

BD-9500HD

2D IMAGER



USER GUIDE

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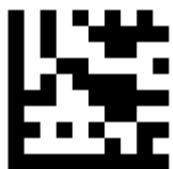
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Factory Defaults



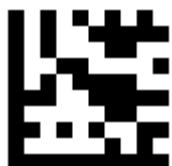
Start / End

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



Factory Defaults

Custom Defaults



Start / End

Scanning the **Save as Custom Defaults** barcode can set the current settings as custom defaults.

Scanning the **Restore Custom Defaults** barcode can reset all parameters to the custom defaults.



Save as Custom Defaults



Restore Custom Defaults

Chapter 1 Basic Settings



Start / End

Interface Selection

Scan the appropriate programming bar code to select the interface type for your system.



**** USB Keyboard**



RS232 COM Port



USB Virtual COM Port

Scan Mode

Trigger Mode:

A trigger pull activates a decode session. The decode session continues until a barcode is decoded or you release the trigger.

Sense Mode:

The scanner activates a decode session every time it detects a barcode presented to it. **Ignore Same Code (Same Barcode)** can avoid undesired rereading of same barcode in a given period of time.

Continuous Mode:

The scanner automatically starts one decode session after another. To suspend/resume barcode reading, simply press the trigger. **Timeout between Decodes (Same Barcode)** can avoid undesired rereading of same barcode in a given period of time.



Start / End

Scan Mode - Continued



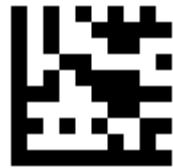
** Trigger Mode



Sense Mode



Continuous Mode



Start / End

Sense Mode Sensitivity



Low Sensitivity



*** * Medium Sensitivity**



High Sensitivity

Decode Redundancy

The scanner offers three levels of decode redundancy.

Select higher redundancy levels for decreasing levels of bar code quality.

As redundancy levels increase, the scanner's aggressiveness decreases. Select the redundancy level appropriate for the bar code quality.

Redundancy Level 1

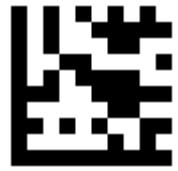
All code types just read one time.

Redundancy Level 2

All code types must be successfully read two times before being decoded.

Redundancy Level 3

All code types must be successfully read three times before being decoded.



Start / End

Decode Redundancy - Continued



** 1 time



2 times



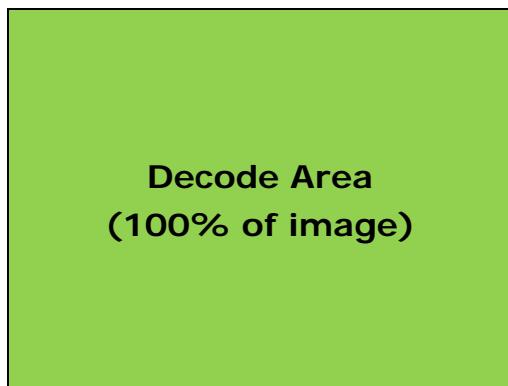
3 times

Decode Area

This parameter sets the specified decoding area to read barcode.

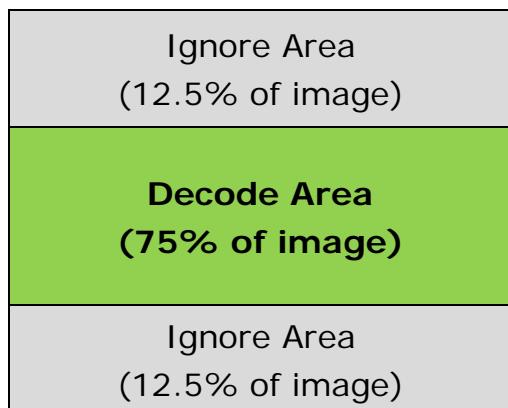
Full size of image

Only decode the barcode within full size of image.



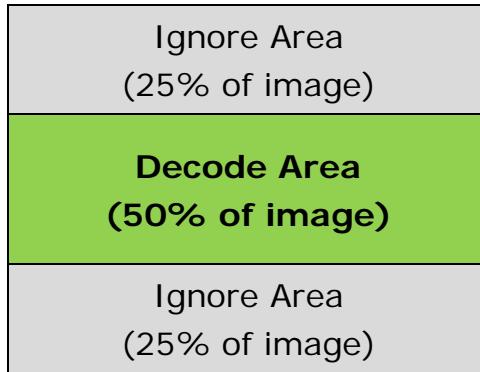
75% of image

Only decode the barcode within 75% of image.



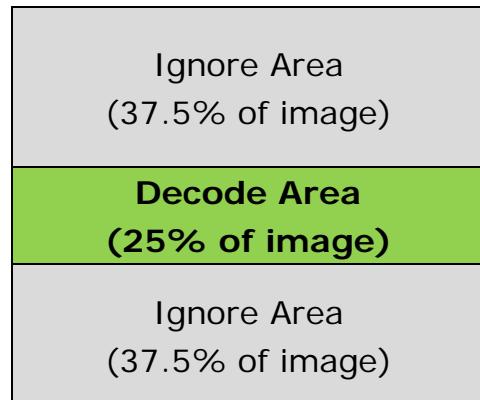
50% of image

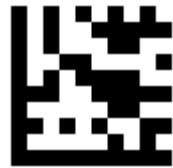
Only decode the barcode within 50% of image.



25% of image

Only decode the barcode within 25% of image.





Start / End

Decode Area - Continued



**** Full Size**



75% of image



50% of image



25% of image



Start / End

Decode Area - Continued



Aiming Barcode



Read



No Read

Decode Session Timeout

This parameter sets the maximum time decode session continues during a scan attempt. This feature is only applicable to the **Trigger** and **Sense** modes. It is programmable in 1ms increments from 1ms to 60,000 ms. When it is set to 0 , the timeout is infinite. The default setting is 5,000 ms.

Set the decode session timeout to 1,500 ms

1. Scan the **Start** barcode.
2. Scan the **Decode Session Timeout** barcode.
3. Scan the "1", "5", "0" and "0" barcodes from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.



Start / End



Decode Session Timeout

Time to Read Same Barcode

- **Timeout between Decodes**

Timeout between Decodes (Same Barcode) can avoid undesired rereading of same barcode in a given period of time. This feature is only applicable to **Continuous** mode.

It is programmable in 1ms increments from 1ms to 5,000 ms. When it is set to 0, the timeout is disable.

- **Ignore Same Code**

Time to ignore the barcode when read same barcode in a given period of time. This feature is only applicable to the **Sense** and **Continuous** modes. The default setting is 300 ms.

Set the timeout between decodes to 500ms

1. Scan the **Start** barcode.
2. Scan the **Timeout between Decodes** barcode
3. Scan the "5", "0" and "0" barcodes from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.

Set the ignore same barcode to 250 ms

1. Scan the **Start** barcode.
2. Scan the **Ignore Same Barcode**
3. Scan the "2", "5" and "0" barcodes from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.



Start / End

Time to Read Same Barcode - Continued



Timeout between Decodes



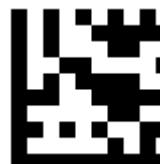
** Ignore Same Barcode

Time to Suspend State

This parameter sets the time to enter to suspend state when the decoder is idle. This feature is only applicable to **Trigger** mode. It is programmable in 1 ms increments from 1ms to 36,00,000 ms. When it is set to 0, the timeout is disable. The default setting is 15,000 ms.

Set the time to suspend state to 2,500 ms

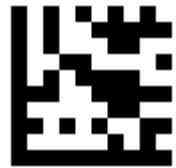
1. Scan the **Start** barcode.
2. Scan the **Time to Suspend State** barcode
3. Scan the "2", "5", "0" and "0" barcodes from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.



Start / End



Time to Suspend State



Start / End

Illumination Mode



Disable



**** Enable by trigger**



Always On



Fade Up



Start / End

Illumination Level



Minimum



Medium



* * Maximum



Start / End

Aiming Pattern



Disable



**** Enable by trigger**



Always On



Start / End

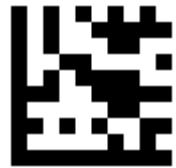
Good Read Beep



Disable



*** * Enable**



Start / End

Good Read Beep Frequency



Low



* * Medium



High

Chapter 2 USB Keyboard



Start / End

Emulate ALT+Keypad

When **Emulate ALT+Keypad** is turned on, any character whose ASCII value is greater than or equal to 0x20 is sent over the numeric keypad no matter which keyboard type is selected.



**** Disable**



Enable

Supposing **Emulate ALT+Keypad** is Enable , barcode data "WNA" (87/78/65) is sent as below:

"W" – "ALT Make" + "0087" + "ALT Break"

"N" -- "ALT Make" + "0078" + "ALT Break"

"A" -- "ALT Make" + "0065" + "ALT Break"



Start / End

Keyboard Layout

Keyboard layouts vary from country to country. The default setting is U.S. keyboard.



** U.S.



Belgium



Britain



Brazil



Start / End

Keyboard Layout - Continued



Czech Republic



Denmark



France



Germany



Start / End

Keyboard Layout - Continued



Hungary



Italy



Japan



Norway



Start / End

Keyboard Layout - Continued



Poland



Portugal



Romania



Spain



Start / End

Keyboard Layout - Continued



Sweden



Slovakia



Switzerland



Turkish Q



Start / End

Keyboard Layout - Continued



Russia



Vietnam



Start / End

Unicode/Code Page



**** Unicode**



Microsoft Office Word / Codepage



Big 5 - Unicode



Big 5 - Microsoft Office Word



Start / End

Unicode/Code Page - Continued



Shift JIS - Unicode



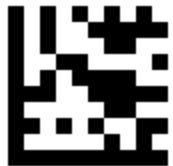
Shift JIS - Microsoft Office Word



Korean - Unicode



Korean - Microsoft Office Word



Start / End

Unicode/Code Page - Continued



West European Latin



Central and East European Latin



Arabic



Baltic



Start / End

Unicode/Code Page - Continued



Cyrillic



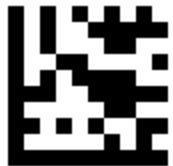
Hebrew



Turkish



Greek



Start / End

Unicode/Code Page - Continued

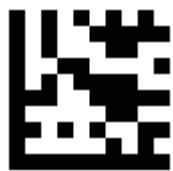


Thai



Vietnamese

Chapter 3 RS-232 Interface



Start / End

RS232 Data Bits



7 data bits



** 8 data bits



Start / End

RS232 Parity



No Parity



Odd Parity



Even Parity



Start / End

RS232 Stop Bits



**** 1 Stop bit**



2 Stop bit



Start / End

RS232 Baud Rate



** 9600



19200



38400



57600



115200



230400

Chapter 4 Symbologies



Start / End

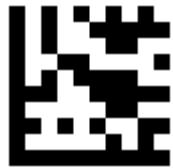
Enable/Disable All Symbologies



Enable All Symbologies



Disable All Symbologies



Start / End

Enable 1D/2D Symbologies

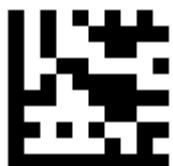


Enable 1D Symbologies



Enable 2D Symbologies

UPC-A



Start / End

Enable/Disable UPC-A



**** Enable UPC-A**



Disable UPC-A



Start / End

Number System Transmission



**** Enable Number System Transmission**



Disable Number System Transmission



Start / End

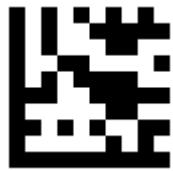
Check Digit Transmission



** Send Check Digit



Don't Send Check Digit



Start / End

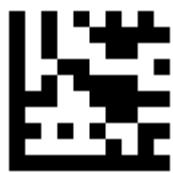
Expand UPC-A to EAN13



**** Don't Expand to EAN13**



Expand to EAN13



Start / End

UPC-A 2/5-Digit Add-ons



**** Disable UPC-A Add-ons**



Enable UPC-A 2/5-Digit Add-ons



Start / End

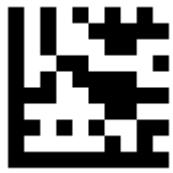
UPC-A 2/5-Digit Add-ons - Continued



Enable UPC-A 2-Digit Add-ons



Enable UPC-A 5-Digit Add-ons



Start / End

UPC-A 2/5-Digit Add-ons - Continued

When **UPC-A Add-ons Only** is selected, the scanner will only read UPC-A barcodes that contain add-on codes.

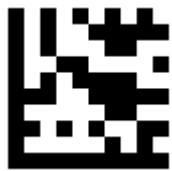


**** Disable UPC-A Add-ons Only**



Enable UPC-A Add-ons Only

UPC-E



Start / End

Enable/Disable UPC-E



**** Enable UPC-E**



Disable UPC-E



Start / End

Number System Transmission



**** Enable Number System Transmission**



Disable Number System Transmission



Start / End

Check Digit Transmission



** Send Check Digit



Don't Send Check Digit



Start / End

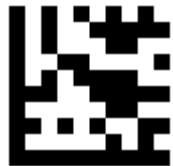
Expand UPC-E to UPC-A



Don't Expand to UPC-A



Expand to UPC-A



Start / End

UPC-E 2/5-Digit Add-ons



[Disable UPC-E Add-ons](#)



[Enable UPC-E 2/5-Digit Add-ons](#)



Start / End

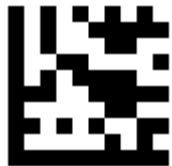
UPC-E 2/5-Digit Add-ons - Continued



Enable UPC-E 2-Digit Add-ons



Enable UPC-E 5-Digit Add-ons



Start / End

UPC-E 2/5-Digit Add-ons - Continued

When **UPC-E Add-ons Only** is selected, the scanner will only read UPC-A barcodes that contain add-on codes.

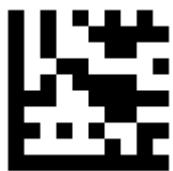


**** Disable UPC-E Add-ons Only**



Enable UPC-E Add-ons Only

EAN 13



Start / End

Enable/Disable EAN 13



**** Enable EAN 13**



Disable EAN 13



Start / End

Check Digit Transmission



**** Send Check Digit**



Don't Send Check Digit



Start / End

ISBN



*** * Disable ISBN**



Enable ISBN



Start / End

EAN 13 2/5-Digit Add-ons



**** Disable EAN 13 Add-ons**



Enable EAN 13 2/5-Digit Add-ons



Start / End

EAN 13 2/5-Digit Add-ons - Continued



Enable EAN 13 2-Digit Add-ons



Enable EAN 13 5-Digit Add-ons



Start / End

EAN 13 2/5-Digit Add-ons - Continued

When **EAN 13 Add-ons Only** is selected, the scanner will only read UPC-A barcodes that contain add-on codes.



**** Disable EAN 13 Add-ons Only**



Enable EAN 13 Add-ons Only

EAN 8



Start / End

Enable/Disable EAN 8



*** * Enable EAN 8**



Disable EAN 8



Start / End

Check Digit Transmission



** Send Check Digit



Don't Send Check Digit



Start / End

Expand EAN 8 to EAN 13



**** Don't Expand to EAN 13**



Expand to EAN 13



Start / End

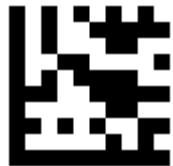
EAN 8 2/5-Digit Add-ons



**** Disable EAN 8 Add-ons**



Enable EAN 8 2/5-Digit Add-ons



Start / End

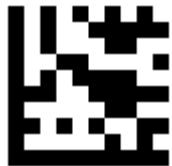
EAN 8 2/5-Digit Add-ons - Continued



Enable EAN 8 2-Digit Add-ons



Enable EAN 8 5-Digit Add-ons



Start / End

EAN 8 2/5-Digit Add-ons - Continued

When **EAN 8 Add-ons Only** is selected, the scanner will only read UPC-A barcodes that contain add-on codes.

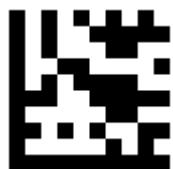


**** Disable EAN 8 Add-ons Only**



Enable EAN 8 Add-ons Only

Code 128 / GS1-128



Start / End

Enable/Disable Code 128 / GS1-128



**** Enable Code 128 / GS1-128**



Disable Code 128 / GS1-128



Start / End

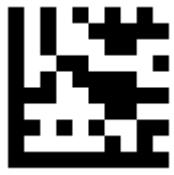
GS1-128 AIM ID



**** Do Not Transmit GS1-128 AIM ID**



Transmit GS1-128 AIM ID



Start / End

GS1-128 Application Identifier Transmission



**** AI Transmission**



(AI) Transmission

Set Lengths for Code 128

- **One Discrete Length**

Select this option to decode the symbol containing a selected length.

Select the length using the numeric bar codes in [ASCII Code](#). For example, to decode only Code 128 symbols with 14 characters, scan **Code 128 One Discrete Length**, then scan **1** followed by **4**.

- **Two Discrete Lengths**

Select this option to decode the symbol containing either of two selected lengths.

Select lengths using the numeric bar codes in [ASCII Code](#). For example, to decode only Code 128 symbols containing either 2 or 14 characters, select **Code 128 Two Discrete Lengths**, then scan **0, 2, 1**, and then **4**.

- **Length Within Range**

Select this option to decode the symbol with a specific length range.

Select lengths using numeric bar codes in [ASCII Code](#). For example, to decode Code 128 symbols containing between 4 and 12 characters, first scan **Code 128 Length Within Range**. Then scan **0, 4, 1**, and **2**.

- **Any Length**

Select this option to decode the symbol containing any number of characters within the digital scanner's capability.



Start / End

Set Lengths for Code 128 - Continued



One Discrete Length



Two Discrete Lengths

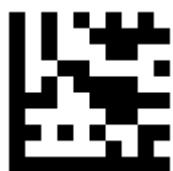


Length Within Range



** Any Length

Code 39



Start / End

Enable/Disable Code 39



**** Enable Code 39**



Disable Code 39



Start / End

Code 39 Full ASCII



**** Disable Code 39 Full ASCII**



Enable Code 39 Full ASCII



Start / End

Check Character Calculation



**** Disable Check Char Calculation**



Enable Check Char Calculation



Start / End

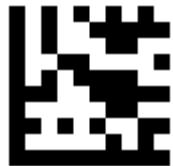
Check Character Transmission



**** Disable Check Char Transmission**



Enable Check Char Transmission



Start / End

Start / Stop Character



**** Don't Transmit Start / Stop Character**



Transmit Start / Stop Character

Set Lengths for Code 39

- **One Discrete Length**

Select this option to decode the symbol containing a selected length.

Select the length using the numeric bar codes in [ASCII Code](#). For example, to decode only Code 39 symbols with 14 characters, scan **Code 39 One Discrete Length**, then scan **1** followed by **4**.

- **Two Discrete Lengths**

Select this option to decode the symbol containing either of two selected lengths.

Select lengths using the numeric bar codes in [ASCII Code](#). For example, to decode only Code 39 symbols containing either 2 or 14 characters, select **Code 39 Two Discrete Lengths**, then scan **0, 2, 1**, and then **4**.

- **Length Within Range**

Select this option to decode the symbol with a specific length range.

Select lengths using numeric bar codes in [ASCII Code](#). For example, to decode Code 39 symbols containing between 4 and 12 characters, first scan **Code 39 Length Within Range**. Then scan **0, 4, 1**, and **2**.

- **Any Length**

Select this option to decode the symbol containing any number of characters within the digital scanner's capability.



Start / End

Set Lengths for Code 39 - Continued



One Discrete Length



Two Discrete Lengths

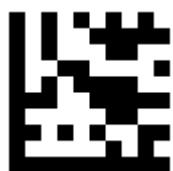


Length Within Range



** Any Length

Code 32



Start / End

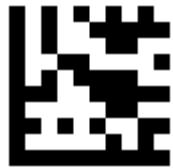
Enable/Disable Code 32



Enable Code 32



**** Disable Code 32**



Start / End

Start / Stop Character

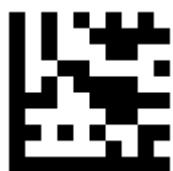


** Don't Transmit Start / Stop Character



Transmit Start / Stop Character

Code 93



Start / End

Enable/Disable Code 93



**** Enable Code 93**



Disable Code 93

Set Lengths for Code 93

- **One Discrete Length**

Select this option to decode the symbol containing a selected length.

Select the length using the numeric bar codes in [ASCII Code](#). For example, to decode only Code 93 symbols with 14 characters, scan **Code 93 One Discrete Length**, then scan **1** followed by **4**.

- **Two Discrete Lengths**

Select this option to decode the symbol containing either of two selected lengths.

Select lengths using the numeric bar codes in [ASCII Code](#). For example, to decode only Code 93 symbols containing either 2 or 14 characters, select **Code 93 Two Discrete Lengths**, then scan **0, 2, 1**, and then **4**.

- **Length Within Range**

Select this option to decode the symbol with a specific length range.

Select lengths using numeric bar codes in [ASCII Code](#). For example, to decode Code 93 symbols containing between 4 and 12 characters, first scan **Code 93 Length Within Range**. Then scan **0, 4, 1**, and **2**.

- **Any Length**

Select this option to decode the symbol containing any number of characters within the digital scanner's capability.



Start / End

Set Lengths for Code 93 - Continued



One Discrete Length



Two Discrete Lengths

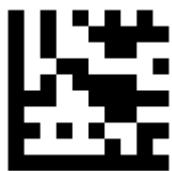


Length Within Range



** Any Length

Pharmacode



Start / End

Enable/Disable Pharmacode

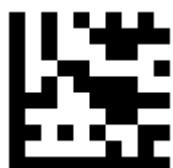


Enable Pharmacode



* * Disable Pharmacode

Codabar



Start / End

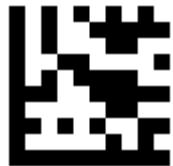
Enable/Disable Codabar



**** Enable Codabar**



Disable Codabar



Start / End

Check Character Verification



**** Disable Check Char Verification**



Enable Check Char Verification



Start / End

Check Character Transmission



**** Disable Check Char Transmission**



Enable Check Char Transmission



Start / End

Start / Stop Characters



Transmit Start / Stop Characters



** Don't Transmit Start / Stop Characters

Set Lengths for Codabar

- **One Discrete Length**

Select this option to decode the symbol containing a selected length.

Select the length using the numeric bar codes in [ASCII Code](#). For example, to decode only Codabar symbols with 14 characters, scan **Codabar One Discrete Length**, then scan **1** followed by **4**.

- **Two Discrete Lengths**

Select this option to decode the symbol containing either of two selected lengths.

Select lengths using the numeric bar codes in [ASCII Code](#). For example, to decode only Codabar symbols containing either 2 or 14 characters, select **Codabar Two Discrete Lengths**, then scan **0, 2, 1**, and then **4**.

- **Length Within Range**

Select this option to decode the symbol with a specific length range.

Select lengths using numeric bar codes in [ASCII Code](#). For example, to decode Codabar symbols containing between 4 and 12 characters, first scan **Codabar Length Within Range**. Then scan **0, 4, 1**, and **2**.

- **Any Length**

Select this option to decode the symbol containing any number of characters within the digital scanner's capability.



Start / End

Set Lengths for Codabar - Continued



One Discrete Length



Two Discrete Lengths

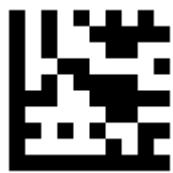


Length Within Range



**** Any Length**

MSI



Start / End

Enable/Disable MSI



Enable MSI



** Disable MSI



Start / End

Check Character Calculation



* * Enable Check Char Calculation



Disable Check Char Calculation



Start / End

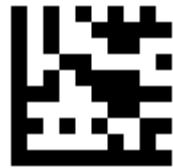
Check Character Transmission



**** Enable Check Char Transmission**



Disable Check Char Transmission



Start / End

Check Character Algorithm



** MOD 10



MOD 10 / MOD 10



MOD 10 / MOD 11

Set Lengths for MSI

- **One Discrete Length**

Select this option to decode the symbol containing a selected length.

Select the length using the numeric bar codes in [ASCII Code](#). For example, to decode only MSI symbols with 14 characters, scan **MSI One Discrete Length**, then scan **1** followed by **4**.

- **Two Discrete Lengths**

Select this option to decode the symbol containing either of two selected lengths.

Select lengths using the numeric bar codes in [ASCII Code](#). For example, to decode only MSI symbols containing either 2 or 14 characters, select **MSI Two Discrete Lengths**, then scan **0, 2, 1**, and then **4**.

- **Length Within Range**

Select this option to decode the symbol with a specific length range.

Select lengths using numeric bar codes in [ASCII Code](#). For example, to decode MSI symbols containing between 4 and 12 characters, first scan **MSI Length Within Range**. Then scan **0, 4, 1, and 2**.

- **Any Length**

Select this option to decode the symbol containing any number of characters within the digital scanner's capability.



Start / End

Set Lengths for MSI - Continued



One Discrete Length



Two Discrete Lengths

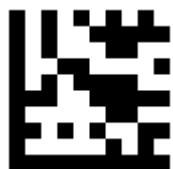


Length Within Range



**** Any Length**

Interleaved 2 of 5



Start / End

Enable/Disable Interleaved 2 of 5



**** Enable Interleaved 2 of 5**



Disable Interleaved 2 of 5



Start / End

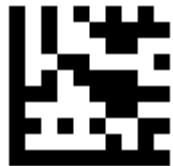
Check Character Calculation



**** Disable Check Char Calculation**



Enable Check Char Calculation



Start / End

Check Character Transmission



**** Disable Check Char Transmission**



Enable Check Char Transmission

Set Lengths for Interleaved 2 of 5

- **One Discrete Length**

Select this option to decode the symbol containing a selected length.

Select the length using the numeric bar codes in [ASCII Code](#). For example, to decode only Interleaved 2 of 5 symbols with 14 characters, scan **Interleaved 2 of 5 One Discrete Length**, then scan **1** followed by **4**.

- **Two Discrete Lengths**

Select this option to decode the symbol containing either of two selected lengths.

Select lengths using the numeric bar codes in [ASCII Code](#). For example, to decode only Interleaved 2 of 5 symbols containing either 2 or 14 characters, select **Interleaved 2 of 5 Two Discrete Lengths**, then scan **0, 2, 1**, and then **4**.

- **Length Within Range**

Select this option to decode the symbol with a specific length range.

Select lengths using numeric bar codes in [ASCII Code](#). For example, to decode Interleaved 2 of 5 symbols containing between 4 and 12 characters, first scan **Interleaved 2 of 5 Length Within Range**. Then scan **0, 4, 1**, and **2**.

- **Any Length**

Select this option to decode the symbol containing any number of characters within the digital scanner's capability.



Start / End

Set Lengths for Interleaved 2 of 5 - Continued



One Discrete Length



Two Discrete Lengths

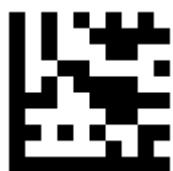


Length Within Range



**** Any Length**

GS1 DataBar 14



Start / End

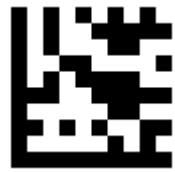
Enable/Disable GS1 DataBar 14



**** Enable GS1 DataBar 14**



Disable DataBar 14



Start / End

Application Identifier Transmission



Disable

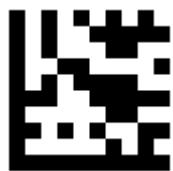


* * 01 Transmission



(01) Transmission

GS1 DataBar 14 Stacked



Start / End

Enable/Disable GS1 DataBar 14 Stacked



**** Enable GS1 DataBar 14 Stacked**



Disable GS1 DataBar 14 Stacked



Start / End

Application Identifier Transmission



Disable



* * 01 Transmission



(01) Transmission

GS1 DataBar Expanded



Start / End

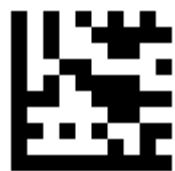
Enable/Disable GS1 DataBar Expanded



**** Enab GS1 DataBar Expanded**



Disable GS1 DataBar Expanded



Start / End

Application Identifier Transmission



Disable

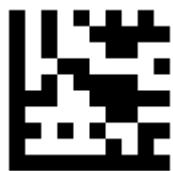


**** 01 Transmission**



(01) Transmission

GS1 DataBar Expanded Stacked



Start / End

Enable/Disable GS1 DataBar Expanded Stacked



**** Enable GS1 DataBar Expanded Stacked**



Disable GS1 DataBar Expanded Stacked



Start / End

Application Identifier Transmission



Disable

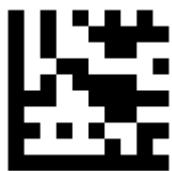


*** * 01 Transmission**



(01) Transmission

GS1 DataBar Limited



Start / End

Enable/Dsiable GS1 DataBar Limited



**** Enable GS1 DataBar Limited**



Disable GS1 DataBar Limited



Start / End

Application Identifier Transmission



Disable

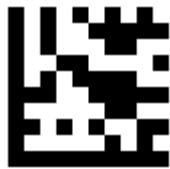


*** * 01 Transmission**



(01) Transmission

GS1 Composite Component A



Start / End

Enable/Disable GS1 Composite Component A

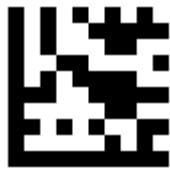


Enable CC-A



Disable CC-A

GS1 Composite Component B



Start / End

Enable/Disable GS1 Composite Component B

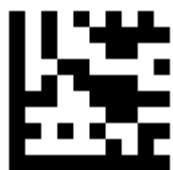


Enable CC-B



Disable CC-B

GS1 Composite Component C



Start / End

Enable/Disable GS1 Composite Component C



Enable CC-C



** Disable CC-C

PDF417



Start / End

Enable/Disable PDF417

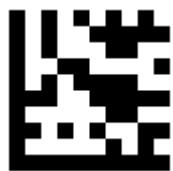


**** Enable PDF417**



Disable PDF417

Micro PDF417



Start / End

Enable/Disable Micro PDF417

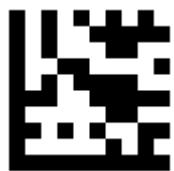


Enable Micro PDF417



* * Disable Micro PDF417

Data Matrix



Start / End

Enable/Disable Data Matrix



**** Enable Data Matrix**



Disable Data Matrix



Start / End

GS1 Data Matrix AIM ID



**** Do Not Transmit GS1 Data Matrix AIM ID**



Transmit GS1 Data Matrix AIM ID



Start / End

GS1 Data Matrix Application Identifier Transmission

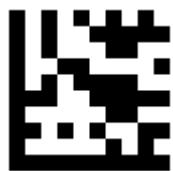


** AI Transmission



(AI) Transmission

QR



Start / End

Enable/Disable QR



** Enable QR



Disable QR



Start / End

GS1 QR AIM ID



**** Do Not Transmit GS1 QR AIM ID**



Transmit GS1 QR AIM ID



Start / End

GS1 QR Application Identifier Transmission



** AI Transmission



(AI) Transmission

Micro QR



Start / End

Enable/Disable Micro QR

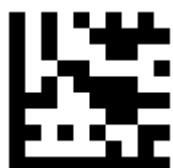


Enable Micro QR



** Disable Micro QR

Aztec



Start / End

Enable/Disable Aztec

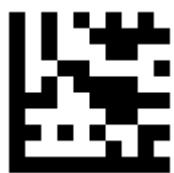


Enable Aztec



** Disable Aztec

MaxiCode



Start / End

Enable/Disable MaxiCode

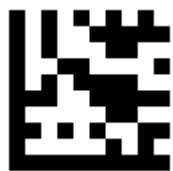


Enable MaxiCode



** Disable MaxiCode

DotCode



Start / End

Enable/Disable DotCode



Enable DotCode



**** Disable DotCode**



Start / End

GS1 DotCode AIM ID



**** Do Not Transmit GS1 DotCode AIM ID**



Transmit GS1 DotCode AIM ID



Start / End

GS1 DotCode Application Identifier Transmission



**** AI Transmission**



(AI) Transmission

Chapter 5 Data Editing

Data Format

The scan data is transmitted as below format.

Prefix	AIM ID	Scan Data	Suffix
--------	--------	-----------	--------

Prefix/Suffix

One to six prefixes and/or suffixes can be appended to scan data for use in data editing.

Example:

Set two Prefixes/Suffixes for all codes

```
<Enter programming Mode>  
<Set Prefix> or <Set Suffix>  
<Set All Codes>  
<Set first code of ASCII Codes or Direct Keys >  
<Set second code of ASCII Codes or Direct Keys >  
<Exit programming Mode>
```

Disable Prefixes/Suffixes for all codes

```
<Enter programming Mode>  
<Disable Prefix> or <Disable Suffix>  
<Set All Codes>  
<Exit programming Mode>
```



Start / End

Set Prefix - Continued



Set Prefix



** Disable Prefix



Start / End

Set Suffix - Continued



Set Suffix

(Default CR for all codes)



Disable Suffix

Truncate Data

This parameter sets the number of leading or ending data to be truncated. It is programmable in 1 increment from 1 to 255 characters. The default setting is 0.

Truncate 5 characters of leading for all codes

1. Scan the **Start** barcode.
2. Scan the **Truncate Leading** barcode.
2. Scan the **All Codes** barcode.
3. Scan the "5" barcode from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.

Truncate 10 characters of Ending for QR

1. Scan the **Start** barcode.
2. Scan the **Truncate Ending** barcode.
2. Scan the **QR** barcode.
3. Scan the "1" and "0" barcodes from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.

Output 1~15 characters of QR

1. Scan the **Start** barcode.
2. Scan the **Ending character** barcode.
2. Scan the **QR** barcode.
3. Scan the "1" and "5" barcodes from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.

Output 20~99 characters of QR

1. Scan the **Start** barcode.
2. Scan the **Truncate Leading** barcode.
2. Scan the **QR** barcode.
3. Scan the "1" and "9" barcodes from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.
5. Scan the **Start** barcode.
6. Scan the **Ending character** barcode.
7. Scan the **QR** barcode.
8. Scan the "9" and "9" barcodes from the **Digit Number** in Appendix C.
4. Scan the **End** barcode.



Start / End

Truncate Data - Continued



Truncate Leading



Truncate Ending



Ending Character



Start / End

Set Data for Codes



Set All Codes



UPC-A



UPC-E



EAN 13



Start / End

Set Data for Codes - Continued



EAN 8



Code 128



Code 39



Code 93



Start / End

Set Data for Codes - Continued



Code 32



Pharmacode



Codabar



MSI



Start / End

Set Data for Codes - Continued



Interleaved 2 of 5



GS1 DataBar 14



GS1 DataBar 14 Stacked



GS1 DataBar Expanded



Start / End

Set Data for Codes - Continued



GS1 DataBar Expanded Stacked



GS1 DataBar Limited



CC-A



CC-B



Start / End

Set Data for Codes - Continued



CC-C



PDF417



Micro PDF417



Data Matrix



Start / End

Set Data for Codes - Continued



QR



Micro QR



Aztec



MaxiCode



Start / End

Set Data for Codes - Continued



DotCode



Start / End

AIM ID



**** Disable Transmission of AIM ID**



Enable Transmission of AIM ID



Start / End

Keyboard Function Key Mapping

Ctrl + ASCII Mode:

Control Characters (0x00 - 0x1F) are sent as ASCII sequences.

Alt + Numeric Keypad Mode:

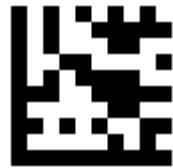
Control Characters (0x00 - 0x1F) are sent as Unicode code sequences



**** Ctrl + ASCII Mode**



Alt + Numeric Keypad Mode



Start / End

Keyboard Caps Lock State



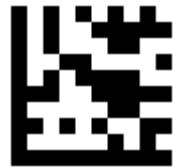
**** Caps Lock Off**



Caps Lock On
Non-Japanese Keyboard



Caps Lock On
Japanese Keyboard



Start / End

Case Conversion



**** Disable**



Convert to Upper Case



Convert to Lower Case

Note: Case Conversion does not affect AIM ID , Prefix , Suffix.

Control Characters Conversion

Convert Control Characters (0x00 - 0x1F) to other keystroke.

Set ASCII value 29 [GS] to #

1. Scan the **Start** barcode.
2. Scan the **GS Conversion** barcode.
3. Scan the **#** barcode from the **ASCII Code** in Appendix A.
4. Scan the **End** barcode.

Disable ASCII value 29 [GS] conversion

1. Scan the **Start** barcode.
2. Scan the **Disable GS Conversion** barcode.
4. Scan the **End** barcode.



Start / End

Control Characters Conversion - Continued



NUL Conversion



Disable NUL Conversion



SOH Conversion



Disable SOH Conversion



Start / End

Control Characters Conversion - Continued



STX Conversion



Disable STX Conversion



ETX Conversion



Disable ETX Conversion



Start / End

Control Characters Conversion - Continued



EOT Conversion



Disable EOT Conversion



ENQ Conversion



Disable ENQ Conversion



Start / End

Control Characters Conversion - Continued



ACK Conversion



Disable ACK Conversion



BEL Conversion



Disable BEL Conversion



Start / End

Control Characters Conversion - Continued



BS Conversion



Disable BS Conversion



HT Conversion



Disable HT Conversion



Start / End

Control Characters Conversion - Continued



LF Conversion



Disable LF Conversion



VT Conversion



Disable VT Conversion



Start / End

Control Characters Conversion - Continued



FF Conversion



Disable FF Conversion



CR Conversion



Disable CR Conversion



Start / End

Control Characters Conversion - Continued



SO Conversion



Disable SO Conversion



SI Conversion



Disable SI Conversion



Start / End

Control Characters Conversion - Continued



DLE Conversion



Disable DLE Conversion



DC1 Conversion



Disable DC1 Conversion



Start / End

Control Characters Conversion - Continued



DC2 Conversion



Disable DC2 Conversion



DC3 Conversion



Disable DC3 Conversion



Start / End

Control Characters Conversion - Continued



DC4 Conversion



Disable DC4 Conversion



NAK Conversion



Disable NAK Conversion



Start / End

Control Characters Conversion - Continued



SYN Conversion



Disable SYN Conversion



ETB Conversion



Disable ETB Conversion



Start / End

Control Characters Conversion - Continued



CAN Conversion



Disable CAN Conversion



EM Conversion



Disable EM Conversion



Start / End

Control Characters Conversion - Continued



SUB Conversion



Disable SUB Conversion



ESC Conversion



Disable ESC Conversion



Start / End

Control Characters Conversion - Continued



FS Conversion



Disable FS Conversion



GS Conversion



Disable GS Conversion



Start / End

Control Characters Conversion - Continued



RS Conversion



Disable RS Conversion



US Conversion



Disable US Conversion

Appendix A - ASCII Codes

ASCII (hex)	Serial	Keystroke	
00	NUL	CTRL+@ / Alt + 000	
01	SOH	CTRL+a / Alt + 001	
02	STX	CTRL+b / Alt + 002	
03	ETX	CTRL+c / Alt + 003	

The keystroke in bold is sent only if **Ctrl + ASCII Mode** is enabled.
Otherwise, the unbolded keystroke is sent.

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
04	EOT	CTRL+d / Alt + 004	
05	ENQ	CTRL+e / Alt + 005	
06	ACK	CTRL+f / Alt + 006	
07	BEL	CTRL+g / Alt + 007	

The keystroke in bold is sent only if **Ctrl + ASCII Mode** is enabled.
Otherwise, the unbolded keystroke is sent.

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
08	BACKSPACE	BACKSPACE	
09	TAB	TAB	
0A	LF	CTRL+j / Alt + 010	
0B	VT	CTRL+k / Alt + 011	

The keystroke in bold is sent only if **Ctrl + ASCII Mode** is enabled.
otherwise, the unbolted keystroke is sent.

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
0C	FF	CTRL+I / Alt + 012	
0D	CR	ENTER	
0E	SO	CTRL+n / Alt + 014	
0F	SI	CTRL+o / Alt + 015	

The keystroke in bold is sent only if **Ctrl + ASCII Mode** is enabled.
Otherwise, the unbolded keystroke is sent.

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
10	DLE	CTRL+p / Alt + 016	
11	DC1	CTRL+q / Alt + 017	
12	DC2	CTRL+r / Alt + 018	
13	DC3	CTRL+s / Alt + 019	

The keystroke in bold is sent only if **Ctrl + ASCII Mode** is enabled.
Otherwise, the unbolded keystroke is sent.

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
14	DC4	CTRL+t / Alt + 020	
15	NAK	CTRL+u / Alt + 021	
16	SYN	CTRL+v / Alt + 022	
17	ETB	CTRL+w / Alt + 023	

The keystroke in bold is sent only if **Ctrl + ASCII Mode** is enabled.
Otherwise, the unbolded keystroke is sent.

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
18	CAN	CTRL+x / Alt + 024	
19	EM	CTRL+y / Alt + 025	
1A	SUB	CTRL+z / Alt + 026	
1B	ESC	CTRL+[

The keystroke in bold is sent only if **Ctrl + ASCII Mode** is enabled.
Otherwise, the unbolded keystroke is sent.

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
1C	FS	CTRL+\	
1D	GS	CTRL+]	
1E	RS	CTRL+^	
1F	US	CTRL+_	

The keystroke in bold is sent only if **Ctrl + ASCII Mode** is enabled.
Otherwise, the unbolded keystroke is sent.

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
20	SPACE	SPACE	
21	!	!	
22	"	"	
23	#	#	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
24	\$	\$	
25	%	%	
26	&	&	
27	'	'	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
28	((
29))	
2A	*	*	
2B	+	+	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
2C	,	,	
2D	-	-	
2E	.	.	
2F	/	/	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
30	0	0	
31	1	1	
32	2	2	
33	3	3	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
34	4	4	
35	5	5	
36	6	6	
37	7	7	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
38	8	8	
39	9	9	
3A	:	:	
3B	;	;	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
3C	<	<	
3D	=	=	
3E	>	>	
3F	?	?	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
40	@	@	
41	A	A	
42	B	B	
43	C	C	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
44	D	D	
45	E	E	
46	F	F	
47	G	G	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
48	H	H	
49	I	I	
4A	J	J	
4B	K	K	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
4C	L	L	
4D	M	M	
4E	N	N	
4F	O	O	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
50	P	P	
51	Q	Q	
52	R	R	
53	S	S	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
54	T	T	
55	U	U	
56	V	V	
57	W	W	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
58	X	X	
59	Y	Y	
5A	Z	Z	
5B	[[

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
5C	\	\	
5D]]	
5E	^	^	
5F	-	-	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
60	.	.	
61	a	a	
62	b	b	
63	c	c	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
64	d	d	
65	e	e	
66	f	f	
67	g	g	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
68	h	h	
69	i	i	
6A	j	j	
6B	k	k	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
6C			
6D	m	m	
6E	n	n	
6F	o	o	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
70	p	p	
71	q	q	
72	r	r	
73	s	s	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
74	t	t	
75	u	u	
76	v	v	
77	w	w	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
78	x	x	
79	y	y	
7A	z	z	
7B	{	{	

ASCII Codes - Continued

ASCII (hex)	Serial	Keystroke	
7C			
7D	}	}	
7E	~	~	
7F	7F (Hex NO.)	DELETE	

Appendix B - Direct Keys



F1



F2



F3



F4



F5



F6

Direct Keys - Continued



F7



F8



F9



F10



F11



F12

Direct Keys - Continued



INSERT



DELETE



HOME



END



Arrow Up



Arrow Down

Direct Keys - Continued



Arrow Left



Arrow Right



CTRL



ALT



SHIFT



Page Up

Direct Keys - Continued



Page Down



ALT+a



ALT+b



ALT+c



ALT+d



ALT+e

Direct Keys - Continued



ALT+f



ALT+g



ALT+h



ALT+i



ALT+j



Ctrl+k

Direct Keys - Continued



ALT+i



ALT+m



ALT+n



ALT+o



ALT+p



ALT+q

Direct Keys - Continued



ALT+r



ALT+s



ALT+t



ALT+u



ALT+v



ALT+w

Direct Keys - Continued



ALT+x



ALT+y



ALT+z

Appendix C - Digit Number



0



1



2



3



4



5

Digit Number - Continued



6



7



8



9

Revision History

Version 1.0

Initial release

Version 1.1

1. Added settings for Standby Time

Version 1.2

1. Added settings for Decode Redundancy
2. Added settings for Decode Area

Version 1.3

1. Added settings for Illumination
2. Added settings for Aiming Pattern
3. Updated the setting barcode for Disable Prefix

Version 1.4

1. Added settings for Disable All Codes
2. Added settings for Only Enable 1D Codes
3. Added settings for Only Enable 2D Codes
4. Added settings for Enable All Codes
5. Added settings for Aztec

Version 1.5

1. Changed the setting barcode for following codes
 - Interleaved 2 of 5 ; MSI ; Code 32 ; Pharmacode ; PDF417
 - Micro PDF417 ; Data Matrix ; QR ; Micro QR ; Aztec
2. Added settings for following codes
 - GS1 DataBar 14
 - GS1 DataBar 14 Stacked
 - GS1 DataBar Expanded
 - GS1 DataBar Expanded Stacked
 - GS1 DataBar Limited
 - GS1 Composite Component A
 - GS1 Composite Component B
 - GS1 Composite Component C
3. Added settings for GS1-Codes ASCII 29 Conversion

Version 1.6

1. Added settings for illumination level
2. Added settings for GS1-Codes ASCII 04 [EOT] Conversion
3. Added settings for GS1-Codes ASCII 30 [RS] Conversion

Version 1.7

1. Added settings for Customer Defaults
2. Added settings for Timeout between Decodes
3. Added settings for Time to suspend state
4. Added Ctrl + ASCII Mode for Function Key Mapping
5. Added Alt + Numeric Keypad Mode for Function Key Mapping
6. Added settings for Control characters Conversion

Version 1.8

1. Added settings for Turkish Q Keyboard
2. Added settings for Sense Mode Sensitivity
3. Added settings for GS1-128
4. Added settings for GS1 Data Matrix
5. Added settings for GS1 QR

Version 1.9

1. Added settings to enable UPC/EAN 2/5-Digit Add-ons

Version 2.0

1. Added settings for Maxicode
2. Added settings for Time to Read Same Barcode

Version 2.1

1. Added setting for Brazil keyboard
2. Added following settings for 2/5-Digit Add-ons

Enable/Disable UPC-A 2/5-Digit Add-ons Only

Enable/Disable UPC-E 2/5-Digit Add-ons Only

Enable/Disable EAN 13 2/5-Digit Add-ons Only

Enable/Disable EAN 8 2/5-Digit Add-ons Only

3. Added following settings for UTF8 QR Keyboard Output

Turkish - UTF8 QR Keyboard Output

Italian - UTF8 QR Keyboard Output

German - UTF8 QR Keyboard Output

Version 2.2

1. Added setting for **Arabic** - UTF8 QR Keyboard Output

Version 2.3

1. Added setting for Russia keyboard
2. Added settings for Truncate Leading / Ending Data

Version 2.4

1. Updated the setting barcode for Case Conversion

Version 2.5

1. Added settings for DotCode

Version 2.6

1. Added settings for RS232 Data Bits ; Parity ; Stop Bits
2. Added settings for Good Read Beep Frequency

Version 2.7

1. Timeout between Decodes is only applicable to Continuous mode.

Version 2.8

1. Added 00 and 7F for ASCII Code settings
2. Added aiming barcode for decode area
3. Added settings for Emulate ALT+Keypad

Version 2.9

1. Added enable/disable leading A for code 32
2. Added settings for Switzerland ; Vietnam keyboard

Version 3.0

1. To enable Codabar for default setting
2. Added Caps Lock On setting for Japanese Keyboard

Version 3.1

1. Corrected documentation errors for **Keyboard Function Key Mapping**.
2. Corrected documentation errors for Control Characters (0x00 - 0x1F) in Appendix A - ASCII Codes

Version 3.2

1. Added Application Identifier Transmission settings for GS1 barcodes
2. Added Ending Data setting for Truncate Data.