC-E



W016900

Disable UPC-E



WC06940

Enable UPC-E Extend



WC06900

\*Disable UPC-E Extend



WC06980

Convert UPC-E to UPC-A





W207420

\*Enable Code 39 Full ASCII



W207400

Disable Code 39 Full ASCII

**Set Length Range**



M000301

Set the Minimum Length  
for Code 128



M000300

Set the Maximum Length  
for Code 128



M000303

Set the Minimum Length  
for UCC/EAN-128



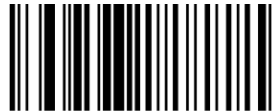
M000302

Set the Maximum Length  
for UCC/EAN-128



M000305

Set the Minimum Length  
for AIM 128



M000304

Set the Maximum Length  
for AIM 128



M000307

Set the Minimum Length for Interleaved 2 of 5



M000306

Set the Maximum Length for Interleaved 2 of 5



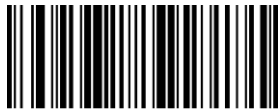
M000309

Set the Minimum Length for Matrix 2 of 5



M000308

Set the Maximum Length for Matrix 2 of 5



M00030B

Set the Minimum Length for Industrial 25

M00030A



Set the Maximum  
Length for  
Industrial 25



M00030D

Set the Minimum Length  
for Industrial 25



M00030C

Set the Maximum Length  
for Industrial 25



M00030F

Set the Minimum Length  
for Code 39



M00030E

Set the Maximum Length  
for Code 39



M000311

Set the Minimum Length  
for Codabar



M000310

Set the Maximum Length  
for Codabar



M000313

Set the Minimum Length  
for Code 93



M000312

Set the Maximum Length  
for Code 93



M000315

Set the Minimum Length  
for Code 11



M000314

Set the Maximum Length  
for Code 11



M000317

Set the Minimum Length  
for Plessey



M000316

Set the Maximum Length  
for Plessey



M000319

Set the Minimum Length  
for MSI-Plessey



M000318

Set the Maximum Length  
for MSI-Plessey

Example: Set the scanner 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.



Transmit Check Digit



W046504

\*Transmit EAN-8 Check Digit



W046500

Do Not Transmit EAN-8  
Check Digit



W046604

\*Transmit EAN-13 Check Digit



W046600

Do Not Transmit EAN-13  
Check Digit



W046904

\*Transmit UPC-E Check Digit



W046900

Do Not Transmit UPC-E  
Check Digit



W086B08

\*Transmit UPC-A Check Digit



W086B00

Do Not Transmit UPC-A  
Check Digit

#### Check Digit Verification

Example: Set the scanner for check digit  
Interleaved 2 of 5.

A check digit is optional for Interleaved 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 scanner transmits Interleaved 2 of 5 barcodes as is.

Do Not Transmit Check Digit After Verification:

The scanner 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 scanner 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.



W0C6C00

Disable



W0C6C04

Do Not Transmit Check Digit  
After Verification



W0C6C0C

Transmit Check Digit  
After 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 scanner transmits Matrix 2 of 5 barcodes as is.

Do Not Transmit Check Digit After Verification:  
The scanner 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 scanner 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.



W0C7100

\*Disable



W0C7104

Do Not Transmit Check Digit  
After Verification



W0C710C

Transmit Check Digit  
After 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 scanner transmits Industrial 25 barcodes as is. Do Not Transmit Check Digit

After Verification: The scanner 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 scanner 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.



W0C7200

\*Disable



W0C7204

Do Not Transmit Check Digit  
After Verification



W0C720C

Transmit Check Digit  
After Verification

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

Disable: The scanner transmits Standard 25 barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner checks the integrity of all Standard 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 scanner checks the integrity of all Standard 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.



W0C7300

\*Disable



W0C7304

Do Not Transmit Check Digit  
After Verification



W0C730C

Transmit Check Digit  
After 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 scanner transmits Code 39 barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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.



W187400

\*Disable



W187408

Do Not Transmit Check Digit  
After Verification



W187418

Transmit Check Digit  
After 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 scanner transmits Codabar barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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.



W607500

\*Disable



W607520

Do Not Transmit Check Digit  
After Verification



W607560

Transmit Check Digit  
After 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 scanner transmits Code 93 barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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.



W0C7600

Disable



W0C7604

\*Do Not Transmit Check Digit  
After Verification



W0C760C

Transmit Check Digit  
After 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 scanner transmits Plesseybarcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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.



W0C7800

Disable



W0C7804

\*Do Not Transmit Check Digit  
After Verification



W0C780C

Transmit Check Digit  
After 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 scanner transmits Code 11 barcodes as is.



W0C7900

Disable



W0C7904

\*One Check Digit, MOD10



W0C7908

Two Check Digits,  
MOD10/MOD10



W0C790C

Two Check Digits,  
MOD10/MOD11



W107910

Transmit Check Digit



W107900

\*Do Not Transmit 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.





W106510

Enable 2-Digit Add-On Code



W106500

\*Disable 2-Digit Add-On Code



W206520

Enable 5-Digit Add-On Code



W206500

\*Disable 5-Digit Add-On Code



W086500

\*EAN-8 Add-On Code  
Not Required



W086508

EAN-8 Add-On Code Required

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner 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 scanner decodes EAN-8 and ignores the add-on code when presented with an EAN-8 plus add-on barcode. It can also decode

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.





W106610

Enable 2-Digit Add-On Code



W106600

\*Disable 2-Digit Add-On Code



W206620

Enable 5-Digit Add-On Code



W206600

\*Disable 5-Digit Add-On Code



W086608

EAN-13 Add-On Code Required



W086600

\*EAN-13 Add-On Code  
Not Required



Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner 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 scanner 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.

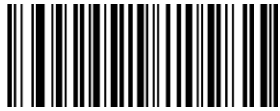
#### Transmit System Character

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



W306A10

Do Not Transmit System Character



W306A20

\*Transmit System Character

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.



W106910

Enable 2-Digit Add-On Code



W106900

\*Disable 2-Digit-Add-On Code



W206920

Enable 5-Digit Add-On Code



W206900

\*Disable 5-Digit Add-On Code



W086908

UPC-E Add-On Code Required



W086900

\*UPC-E Add-On Code  
Not Required

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner 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 scanner 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.

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

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.



W206B20

Enable 2-Digit Add-On Code



W206B00

\*Disable 2 Digit Add-On Code



W206B40

Enable 5-Digit Add-On Code



W206B00

\*Disable 5-Digit Add-On Code



W106B10

UPC-A Add-On Code Required



W106B00

\*UPC-A Add-On Code  
Not Required

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner 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 scanner 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.

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

Transmit Start/Stop Characters



W047404

Transmit Start/Stop Characters  
code39



W047400

\*Do Not Transmit Start/Stop  
Characters code39



W047504

Transmit Start/Stop Characters



W047500

DO Not Transmit Start/Stop  
Characters



W187500

\*ABCD/ABCD as the Start/  
Stop CharacterS

W187508



ABCD/TN\*E as the  
Start/ Stop  
Characters



W187510

abcd/abcd as the Start/  
Stop Characters



W187518

abcd/tn\*e as the Start/  
Stop Characters

#### Set ISBN Format



W086800

\*ISBN-13



W086808

ISBN-10



## 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 countrycode ("0" for USA), or transmit no preamble.



No Preamble

W036A00



\*System Character

W036A01



System Character &  
Country Code

W036A02



W086B08

\*Transmit UPC-A Check Digit



W086B00

Do Not Transmit UPC-A  
Check Digit

### Check Digit Verification

#### Interleaved 2 of 5

A check digit is optional for Interleaved 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 scanner transmits Interleaved 2 of 5 barcodes as is.

Do Not Transmit Check Digit After Verification:

The scanner 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 scanner 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.



W0C6C00

Disable



W0C6C04

Do Not Transmit Check Digit  
After Verification



W0C6C0C

Transmit Check Digit  
After Verification

### Matrix 2 of 5

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 scanner transmits Matrix 2 of 5 barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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.



W0C7100

\*Disable



W0C7104

Do Not Transmit Check Digit  
After Verification



W0C710C

Transmit Check Digit  
After Verification

### Industrial 25

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 scanner transmits Industrial 25 barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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.



W0C7200

\*Disable



W0C7204

Do Not Transmit Check Digit  
After Verification



W0C720C

Transmit Check Digit  
After Verification

### Standard 25

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

Disable: The scanner transmits Standard 25 barcodes as is.

DoNot Transmit Check Digit After Verification: The scanner checks the integrity of all Standard 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 scanner checks the integrity of all Standard 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

W0C7300



Do Not Transmit Check Digit  
After Verification

W0C7304



Transmit Check Digit  
After Verification

W0C730C

### Code 39

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 scanner transmits Code 39 barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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.



W187400

\*Disable



W187408

Do Not Transmit Check Digit  
After Verification



W187418

Transmit Check Digit  
After Verification

### Codabar

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 scanner transmits Codabar barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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

W607500



Do Not Transmit Check Digit  
After Verification

W607520



Transmit Check Digit  
After Verification

W607560

### Code 93

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 scanner transmits Code 93 barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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

W0C7600



\*Do Not Transmit Check Digit  
After Verification

W0C7604



Transmit Check Digit  
After Verification

W0C760C

### Plessey

Check digits are optional for 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 scanner transmits Plessey barcodes as is.

Do Not Transmit Check Digit After Verification: The scanner 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 scanner 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.



W0C7800

Disable



W0C7804

After Verification



W0C780C

Transmit Check Digit  
After Verification

### Code 11

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 scanner transmits Code 11 barcodes as is.



W0C7900

Disable



W0C7904

\*One Check Digit,MOD10



W0C7908

Two Check Digits,  
MOD10/MOD10



W0C790C

Two Check Digits,  
MOD10/MOD



W0C7910

Transmit Check Digit



W0C7900

\*Do Not Transmit 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.



W106510

Enable 2-Digit Add-On Code



W106500

\*Disable 2-Digit Add-On Code



W206520

Enable 5-Digit Add-On Code



W206500

\*Disable 5-Digit Add-On Code



W086508

EAN-8 Add-On Code Required



W086500

\*EAN-8 Add-On Code  
Not Required

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner 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 scanner 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.

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

W106610



\*Disable 2-Digit Add-On Code

W106600



W206620

Enable 5-Digit Add-On Code



W206600

\*Disable 5-Digit Add-On Code



W086608

EAN-13 Add-On Code Required



W086600

\*EAN-13 Add-On Code  
Not Required

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner 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 scanner 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.

## Transmit System Character

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



W306A10

\*Do Not Transmit System Character



W306A20

Transmit System Character

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

W106910



\*Disable 2-Digit Add-On Code

W106910



Enable 5-Digit Add-On Code

W206920



\*Disable 5-Add-On Code

W206900



W086908

UPC-E Add-On Code Required



W086900

\*UPC-E Add-On Code  
Not Required

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner 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 scanner 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.

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

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.



W206B20

Enable 2-Digit Add-On Code



W206B00

\*Disable 2-Digit Add-On Code



W406B40

Enable 5-Digit Add-On Code



W406B00

\*Disable 5-Digit Add-On Code



W106B10

UPC-A Add-On Code Required



W106B00

\*UPC-A Add-On Code  
Not Required

Enable 2-Digit Add-On Code/ Enable 5-Digit Add-On Code: The scanner 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 scanner 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.

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

## TransmitStart/Stop Characters



W407404

Transmit Start/Stop  
Characters Code 39



W407400

\*Do Not Transmit Start/Stop  
Characters Code 39



W407504

\*Transmit Start/Stop Characters



W407500

DoNot Transmit Start/Stop  
Characters



W187500

\*ABCD/ABCD as the Start/  
Stop Characters



W187508

ABCD/TN\*E as the Start/  
Stop Character



W187510

abcd/abcd as the Start/  
Stop Character



W187518

abcd/tn\*e as the Start/  
Stop Character

**Set ISBN Format**



W086800

\*ISBN-13



W086808

ISBN-10

## Transmit Preamble Character

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



No Preamble

W036A00



\*System Character

W036A01



System Character &  
Country Code

W036A02

## Appendix

### Factory Defaults Table

Parameter	Factory	Default	Remark
<b>System Settings</b>			
Barcode Programming		Enabled	
Programming Barcode Data		Do not send	
Scan Mode		Manual Mode	
Manual Mode	Decode Session Timeout	15 s	1 -255s; 0: infinite.
Continuous Mode	Decode Session Timeout	15 s	1 -255s; 0: infinite.
	Timeout between Decodes	1.0s	0.0 -25.5s
	Reread Same Barcode	With no delay	To disable rereads of same barcode, enable the Reread Same Barcode with a Delay and set the delay to 0.
Sense Mode	Decode Session Timeout	15 s	1 -255s; 0: infinite.
	Image Stabilization Timeou	0.4s	0.0 -25.5s
	Reread Same Barcode	With no delay	To disable rereads of same barcode, enable the Reread Same Barcode with a Delay and set the delay to 0.
	Sensitivity	Medium	
Command rigger Mode	Decode Session Timeout	15s	1 -255s; 0: infinite.
Security Level		0	
Good Read Beep		Enabled	
Good Read Beep Frequency		Medium	
Good Read Beep Duration		80ms	
Decode Result Notification		Disabled	
Silent Mode		Disabled	Temporary setting
Illumination		On When Scanning	Temporary setting



Parameter		Factory Default	Remark
<b>Communication Interfaces</b>			
TTL-232 Interface	Baud Rate	9600	
	Parity Check	None	
	Number of Data Bits	8	
	Number of Stop Bits	1	
	Flow Control	None	
USB Interface		USB HID-KBW	Other options:DataPipe,USB COM Port Emulation, HID-POS
USB HID- KBW	Input Mode	Standard Keyboard	
	USB Country Keyboard Type	U.S.	
	Inter-Keystroke Delay	No delay	
	Convert Case	No Conversion	
	Emulate Numeric Keypad	Disabled	
<b>Data Formatting</b>			
Prefix Sequence		Code ID+Custom+AIM ID	
AIM ID Prefix		Disabled	
Code ID Prefix		Disabled	1 or 2 English letters
Custom Prefix		Disabled	1 to 5 characters
Custom Suffix		Disabled	1 to 5 characters
Terminating Character Suffix		Enabled, 0x0D,0x0A	0x0D,0x0A : CRLF
<b>Code 128</b>			
Code 128		Enabled	
Minimum Length		1	No less than 1 (including check digit)
Maximum Length		80	
<b>UCC/EAN-128 ( GS1-128 )</b>			
UCC/EAN-128		Enabled	
Minimum Length		1	No less than 1 (including check digit)
Maximum Length		80	
<b>AIM 128</b>			
AIM 128		Enabled	
Minimum Length		1	No less than 1 (including check digit)
Maximum Length		80	
<b>EAN-8</b>			
EAN-8		Enabled	
2-Digit Add-On Code		Transmit	
5-Digit Add-On Code		Disabled	
Add-On Code		Not required	
Extend to EAN-13		Disabled	

Parameter	Factory Default	Remark
<b>EAN-13</b>		
EAN-13	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Not required	
Add-On Code	Disabled	
<b>ISSN</b>		
ISSN	Disabled	
<b>ISBN</b>		
ISBN	Disabled	
ISBN Format	ISBN-13	
<b>UPC-E</b>		
UPC-E	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code	Not required	
Extend to UPC-A	Disabled	
System Character	Transmit	
<b>UPC-A</b>		
UPC-A	Enabled	
Check Digit	Transmit	
2-Digit Add-On Code	Disabled	
5-Digit Add-On Code	Disabled	
Add-On Code	Not required	
Extend to UPC-A	Disabled	
System Character	Transmit	
<b>Interleaved 2 of 5</b>		
Interleaved 2 of 5	Enabled	
Check Digit Verification	Enabled	
Check Digit	Do not transmit	
Minimum Length	6	No less than 1 (including check digit)
Maximum Length	100	
<b>ITF-6</b>		
ITF-6	Decode as I25	
Check Digit	Transmit	
<b>ITF-14</b>		
ITF-14	Decode as I25	
Check Digit	Transmit	

Parameter	Factory Default	Remark
<b>Deutsche14</b>		
Deutsche14	Decode as I25	
Check Digit	Transmit	
<b>Deutsche12</b>		
Deutsche12	Decode as I25	
Check Digit	Transmit	
<b>Matrix 2 of 5</b>		
Matrix 2 of 5	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Minimum Length	6	No less than 1 (including check digit)
Maximum Length	80	
<b>Industrial 25</b>		
Industrial 25	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Minimum Length	6	No less than 1 (including check digit)
Maximum Length	80	
<b>Standard 25</b>		
Standard 25	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Minimum Length	6	No less than 1 (including check digit)
Maximum Length	80	
<b>Code 39</b>		
Code 39	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Start/Stop Characters	Do not transmit	
Code 39 Full ASCII	Enabled	
Minimum Length	4	No less than 1 (including check digit)
Maximum Length	50	
<b>Codabar</b>		
Codabar	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Start/Stop Character	Transmit	
Start/Stop Character Format	ABCD/ABCD	
Minimum Length	4	No less than 1 (including check digit)
Maximum Length	60	

Parameter	Factory Default	Remark
<b>Code93</b>		
Code 93	Enabled	
Check Digit Verification	Enabled	
Check Digit	Do not transmit	
Minimum Length	2	No less than 1 (including check digit)
Maximum Length	80	
<b>Code11</b>		
Code 11	Disabled	
Check Digit Verification	One check digit,MOD1	
Check Digit	Do not transmit	
Minimum Length	4	No less than 1 (including check digit)
Maximum Length	80	
<b>Plessey</b>		
Plessey	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Minimum Length	4	No less than 1 (including check digit)
Maximum Length	60	
<b>MSI-Plessey</b>		
MSI-Plessey	Enabled	
Check Digit Verification	Disabled	
Check Digit	Do not transmit	
Minimum Length	6	No less than 1 (including check digit)
Maximum Length	80	
<b>RSS-14</b>		
RSS-14	Disabled	
AI (Application Identifier)	One check digit,MOD1	
<b>RSS-Limited</b>		
RSS-Limited	4	No less than 1 (including check digit)
(Application Identifier)	60	
<b>RSS-Expand</b>		
RSS-Expand	Enabled	

## AIM ID Table

Symbology	AIM ID	Remark
Code 128	C0	Standard Code 128
UCC/EAN 128 (GS1-128)	C1	FNC1 is the character right after the start character
AIM 128	C2	FNC1 is the 2nd character after the start character
EAN-8	E4	Standard EAN-8
	E4... E1...	EAN-8+2-Digit Add-On Code
	E4... E2...	EAN-8+5-Digit Add-On Code
EAN-13	E0	Standard EAN-13
	E3	EAN-13+ 2/5-Digit Add-On Code
ISSN	X5	
ISBN	X4	
UPC-E	E0	Standard UPC-E
	E3	UPC-E+ 2/5-Digit Add-On Code
UPC-A	E0	Standard UPC-A
	E3	UPC-A+ 2/5-Digit Add-On Code
Interleaved 2 of 5	I0	No check digit verification
	I1	Transmit check digit after verification
	I3	Do not transmit check digit after verification
ITF-6	I1	Transmit check digit
	I3	Do not transmit check digit
ITF-14	I1	Transmit check digit
	I3	Do not transmit check digit
Deutsche 14 Deutsche 12	X0	
Matrix 2 of 5	X1	No check digit verification
	X2	Transmit check digit after verification
	X3	Do not transmit check digit after verification
Industrial 25	S0	Not specified
Standard 25	R0	No check digit verification
	R8	One check digit, MOD 7; do not transmit check digit
	R9	One check digit, MOD 7; transmit check digit
Code 39	A0	Transmit barcodes as is; Full ASCII disabled; no check digit verification
	A1	One check digit, MOD 43; transmit check digit
	A3	One check digit, MOD 43; do not transmit check digit
	A4	Full ASCII enabled; no check digit verification
	A5	Full ASCII enabled; MOD43; do not transmit check digit
	A7	Full ASCII enabled; MOD43; transmit check digit

Symbology	AIM ID	Remark
Codabar	F0	Standard Codabar
	F1	ABC Codabar
	F2	Transmit check digit after verification
	F4	Do not transmit check digit after verification
Code 93	G0	Not specified
Code 11	H0	One check digit, MOD11; transmit check digit
	H1	Two check digits, MOD11/MOD11; transmit check digit
	H3	Do not transmit check digit after verification
	H8	Two check digits, MOD11/MOD9; transmit check digit
Plessey	H9	No check digit verification
MSI Plessey	JP0	Not specified
	JM0	One check digit, MOD10; transmit check digit
	JM1	One check digit, MOD10; do not transmit check digit
	JM7	Two check digits, MOD10/MOD11; do not transmit check digit
	JM8	Two check digits, MOD10/MOD11; transmit check digit
	JM9	No check digit verification
RSS-14/RSS-Limited	Je0	Standard
RSS-Expand	Je1	User-defined
	Je2	User-defined
	Je3	User-defined

Reference: ISO/IEC15424:2008 Information technology - Automatic identification and data techniques capture - Data Carrier Identifiers (including Symbology identifiers).

Hex	Dec	Char
27	39	' (Single Quote)
28	40	( (Right / Closing 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
40	58	: (Colon)
41	59	; (Semi-colon)
42	60	< (Less Than)
43	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

## Code ID Table

Symbology	Code ID
Code 128	j
UCC/EAN-128	u
AIM 128	f
SETTING 128	t
EAN-8	g
EAN-13	d
ISSN	n
ISBN	B
UPC-E	h
UPC-A	c
Interleaved 2 of 5	e
ITF-6	r
ITF-14	q
Deutsche 14	w
Deutsche 12	l
Industrial 25	v
Standard 25	i
Code 39	s
Codabar	b
Code 93	a
Code 11	y
Plessey	z
MSI-Plessey	P
RSS-14	m
RSS-Limited	D
RSS-Expand	R



Hex	Dec	Char
27	39	' (Single Quote)
28	40	( (Right / Closing 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
40	58	: (Colon)
41	59	; (Semi- colon)
42	60	< (Less Than)
43	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

## 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 (DataLink 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)

Hex	Dec	Char
27	39	' (Single Quote)
28	40	( (Right / Closing 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
40	58	: (Colon)
41	59	; (Semi- colon)
42	60	< (Less Than)
43	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

Hex	Dec	Char
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

Hex	Dec	Char
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)

### Digit Barcodes



0

D000000



1

D000001



2

D000002



3

D000003



4

D000004



5

D000005



6

D000006



7

D000007



8

D000008



9

D000009

## 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.



Save

D000012



Cancel the Last Digit

D000010



Cancel All Digits

D000011



A ~ F



A

D00000A



B

D00000B



C

D00000C



D

D00000D



E

D00000E



F

D00000F

F1~F12



F1

F000000



F2

F000001



F3

F000002



F4

F000003



F5

F000004



F6

F000005



F7

F000006



F8

F000007



F9

F000008



F10

F000009



F11

F00000A



F12

F00000B