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# HS7 Barcode Scanner User Manual

*Release v1.1.1*

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# 1 System Settings

## 1.1 Input/output settings

### Introduction

This chapter mainly introduces the configuration of the buzzer and LED when the Barcode Reader is powered on, decoded, and button triggered.

### Power on beep setting

Power-on beep, that is, after the Barcode Reader is successfully powered on, it can sound a buzzer to prompt it to enter the working state. According to the needs of the scene, it can also be configured to have no beep. Default value = there will be a beep when power on successfully.



No beep after successful power-on



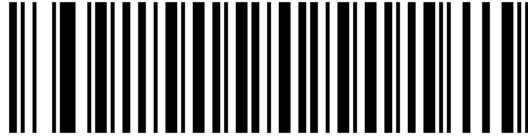
\* There will be a beep after successful power-on.

### Trigger decoding sound settings

After triggering the decoding switch, regardless of whether it is decoded or not, the Barcode Reader can emit a tone to indicate that the switch has been triggered. Default value = no beep when triggering decoding switch



\* No beep when triggering decoding switch



There is a sound when triggering the decoding switch.

## Setting the beep after successful decoding

### Good Decode beep response setting

After the decoding is successful, the buzzer will sound to indicate that the decoding is successful. If a beep is not required, it can be configured to have no beep after the decoding is successful. Default value = beep after successful decoding.



No beep after successful decoding



\* There will be a beep after successful decoding.

### Good Decode sound volume setting

Scan the following barcode to modify the beep volume of the Barcode Reader after successful decoding. Default = high.



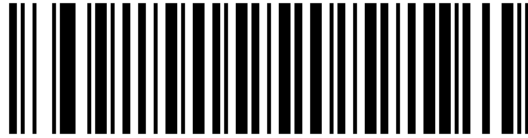
Low



Medium



\* High



Disable

### Good Decode beep frequency setting

Scan the following barcode to modify the beep frequency of the Barcode Reader after successful decoding.  
The default value is medium.



\* Medium (2400 Hz)



Low (1600 Hz)



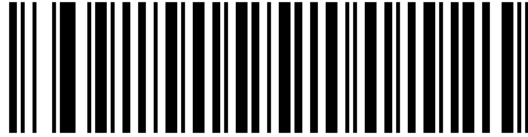
High (4200 Hz)

### Good Decode beep duration setting

Scan the following barcode to modify the beep duration of the Barcode Reader after successful decoding.  
Default=Normal.



\*Normal beep



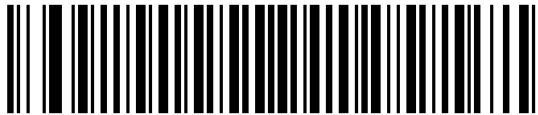
short beep

### Decoding failure beep frequency setting

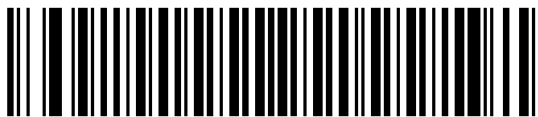
Scan the following barcode to modify the beep frequency of the Barcode Reader after decoding failure. Default=Razz.



\\* Razz (250 Hz)



Medium (3250 Hz)



High (4200 Hz)

### code reading delay

Scan the following barcode to set the time interval between the Barcode Reader reading one barcode and then reading the next barcode. Default=750 ms.



No delay



\* Short delay (750 ms)



Medium latency (1,000 ms)

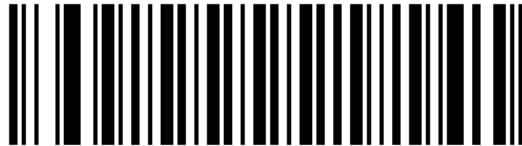


Long delay (1,500 ms)

## 1.2 Common functions

### Factory Default Settings

If you want to apply default settings to your Barcode Reader, scan the “Load Factory Default Settings” barcode below to reset your Barcode Reader to factory default settings.



Load factory default settings

### Firmware version display

Scanning the following barcode will output the current firmware version, unit serial number and other product information.



Show version information

## 2 Interface Settings

### 2.1 Interface type

#### Introduction

This chapter introduces the two interface types, USB and RS232, and lists their related configurations.

#### RS232

To use the RS232 interface, scan the “RS232” Parameter Barcode. The default serial settings are 115200 baud, 8 data bits, no parity, and 1 stop bit. A carriage return and line feed are appended by default.



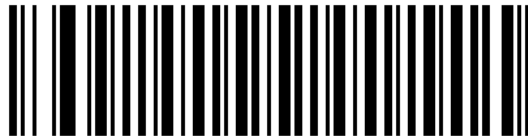
RS232

### RS232 baud rate

The baud rate sends data from the Barcode Reader to the host at a specified rate. The host must be set to the same baud rate as the Barcode Reader for normal communication. Default=115200.



300



600



1200



2400



4800



9600



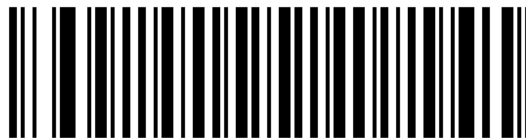
19200



38400



57,600



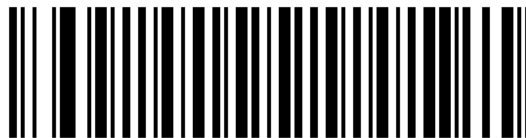
\\* 115,200

### RS232 word length: data bits, stop bits and parity

**Data bits:** You can choose to transmit 7 or 8 data bits. The host must be set to the same data bits as the Barcode Reader for normal communication. Default=8.

**Stop bit:** The stop bit can be set to 1 or 2. The host must be set to the same stop bit as the Barcode Reader for normal communication. Default=1.

**Parity** verifies the bit pattern of each character. For communication to work correctly, configure the host and Barcode Reader with the same parity setting. Default: None.



7 Data Bits, 1 Stop Bit, Even Parity



7 Data Bits, 1 Stop Bit, No Parity



7 Data Bits, 1 Stop Bit, Odd Parity



7 Data Bits, 2 Stop Bits, Even Parity



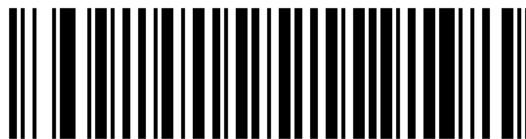
7 Data Bits, 2 Stop Bits, No Parity



8 Data Bits, 1 Stop Bit, Even Parity



8 Data Bits, 1 Stop Bit, Odd Parity



7 Data Bits, 2 Stop Bits, Odd Parity



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

## USB

### USB PC

Scan the following barcode to configure the Barcode Reader into USB PC Keyboard mode. Carriage returns and line feeds are added by default.



USB Keyboard (PC)

### USB COM

Scan the following barcode to configure the Barcode Reader into USB COM mode, simulating a regular RS232-based COM port. If you are using a Microsoft® Windows® PC, you need to download the driver. If you are using an Apple® Macintosh, the computer will recognize the Barcode Reader as a USB CDC class device.



USB COM

#### Note

No additional configuration (such as baud rate, etc.) is required.

## 3 Data Editing

### 3.1 Introduction

After the Barcode Reader decodes successfully, it will obtain a string of data. This string of data can be numbers, English, symbols, etc., and it can also be Chinese characters for QR codes. This string of data is the data information contained in the barcode. In practical applications, you may not only need the data information of the barcode, but you may also need to know which type of barcode the string of data information obtained comes from, or you need to know on which day the barcode information was scanned, or you may need to automatically wrap the text of the barcode and enter after reading a barcode. These requirements may not be included in the data information of the barcode.

Encoding this information directly in a barcode increases its length and reduces flexibility. A Prefix/Suffix can instead be added to the Barcode Data at output time, allowing the added content to be changed or disabled without modifying the barcode itself.

- You can add or remove prefix or suffix characters for one Symbology or for All Symbologies.
- Use [ASCII Conversion Table](#) to add any prefix or suffix
- Add prefix or suffix characters in the order they appear in the output.
- When configuring a specific symbology (or All Symbologies), add prefix or suffix characters to the \_\_\_\_\_ symbology corresponding to the serial number of the specific barcode type.

- The maximum size of a prefix or suffix configuration is 200 characters.

### 3.2 Prefix/suffix addition

1. Scan the “Add Prefix” or “Add Suffix” barcode.
2. Determine the symbology to be prefixed or suffixed, determining the 2-digit hexadecimal value from *ID Symbologies*. For example, for Code 11, the barcode type sequence number is “h” and the Hex ID is 68.
3. Scan 2 hexadecimal digits in *Appendix Charts*, or scan 9, 9 to apply to all barcodes.
4. Determine the hexadecimal value of the prefix/suffix from *ASCII Conversion Table*.
5. Scan *Appendix Charts* for a 2-digit hexadecimal value.
6. Repeat steps 4 and 5 for each prefix/suffix character.
7. To add a barcode serial number, please scan 5, C, 8, 0.

To add AIM I.D., scan 5, C, 8, 1.

To add a backslash (), scan 5, C, 5, C.

#### Note

To add the backslash () in step 7, 5C must be scanned twice - once to create the leading backslash, and then to create the backslash itself.

8. Scan the “Save” barcode to exit and save, or scan the “Discard” barcode to exit without saving. Repeat steps 1-6 to add prefixes or suffixes to other Symbologies.



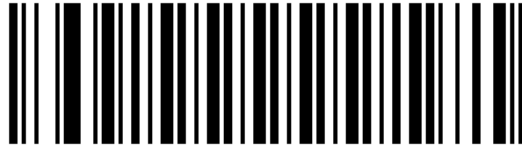
Add Prefix



Add Suffix



Save



give up

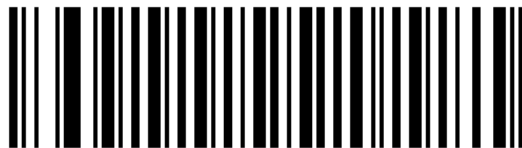
#### Example

Add suffix to specific Symbology

Add CR (carriage return) suffix to Code 128.

**step:**

1. Scan the “Add Suffix” barcode.
2. Determine the 2-digit hexadecimal value of Code 128 from *ID Symbologies*: 6A.
3. Scan the “6” , “A” barcodes from *Appendix Charts*.
4. Determine the hexadecimal value of the carriage return suffix from *ASCII Conversion Table*: 0D.
5. Scan the “0” , “D” barcode in *Appendix Charts*.
6. Scan the “Save” barcode, or scan the “Abandon” barcode to exit without saving.



Add Suffix



6



A



0



D



Save

### 3.3 Add carriage return suffix to All Symbolologies

To add a carriage return suffix to all symbolologies, please scan the following barcode. This operation first clears all current suffixes, and then adds carriage return suffixes to All Symbolologies.



Add carriage return suffix to All Symbolologies

### 3.4 Add a Newline Suffix to All Symbolologies

To add a carriage return and line feed suffix to All Symbolologies, please scan the following barcode. This operation first clears all current suffixes, and then adds carriage return and line feed suffixes to All Symbolologies.



Add newline suffix to all symbologies

### 3.5 Add carriage return and line feed suffix to All Symbologies

To add a carriage return and line feed suffix to All Symbologies, please scan the following barcode. This operation first clears all current suffixes, and then adds carriage return and line feed suffixes to All Symbologies.



Add carriage return and line feed suffix to All Symbologies

### 3.6 Keyboard operation

You can configure the keyboard to perform different operations when decoding the output, such as performing automatic saving after decoding the output.

1. Determine the 2-digit hexadecimal value corresponding to the keyboard operation to be performed from *Keyboard operation ASCII conversion*, and determine the 2-digit hexadecimal value of the symbology system that needs to be set.
2. First scan the “Add Keyboard Action” barcode.
3. Then determine the order of keyboard operation and barcode output. If the keyboard operation comes first, scan the “Add Prefix” barcode. If the keyboard operation follows, scan the “Add Suffix” barcode.
4. Scan the corresponding 4-digit hexadecimal value in *Appendix Charts* according to the corresponding value (including Symbology and corresponding keyboard operation)
5. Scan the “Save” barcode.
6. Scan “End adding keyboard action”



Start adding keyboard actions



End adding keyboard operation

### Example

Add the operation of saving after decoding output for All Symbolologies

First confirm the operation to be performed: save after the barcode is output, that is, add a suffix after the output barcode. Then determine the corresponding hexadecimal value according to the table in the appendix. All Symbolologies correspond to “9” and “9”, and the saving operation corresponds to “1” and “3”.

After confirmation, scan the “Add Keyboard Operation” barcode, “Add Suffix” barcode, “9”, “9”, “1”, “3”, and finally scan the “Save” barcode.

(“9” and “9” correspond to All Symbolologies, and “1” and “3” correspond to decoding and outputting before saving)

## 3.7 Prefix/suffix clear

Can clear the prefix/suffix of a Symbolology. If a prefix/suffix of a Symbolology has been added, you can scan “Clear prefix/suffix of a symbology” barcode removes all prefix/suffix characters from this symbology. Scan “Clear all Symbology prefixes/suffixes” to delete all Symbology prefixes/suffixes.

1. Scan the “Clear Prefix of a Symbol” or “Clear the Suffix of a Symbol” barcode.
2. Determine the 2-digit hexadecimal value to clear the prefix/suffix symbology from *ID Symbolologies*.
3. Scan the 2-digit hexadecimal value in *Appendix Charts*; for example, scan “9”, the “9” barcode applies to All Symbolologies.
4. Scan the “Save” barcode.



Clear the prefix of a Symbology



Clear the suffix of a Symbology



Save

## Prefix selection



Add Prefix



Clear all code prefixes



Clear the prefix of a Symbology

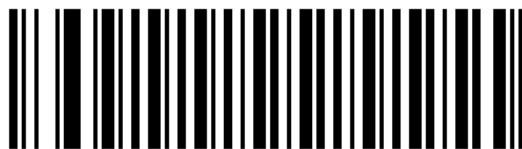
## Suffix selection



Add Suffix



Clear all code suffixes

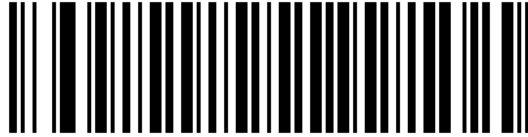


Clear the suffix of a Symbology

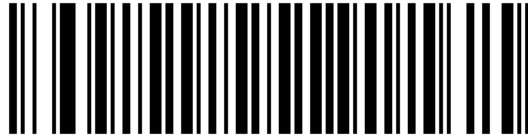
## 3.8 Function code transmission

When function code transmission is enabled and the output data contains function codes, the Barcode Reader will transmit the function code data to the host. Default = disabled.

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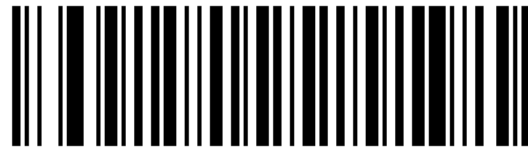
\* Disable



Enable

### 3.9 Delayed transmission of barcode

Delays of up to 5000 ms (in 5 ms increments) can be set for each barcode transmission. Scan the following barcode, then scan [Appendix Charts](#) for the amount of 5 ms delay, then scan the “Save” barcode.



barcode delay

To eliminate barcode transmission delays, scan the “Barcode Delay” barcode and set the delay number to 0. Use [Appendix Charts](#) and scan the “Save” barcode.

#### **i** Example

Set a 100 ms delay for transmitting barcodes:

First scan the “Barcode Delay”, then scan [Appendix Charts](#) “2” “0” ( $100 \text{ ms} / 5 \text{ ms} = 20$ ), then scan the “Save” barcode to set the 100 ms transmission barcode delay.

## 4 Barcode Settings

### 4.1 Symbology

#### All Symbologies

If the Barcode Reader needs to read all symbologies, please scan the “All symbologies enabled” barcode. To only read a specific symbology, please scan the “All symbologies disabled” barcode, and then scan the enable barcode for that specific symbology.



All symbologies enabled



All symbologies disabled

#### **Note**

After scanning the “All symbologies enabled” barcode, 2D postal codes are not enabled by default. 2D postal codes must be enabled separately.

### Reading length description

The effective reading length of certain Symbologies can be set. If the length of the barcode data read does not match the effective reading length, the Barcode Reader will issue an error tone. Setting the minimum and maximum length to the same value will force the Barcode Reader to read fixed-length barcodes. This helps reduce misreadings.

#### **Example**

Only barcodes with a length of 6-10 characters are read.

Minimum length=06. Maximum length=10

1. Select the Symbology for which you want to set the maximum and minimum reading length, scan the “Minimum Reading Length” barcode under its directory, scan the number “6” barcode and the “Save” barcode from [Appendix Charts](#).
2. Scan the “Maximum read length” barcode, scan the digits “1”, “0” and “Save” barcodes from [Appendix Charts](#).

The above steps will set the maximum reading length of the selected Symbology to 10 and the minimum reading length to 6.

### 1D Symbologies

If the Barcode Reader needs to read all 1D barcodes, please scan the “All 1D barcodes enabled” barcode. Only certain Symbologies can be read, please scan the “All 1D Symbologies disabled” barcode.



\* All 1D symbologies enabled



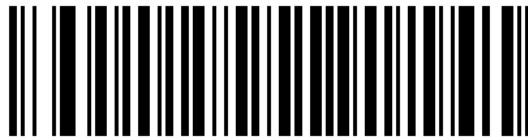
Disable All 1D Symbologies

## 2D Symbologies

If the Barcode Reader needs to read all symbologies, please scan the “All 2D Symbologies enabled” barcode. Only certain Symbologies can be read, please scan the “All 2D Symbologies Disabled” barcode.



\* All 2D Symbologies enabled



Disable All 2D Symbologies

## Codabar

### Note

Default all Codabar settings



Restore Codabar default settings

## Enable/disable



\* Enable



Disable

## start/stop characters

“Start/Stop” character output is located at the leading and trailing ends of the barcode. Configurable to transmit or not transmit Start/Stop characters. Default = no transmission.



transmission



\* Do not transmit

## Check character

No check characters means that the Barcode Reader will read and transmit all barcodes with or without check characters. (When scanning a barcode with check characters at this time, the check characters are transmitted together)

When “Check Character” is set to “Enable, do not transmit check characters”, the Barcode Reader will verify based on the last digit of the barcode. If the verification passes, normal data except the last check character will be transmitted. If the verification fails, the barcode content will not be sent.

When “Check Character” is set to “Enable, transmit check character”, the Barcode Reader will verify based on the last digit of the barcode. If the verification passes, the check character will be transmitted together with the last digit of normal data. If the verification fails, the barcode content will not be sent.



\* No check character



Enable, do not transmit check characters



Enable, transmit check characters

## cascade

Codabar supports barcode concatenation. When cascading is enabled, the Barcode Reader looks for a Codabar barcode with a “D” start character that is adjacent to a barcode with a “D” stop character. In this case, the two barcodes are concatenated into one, omitting all “D” characters.

A 1 2 3 4 D D 5 6 7 8 A

Scan the “Require” barcode to prevent Barcode Readers from decoding a single “D” Codabar barcode without an adjacent “D” starting character for the Codabar barcode. This selection has no effect on Codabar without stop/start D characters.



Enable



need



\* Disable

## Reading length

Scan the barcode below to change the reading length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 2-60. Minimum default value=4, maximum default value=60. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## Code 39

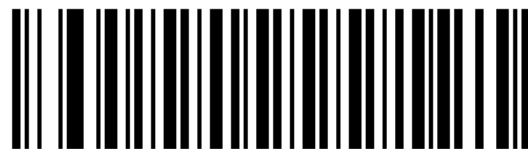
### Enable/disable



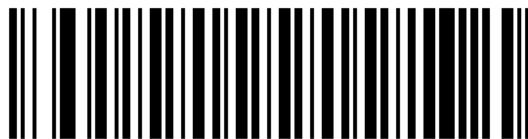
\* Enable

#### Note

Default Code 39 configuration



Restore Code 39 default settings



Disable

### start/stop characters

“Start/stop characters” are located at the beginning and end of the barcode. Configurable to transmit or not transmit “start/stop characters” . Default = no transmission.



transmission



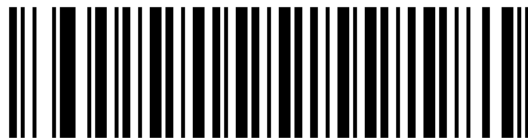
\* Do not transmit

## Check character

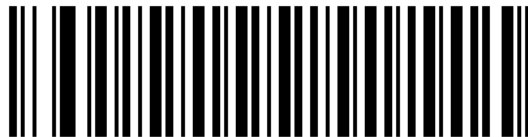
No check characters means that the Barcode Reader will read and transmit all barcodes with or without check characters. (When scanning a barcode with check characters at this time, the check characters are transmitted together)

When “Check Character” is set to “Enable, do not transmit check characters” , the Barcode Reader will verify based on the last digit of the barcode. If the verification passes, normal data except the last check character will be transmitted. If the verification fails, the barcode content will not be sent.

When “Check Character” is set to “Enable, transmit check character” , the Barcode Reader will verify based on the last digit of the barcode. If the verification passes, the check character will be transmitted together with the last digit of normal data. If the verification fails, the barcode content will not be sent.



\* No check character



Enable, do not transmit check characters



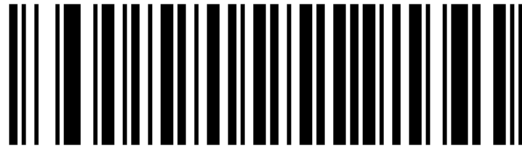
Enable, transmit check characters

## Reading length

Scan the barcode below to change the reading length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 0-48. Minimum default value=0, maximum default value=48. (Note: After scanning the “minimum reading length” and “maximum reading length” , you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

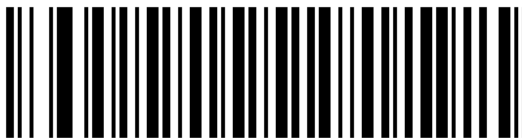


Maximum reading length

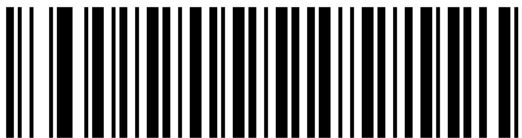
### Code 32 Pharmaceutical (PARAF)

Code 32 Pharmaceutical is a form of the Code 39 barcode used in Italian pharmacies. When configuring Code 32, you need to enable Code 39 before configuring it.

This symbology is also called PARAF.



Enable



\* Disable

### FULL ASCII

If Code 39 Full ASCII decoding is enabled, some characters in the barcode will be decoded into single characters.

### Example

\$V will be decoded to the ASCII character SYN and /C will be decoded to the ASCII character #. Default = disabled.

| NUL%U   | DLE \$P | SP SPACE | 0/P  | @%V | P P  | '%W  | p+P   |
|---------|---------|----------|------|-----|------|------|-------|
| SOH\$A  | DC1 \$Q | !/A      | 1/Q  | A A | Q Q  | a+A  | q+Q   |
| STX\$B  | DC2 \$R | "/B      | 2/R  | B B | R R  | b+B  | r+R   |
| ETX\$C  | DC3\$S  | # /C     | 3/S  | C C | S S  | c+C  | s+S   |
| EOT \$D | DC4 \$T | \$ /D    | 4/T  | D D | T T  | d+D  | t+T   |
| ENQ \$E | NAK \$U | % /E     | 5/U  | E E | U U  | e+E  | u+U   |
| ACK \$F | SYN\$V  | & /F     | 6/V  | F F | V V  | f+F  | v+V   |
| BEL\$G  | ETB \$W | '/G      | 7/W  | G G | W W  | g+G  | w+W   |
| BS\$H   | CAN\$X  | (/H      | 8/X  | H H | X    | h+H  | x+X   |
| HT \$I  | EM\$Y   | ) /I     | 9/Y  | I I | Y Y  | i+I  | y+Y   |
| LF\$J   | SUB\$Z  | * /J     | :/Z  | J J | Z Z  | j+J  | z+Z   |
| VT\$K   | ESC %A  | + /K     | ; %F | K K | [ %K | k+K  | { %P  |
| FF\$L   | FS%B    | , /L     | < %G | L L | \ %L | l+L  | %Q    |
| CR\$M   | GS%C    | -/M      | =%H  | M M | ] %M | m+M  | } %R  |
| SO\$N   | RS %D   | ./N      | > %I | N N | ^%N  | n+N  | ~%S   |
| SI\$O   | US%E    | / /O     | ?%J  | O O | _ %O | o +O | DEL%T |

The character pairs /M and /N are decoded as a minus sign and a period respectively. Character pairs /P to /Y are decoded as 0 to 9.



FULL ASCII enabled



\* FULL ASCII disabled

### Interleaved 2 of 5

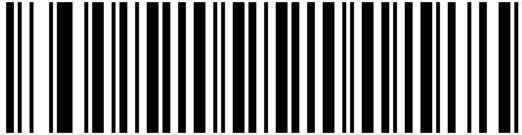
#### Note

Default all Interleaved 2 of 5 settings

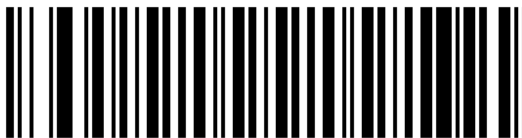


Restore Interleaved 2 of 5 default settings

## Enable/disable



\* Enable



Disable

## Check character

No check characters means that the Barcode Reader will read and transmit all barcodes with or without check characters. (When scanning a barcode with check characters at this time, the check characters are transmitted together)

When “Check Character” is set to “Enable, do not transmit check characters”, the Barcode Reader will verify based on the last digit of the barcode. If the verification passes, normal data except the last check character will be transmitted. If the verification fails, the barcode content will not be sent.

When “Check Character” is set to “Enable, transmit check character”, the Barcode Reader will verify based on the last digit of the barcode. If the verification passes, the check character will be transmitted together with the last digit of normal data. If the verification fails, the barcode content will not be sent.



\* No check character



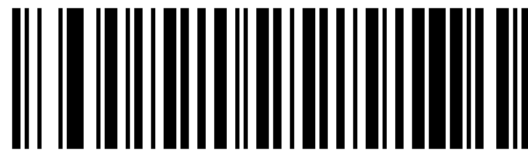
Enable, do not transmit check characters



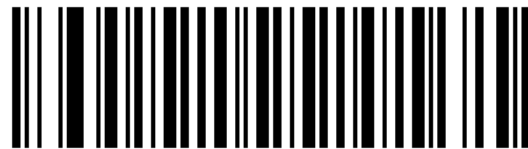
Enable, transmit check characters

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 2-80. Minimum default value=4, maximum default value=80. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## NEC 2of5

### Enable/disable

#### Note

Default all NEC 2 of 5 settings



Restore NEC 2 of 5 default settings



\* Enable



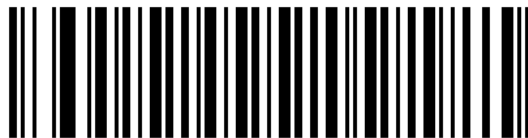
Disable

## Check character

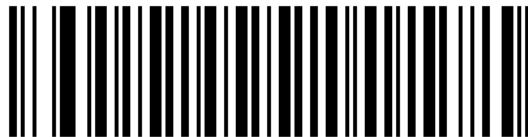
No check characters means that the Barcode Reader will read and transmit all barcodes with or without check characters. (When scanning a barcode with check characters at this time, the check characters are transmitted together)

When “Check Character” is set to “Enable, do not transmit check characters”, the Barcode Reader will verify based on the last digit of the barcode. If the verification passes, normal data except the last check character will be transmitted. If the verification fails, the barcode content will not be sent.

When “Check Character” is set to “Enable, transmit check character”, the Barcode Reader will verify based on the last digit of the barcode. If the verification passes, the check character will be transmitted together with the last digit of normal data. If the verification fails, the barcode content will not be sent.



\* No check character



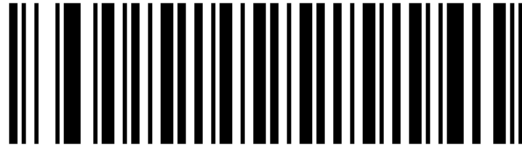
Enable, do not transmit check characters



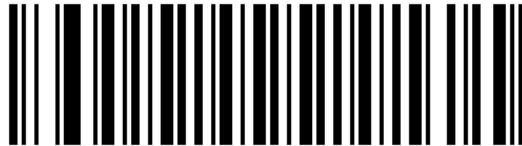
Enable, transmit check characters

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 2-80. Minimum default value=4, maximum default value=80. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

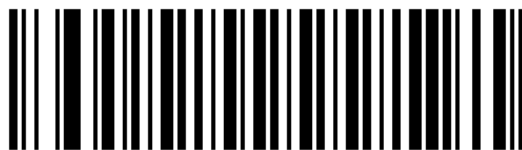


Maximum reading length

## Code 93

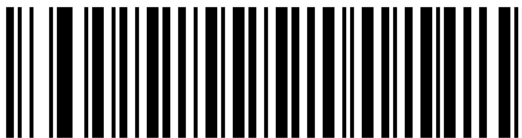
### Note

Default all Code 93 settings

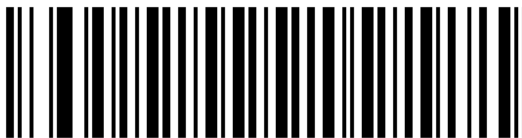


Restore Code 93 default settings

## Enable/disable



\* Enable



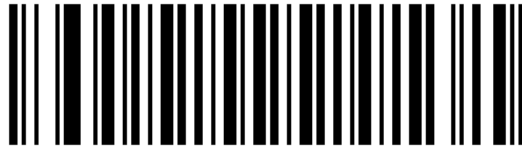
Disable

## Reading length

Scan the barcode to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 0-80. Minimum default value=0, maximum default value=80. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

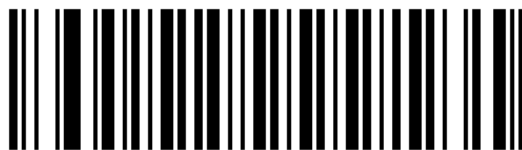


Maximum reading length

### Straight 2 of 5 Industrial (three-bar start/stop)

#### Note

Restore Straight 2 of 5 Industrial default settings



Restore Straight 2 of 5 Industrial default settings

### Enable/disable



Enable



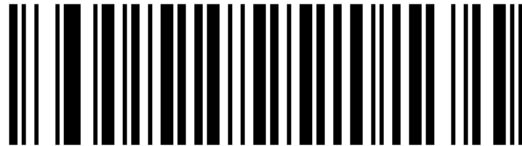
\* Disable

### Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-48. Minimum default value=4, maximum default value=48. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

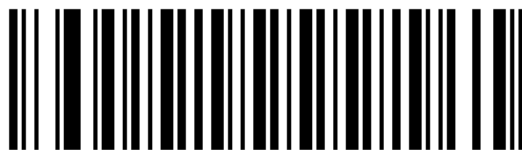


Maximum reading length

### Straight 2 of 5 IATA (two-bar start/stop)

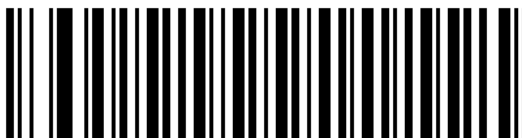
#### Note

Restore Straight 2 of 5 IATA default settings

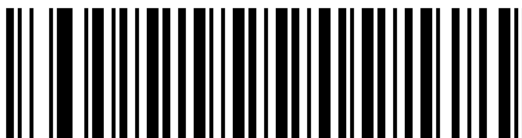


Restore Straight 2 of 5 IATA default settings

### Enable/disable



Enable



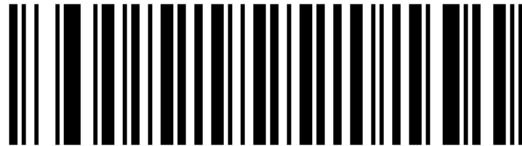
\* Disable

### Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-48. Minimum default value=4, maximum default value=48. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

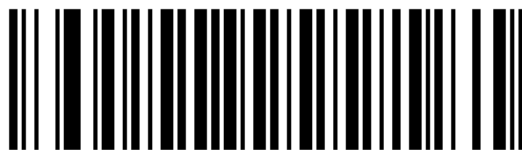


Maximum reading length

## Matrix 2 of 5

### Note

Defaults to all Matrix 2 of 5 settings



Restore Matrix 2 of 5 default settings

## Enable/disable



Enable



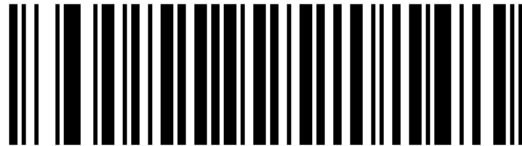
\* Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-80. Minimum default value=4, maximum default value=80. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



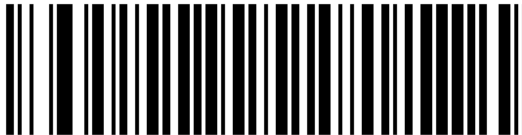
Minimum reading length



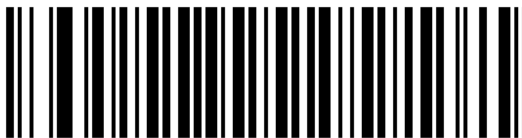
Maximum reading length

## Check

This option sets the enabling and disabling of the Matrix 2 of 5 code verification function.



Enable verification



\* Disable validation

## Code 11

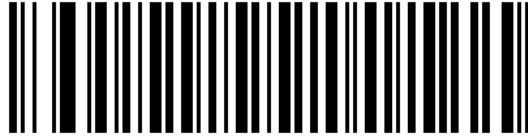
### Note

Default all settings

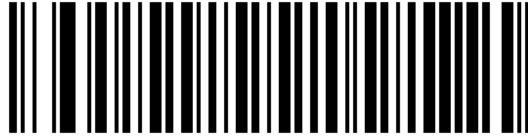


Restore Code 11 default settings

## Enable/disable



Enable



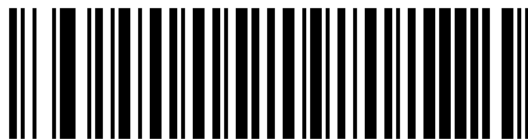
\* Disable

## Check Digit

This option sets 1 or 2 check digits for Code 11 barcodes. Default = two check digits.



a check digit



\* Two check digits

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-80. Minimum default value=4, maximum default value=80. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## Code 128

### Note

Default all Code 128 settings



Restore Code 128 default settings

## Enable/disable



\* Enable



Disable

## ISBT 128 cascade



ISBT 128 Enable



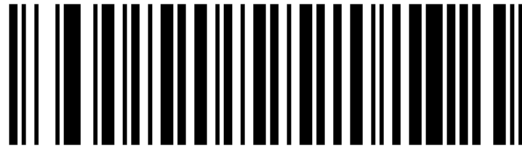
\* ISBT 128 disabled

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 0-80. Minimum default value=0, maximum default value=80. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

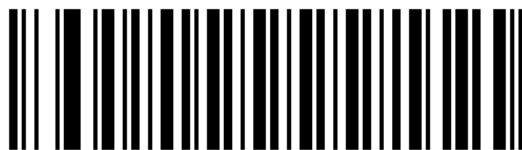


\* Maximum reading length

## GS1-128

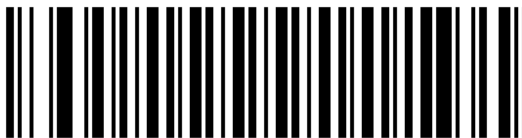
### Note

Default all GS1-128 settings

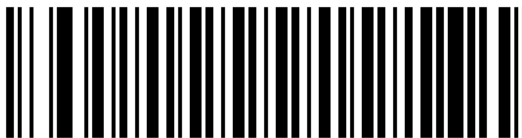


Restore GS1-128 default settings

## Enable/disable



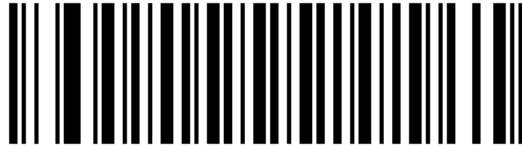
\* Enable



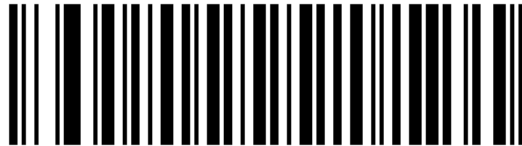
Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-80. Minimum default value=1, maximum default value=80. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

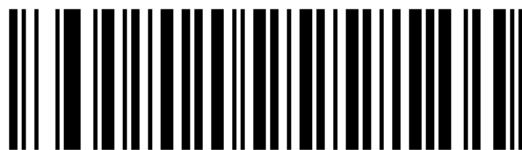


Maximum reading length

## UPC-A

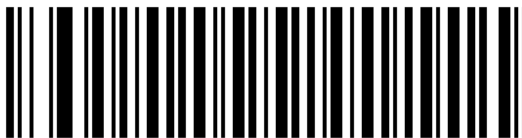
### Note

Default all UPC-A settings

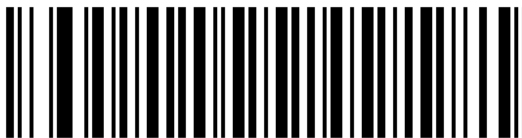


Restore UPC-A default settings

## Enable/disable



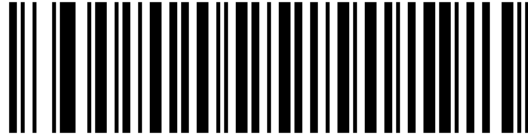
\* Enable



Disable

## Check Digit

The following configures whether a check digit should be transmitted at the end of the output data. Default = enabled.



\* Enable



Disable

### digital system

UPC numeric system characters are usually transmitted at the beginning of the output data, default = enabled.



\* Enable



Disable

### Additional code

This setting adds a two-digit or five-digit additional code to the end of all read UPC-A data.

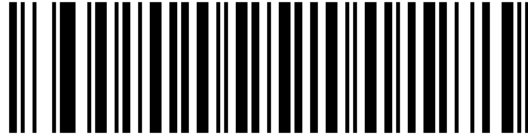
Default=2/5 digit add-on code disabled.



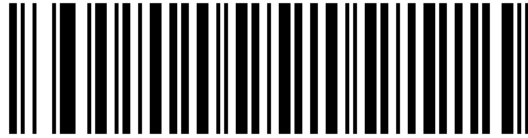
2-digit add-on code enabled



\* 2-digit appendix disabled



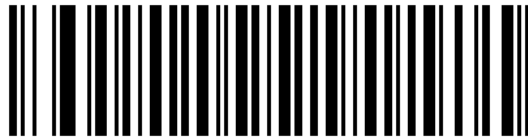
5-digit add-on code enabled



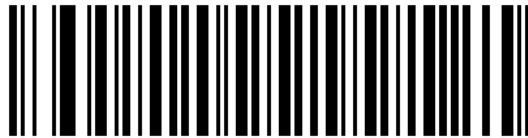
\* 5-digit appendix disabled

### Required add-on code

When “Required” is scanned, the Barcode Reader will only read UPC-A barcodes with the add-on code. Then, you must enable the 2 or 5 digit add-on code. Default=not required.



need



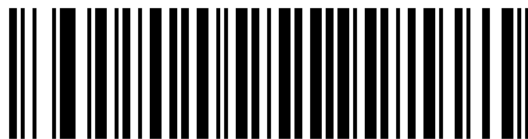
\* unnecessary

### Additional code separator

When this function is enabled, there will be a space separating the barcode and the additional code. When disabled, no space separation occurs. Default = enabled.



\* Enable



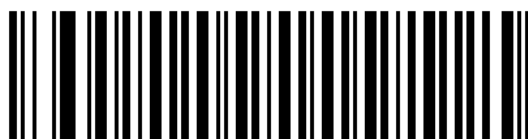
Disable

**Note**

UPC-A can be converted to EAN-13 with the following Parameter Barcode



Not turning



change

## UPC-E0

**Note**

Default all UPC-E settings



Restore UPC-E default settings

## Enable/disable

Most UPC barcodes start with the 0 digit system. To read these barcodes, scan the “\*UPC-E0 Enabled” barcode. If you need to read barcodes using the 1 digit system, please scan “UPC-E1 Enable”. Default=UPC-E0 enabled.



\* UPC-E0 enabled



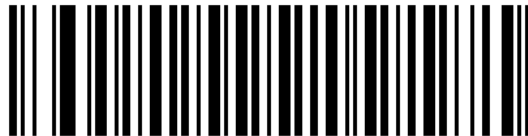
UPC-E0 disabled

## barcode extension

UPC-E Expand expands UPC-E barcodes into 12-digit UPC-A format. Default = disabled.



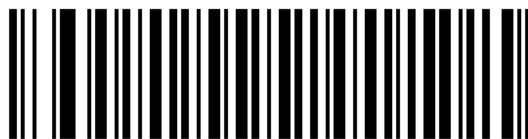
Enable



\* Disable

## Required add-on code

When “Required” is scanned, the Barcode Reader will only read UPC-E barcodes with additional codes. Default = Not required.



need



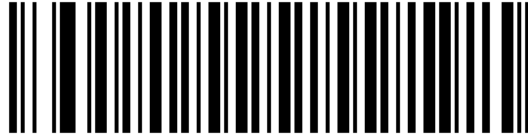
\* unnecessary

## Additional code separator

When this function is enabled, there will be a space separating the barcode and the additional code. When disabled, no space separation occurs. Default = enabled.



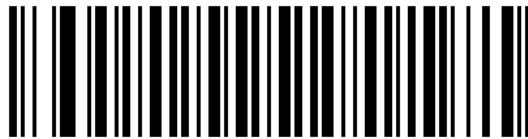
\* Enable



Disable

### Check Digit

The following configures whether a check digit should be transmitted at the end of the output data. Default = enabled.



\* Enable



Disable

### digital system

The numeric system characters of UPC are usually transmitted at the beginning of the output data. Default = enabled.



\* Enable



Disable

### Additional code

This setting adds a 2/5-digit additional code to the end of all read UPC-E data. Default=2/5 digit add-on code disabled.



2-digit add-on code enabled



\* 2-digit appendix disabled



5-digit add-on code enabled



\* 5-digit appendix disabled

## UPC-E1

Most UPC barcodes start with the 0 digit system. To read these barcodes, scan the “\*UPC-E0 Enabled” barcode. If you need to read barcodes using the 1 digit system, please scan “UPC-E1 Enable”. Default=UPC-E1 disabled.



UPC-E1 enabled

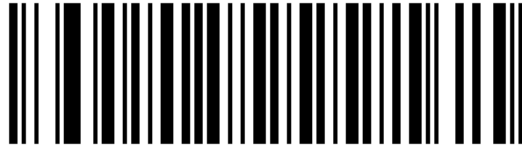


\*UPC-E1 disabled

## EAN/JAN-13

**Note**

Default all EAN/JAN settings



Restore EAN/JAN-13 default settings

### Enable/disable



\* Enable



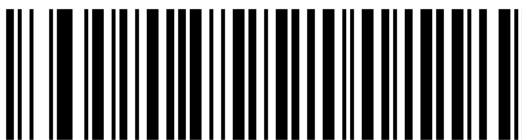
Disable

**Note**

If you want to convert a UPC-A barcode to EAN-13 format, scan the UPC-A disabled barcode.

### Check Digit

The following configures whether a check digit should be transmitted at the end of the output data. Default = enabled.



\* Enable



Disable

## Additional code

This setting adds a 2/5-digit additional code to the end of all read EAN/JAN-13 data.

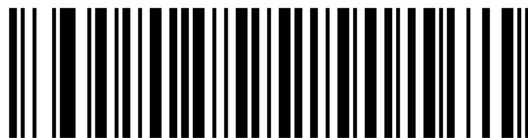
Default=2/5 digit add-on code disabled.



2-digit add-on code enabled



\* 2-digit appendix disabled



5-digit add-on code enabled



\* 5-digit appendix disabled

## Required add-on code

When scanning “Required”, the Barcode Reader will only read EAN/JAN-13 barcodes with additional codes. Default=not required.



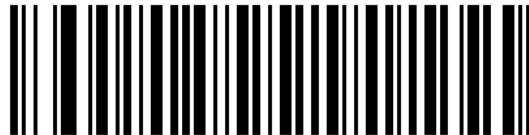
need



\* unnecessary

## Additional code separator

When this function is enabled, there will be a space separating the barcode and the additional code. When disabled, no space separation occurs. Default = enabled.



\* Enable



Disable

## ISBN Translate

When set to be transmitted in ISBN symbols, EAN-13 Bookland symbols will be converted to the equivalent ISBN symbol format. Default = disabled.



Enable



\* Disable

## EAN/JAN-8

### Note

Default all EAN/JAN-8 settings

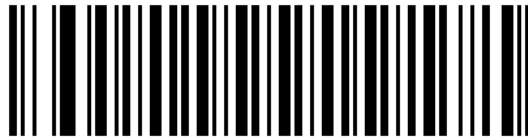


Restore EAN/JAN-8 default settings

## Enable/disable



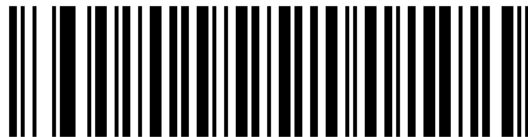
\* Enable



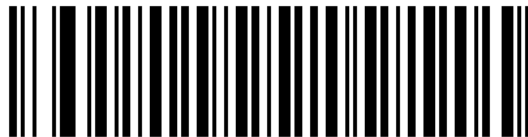
Disable

## Check character

The following configures whether a check character should be transmitted at the end of the output data.  
Default = enabled.



\* Enable



Disable

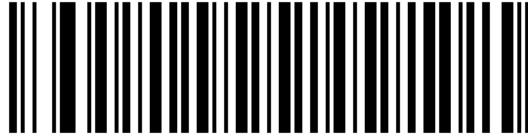
## Additional code

This setting adds a 2/5-digit additional code to the end of all read EAN/JAN-13 data.

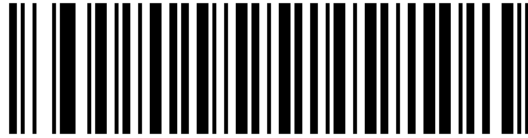
Default=2/5 digit add-on code disabled



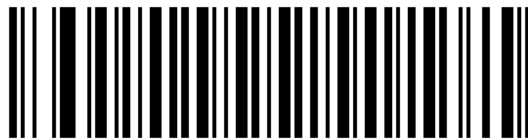
2-digit add-on code enabled



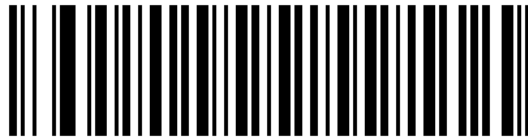
\* 2-digit appendix disabled



5-digit add-on code enabled



5-digit add-on code enabled



\* 5-digit appendix disabled

### Required add-on code

When scanning “Required” , the Barcode Reader will only read EAN/JAN-8 barcodes with additional codes. Default=not required.



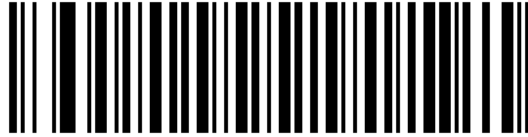
need



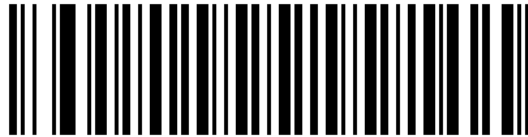
\* unnecessary

### Additional code separator

When this function is enabled, there will be a space separating the barcode and the additional code. When disabled, no space separation occurs. Default = enabled.



\* Enable



Disable

## MSI

### Note

Default all MSI settings



Restore MSI default settings

## Enable/disable



Enable



\* Disable

## Check character

MSI barcodes use different types of check characters. You can configure your Barcode Reader to read MSI barcodes using check characters. Default = MOD10 enabled, but no transmission.

When “Check Character” is set to “Enable MOD10 and Transmit” , the Barcode Reader will only read and use MSI barcodes printed with the specified type of check characters, and will transmit the characters at the end of the output data.

When “Check Character” is set to “Enable MOD10, but do not transmit”, the device will only read and use MSI barcodes printed with the specified type of check characters, but will not transmit scanned check characters.



\* Enable MOD10, but do not transmit



Enable MOD10 and transmit



Disable MSI check characters

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 4-48. Minimum default value=4, maximum default value=48. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## GS1 DataBar Omnidirectional

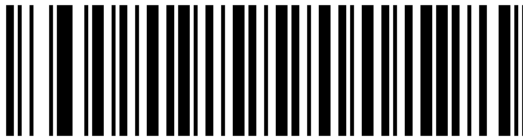
### Note

Defaults to all GS1 DataBar Omnidirectional settings



Restore GS1 DataBar Omnidirectional default settings

### Enable/disable



\* Enable

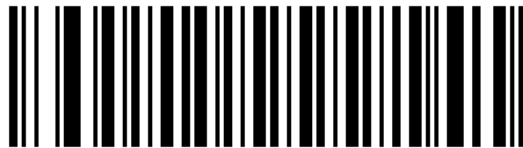


Disable

### GS1 DataBar Limited

#### Note

Defaults to all GS1 DataBar Limited settings



Restore GS1 DataBar Limited default settings

### Enable/disable



\* Enable



Disable

## GS1 DataBar Expanded

### Note

Default all settings



Restore GS1 DataBar Expanded default settings

## Enable/disable



\* Enable



Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 4-74. Minimum default value=4, maximum default value=74. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## PDF417

### Note

Default all PDF417 settings



Restore PDF417 default settings

## Enable/disable



\* Enable



Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-2750. Minimum default value=1, maximum default value=2750. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

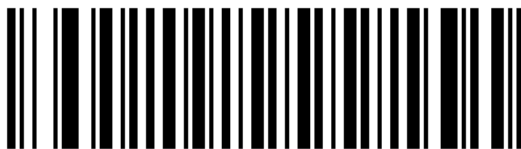


Maximum reading length

## QR Code

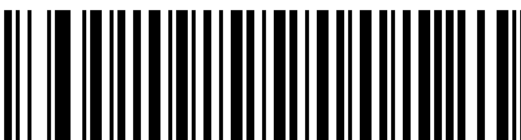
### Note

Default all QR Code settings



Restore QR Code and Micro QR Code default settings

## Enable/disable



\* Enable



Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). The minimum and maximum lengths are 1-7089. Minimum default value=1, maximum default value=7089. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## Data Matrix

### Note

Default all Data Matrix settings



Restore Data Matrix default settings

## Enable/disable



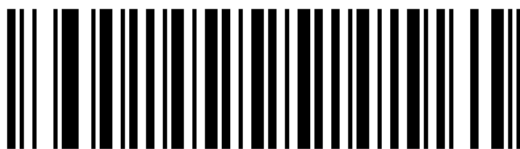
\* Enable



Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). The minimum and maximum length are 1-3116. Minimum default value=1, maximum default value=3116. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Maximum reading length

Minimum reading length



Maximum reading length

## Aztec Code

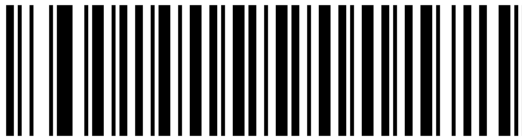
### Note

Default all Aztec Code settings



Restore Aztec Code default settings

## Enable/disable



\* Enable



Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). The minimum and maximum lengths are 1-3832. Minimum default value=1, maximum default value=3832. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length

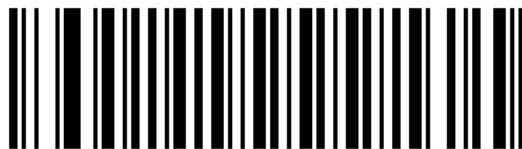


Maximum reading length

## China Post (Hong Kong 2 of 5)

### Note

Defaults to all China Post (Hong Kong 2 of 5) settings

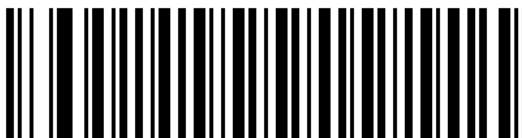


Restore China Post default settings

### Enable/disable



Enable



\* Disable

### Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 2-80. Minimum default value=4, maximum default value=80. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## Korea Post

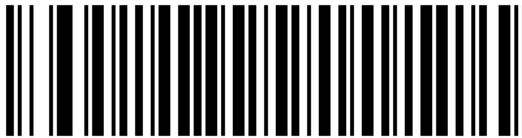
### Note

Default all settings



Restore Korea Post default settings

## Enable/disable



Enable



\* Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 2-80. Minimum default value=4, maximum default value=48. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## Check Digit

Scan the following barcode to determine whether a check digit should be transmitted at the end of the output data. Default = disabled.



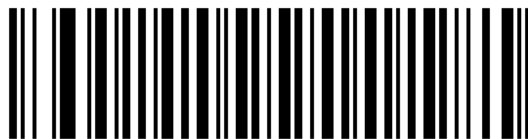
Enable



\* Disable

## Han Xin Code

### Enable/disable



Enable

#### Note

Default all Han Xin settings



Restore Han Xin Code default settings



\* Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-1000. Minimum default value=1, maximum default value=1000. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## MaxiCode

### Note

Default all MaxiCode settings



Restore MaxiCode default settings

## Enable/disable



Enable



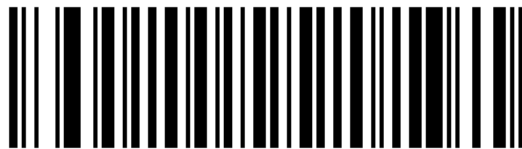
Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-150. Minimum default value=1, maximum default value=150. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## Micropdf

### Note

Default all micropdf settings



Restore MicroPDF417 default settings

## Enable/disable



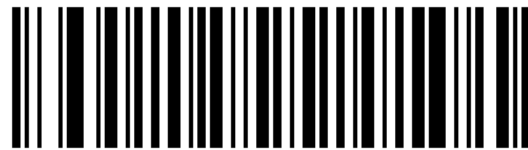
Enable



Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). The minimum and maximum length are 1-366. Minimum default value=1, maximum default value=366. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## GS1 Composite Code

### Note

Default settings for all composites



Restore GS1 Composite Code default settings

## Enable/disable



Enable



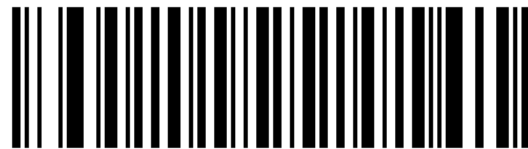
Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). The minimum and maximum lengths are 1-2435. Minimum default value=1, maximum default value=2435. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## Codablock A

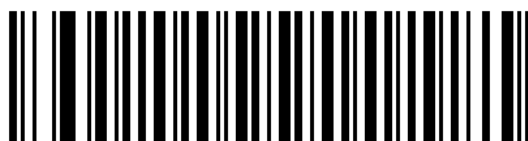
### Note

Default settings for all composites



Restore Codablock A default settings

## Enable/disable



Enable



Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). Minimum and maximum lengths are 1-600. Minimum default value=1, maximum default value=600. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## Codablock F

### Note

Default settings for all composites



Restore Codablock F default settings

## Enable/disable



Enable



Disable

## Reading length

Scan the barcode below to change the read length. For additional information, see [Reading length description](#). The minimum and maximum lengths are 1-2048. Minimum default value=1, maximum default value=2048. (Note: After scanning the “minimum reading length” and “maximum reading length”, you need to scan the specified reading length and save the barcode, please refer to [Reading length description](#))



Minimum reading length



Maximum reading length

## 5 Appendix

### 5.1 1D Symbolologies

| Symbology                          | AIM | HS7                   |    |     |
|------------------------------------|-----|-----------------------|----|-----|
|                                    | ID  | Possible Modifiers(m) | ID | Hex |
| All Symbolologies                  |     |                       |    | 99  |
| Codabar                            | ]Fm | 0-1                   | a  | 61  |
| Code 11                            | ]H3 |                       | h  | 68  |
| Code 128                           | ]Cm | 0, 1, 2, 4            | j  | 6A  |
| Code 32 Pharmaceutical (PARAF)     | ]X0 |                       | <  | 3C  |
| Code 39 (supports Full ASCII mode) | ]Am | 0, 1, 3, 4,5,7        | b  | 62  |
| TCIF Linked Code 39 (TLC39)        | ]L2 |                       | T  | 54  |
| Code 93 and 93i                    | ]Gm | 0-9, A-Z, a-m         | i  | 69  |
| EAN                                | ]Em | 0, 1, 3, 4            | d  | 64  |

continues on next page

Table 1 – continued from previous page

| Symbology                        | AIM | HS7                       |   |      |
|----------------------------------|-----|---------------------------|---|------|
| EAN-13 (including Bookland EAN)  | JE0 |                           | d | 64   |
| EAN-13 with Add-On               | JE3 |                           | d | 64   |
| EAN-13 with Extended Coupon Code | JE3 |                           | d | 64   |
| EAN-8                            | JE4 |                           | D | 44   |
| EAN-8 with Add-On                | JE3 |                           | D | 44   |
| GS1                              |     |                           |   |      |
| GS1 DataBar                      | jem | 0                         | y | 79   |
| GS1 DataBar Limited              | jem |                           | { | 7B   |
| GS1 DataBar Expanded             | jem |                           | } | 7D   |
| GS1-128                          | JC1 |                           | I | 49   |
| 2 of 5                           |     |                           |   |      |
| China Post (Hong Kong 2 of 5)    | JX0 |                           | Q | 51   |
| Interleaved 2 of 5               | JIm | 0, 1, 3                   | e | 65   |
| Matrix 2 of 5                    | JX0 |                           | m | 6D   |
| NEC 2 of 5                       | JX0 |                           | Y | 59   |
| Straight 2 of 5                  | JRm | 0, 1, 3                   | f | 66   |
| IATA                             |     |                           |   |      |
| Straight 2 of 5 Industrial       | JS0 |                           | f | 66   |
| MSI                              | JMm | 0, 1                      | g | 67   |
| Telepen                          | JBm |                           | t | 74   |
| UPC                              |     | 0, 1, 2, 3, 8, 9, A, B, C |   |      |
| UPC-A                            | JE0 |                           | c | 63   |
| UPC-A with Add-On                | JE3 |                           | c | 63   |
| UPC-A with Extended Coupon Code  | JE3 |                           | c | 63   |
| UPC-E                            | JE0 |                           | E | 45   |
| UPC-E with Add-On                | JE3 |                           | E | 45   |
| UPC-E1                           | JX0 |                           | E | 45   |
| Add HS7 Code ID                  |     |                           |   | 5C80 |
| Add AIM Code ID                  |     |                           |   | 5C81 |
| Add Backslash                    |     |                           |   | 5C5C |

continues on next page

Table 1 – continued from previous page

| Symbology  | AIM | HS7 |
|------------|-----|-----|
| Batch Mode | 5   | 35  |
| Quantity   |     |     |

## 5.2 2D Symbologies

| Symbology                            | AIM | HS7                   |    |     |
|--------------------------------------|-----|-----------------------|----|-----|
|                                      | ID  | Possible Modifiers(m) | ID | Hex |
| All Symbologies                      |     |                       |    | 99  |
| Aztec Code                           | ]zm | 0-9, A-C              | z  | 7A  |
| Chinese Sensible Code (Han Xin Code) | ]X0 |                       | H  | 48  |
| Codablock A                          | ]O6 | 0, 1, 4, 5, 6         | V  | 56  |
| Codablock F                          | ]Om | 0, 1, 4, 5, 6         | q  | 71  |
| Code 49                              | ]Tm | 0, 1, 2, 4            | l  | 6C  |
| Data Matrix                          | ]dm | 0-6                   | w  | 77  |
| GS1                                  | ]em | 0-3                   | y  | 79  |
| GS1 Composite                        | ]em | 0-3                   | y  | 79  |
| GS1DataBar Omnidirectional           | ]em | 0-3                   | y  | 79  |
| MaxiCode                             | ]Um | 0-3                   | x  | 78  |
| PDF417                               | ]Lm | 0-2                   | r  | 72  |
| MicroPDF417                          | ]Lm | 0-5                   | R  | 52  |
| QR Code                              | ]Qm | 0-6                   | s  | 73  |
| Micro QR                             | ]Qm |                       | s  | 73  |

## 5.3 Postal Code

| Symbology                 | AIM | HS7                   |    |     |
|---------------------------|-----|-----------------------|----|-----|
|                           | ID  | Possible Modifiers(m) | ID | Hex |
| All Symbologies           |     |                       |    | 99  |
| Australian Post           | ]X0 |                       | A  | 41  |
| British Post              | ]X0 |                       | B  | 42  |
| Canadian Post             | ]X0 |                       | C  | 43  |
| China Post                | ]X0 |                       | Q  | 51  |
| InfoMail                  | ]X0 |                       | ,  | 2c  |
| Intelligent Mail Bar Code | ]X0 |                       | M  | 4D  |
| Japanese Post             | ]X0 |                       | J  | 4A  |
| KIX (Netherlands) Post    | ]X0 |                       | K  | 4B  |
| Korea Post                | ]X0 |                       | ?  | 3F  |
| Planet Code               | ]X0 |                       | L  | 4C  |
| Postal-4i                 | ]X0 |                       | N  | 4E  |
| Postnet                   | ]X0 |                       | P  | 50  |

## 5.4 ASCII Conversion Table

| Hexadecimal | decimal | Character                       |
|-------------|---------|---------------------------------|
| 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 (Inquiry)                   |
| 06          | 6       | ACK (Acknowledgment)            |
| 07          | 7       | BEL (Bell)                      |
| 08          | 8       | BS (Backspace)                  |
| 09          | 9       | HT (Horizontal Tab)             |
| 0a          | 10      | LF (Line Feed)                  |
| 0b          | 11      | VT (Vertical Tab)               |
| 0c          | 12      | FF (Form Feed)                  |
| 0d          | 13      | CR (Carriage Return)            |
| 0e          | 14      | SO (Shift Out)                  |
| 0f          | 15      | SI (Shift In)                   |
| 10          | 16      | DLE (Data Link Escape)          |
| 11          | 17      | DC1 (XON) (Device Control 1)    |
| 12          | 18      | DC2 (Device Control 2)          |
| 13          | 19      | DC3 (XOFF) (Device Control 3)   |
| 14          | 20      | DC4 (Device Control 4)          |
| 15          | 21      | NAK (Negative Acknowledgment)   |
| 16          | 22      | SYN (Synchronous Idle)          |
| 17          | 23      | ETB (End of Trans. Block)       |
| 18          | 24      | CAN (Cancel)                    |
| 19          | 25      | EM (End of Medium)              |
| 1a          | 26      | SUB (Substitute)                |
| 1b          | 27      | ESC (Escape)                    |
| 1c          | 28      | FS (File Separator)             |
| 1d          | 29      | GS (Group Separator)            |
| 1e          | 30      | RS (Request to Send)            |
| 1f          | 31      | US (Unit Separator)             |
| 20          | 32      | SP (Space)                      |
| 21          | 33      | ! (Exclamation Mark)            |
| 22          | 34      | " (Double Quote)                |
| 23          | 35      | # (Number Sign)                 |
| 24          | 36      | \$ (Dollar Sign)                |
| 25          | 37      | % (Percent)                     |
| 26          | 38      | & (Ampersand)                   |
| 27          | 39      | ` (Single Quote)                |
| 28          | 40      | ((Right / Closing Parenthesis)  |
| 29          | 41      | ) (Right / Closing Parenthesis) |
| 2a          | 42      | *(Asterisk)                     |
| 2b          | 43      | + (Plus)                        |
| 2c          | 44      | , (Comma)                       |

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Table 2 – continued from previous page

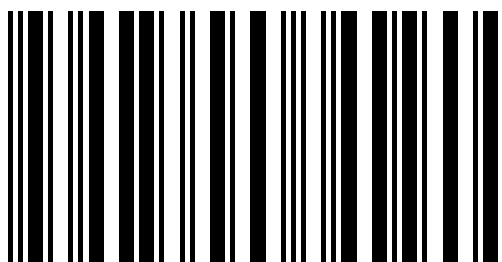
| Hexadecimal | decimal | Character               |
|-------------|---------|-------------------------|
| 2d          | 45      | - (Minus / Dash)        |
| 2e          | 46      | . (Dot)                 |
| 2f          | 47      | / (Forward Slash)       |
| 30          | 48      | 0                       |
| 31          | 49      | 1                       |
| 32          | 50      | 2                       |
| 33          | 51      | 3                       |
| 34          | 52      | 4                       |
| 35          | 53      | 5                       |
| 36          | 54      | 6                       |
| 37          | 55      | 7                       |
| 38          | 56      | 8                       |
| 39          | 57      | 9                       |
| 3a          | 58      | :(Colon)                |
| 3b          | 59      | ;(Semi-colon)           |
| 3c          | 60      | < (Less Than)           |
| 3d          | 61      | = (Equal Sign)          |
| 3e          | 62      | > (Greater Than)        |
| 3f          | 63      | ? (Question Mark)       |
| 40          | 64      | @ (AT Symbol)           |
| 41          | 65      | A                       |
| 42          | 66      | B                       |
| 43          | 67      | C                       |
| 44          | 68      | D                       |
| 45          | 69      | E                       |
| 46          | 70      | F                       |
| 47          | 71      | G                       |
| 48          | 72      | H                       |
| 49          | 73      | I                       |
| 4a          | 74      | J                       |
| 4b          | 75      | K                       |
| 4c          | 76      | L                       |
| 4d          | 77      | M                       |
| 4e          | 78      | N                       |
| 4f          | 79      | O                       |
| 50          | 80      | P                       |
| 51          | 81      | Q                       |
| 52          | 82      | R                       |
| 53          | 83      | S                       |
| 54          | 84      | T                       |
| 55          | 85      | U                       |
| 56          | 86      | V                       |
| 57          | 87      | W                       |
| 58          | 88      | X                       |
| 59          | 89      | Y                       |
| 5a          | 90      | Z                       |
| 5b          | 91      | [(Left/Opening Bracket) |
| 5c          | 92      | \ (Back Slash)          |

continues on next page

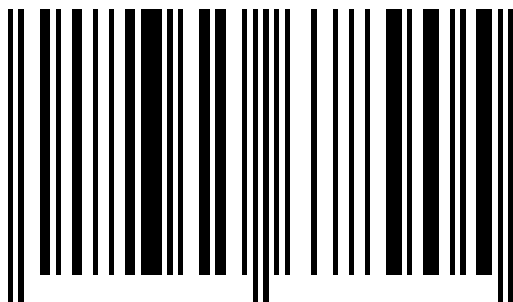
Table 2 – continued from previous page

| Hexadecimal | decimal | Character                   |
|-------------|---------|-----------------------------|
| 5d          | 93      | ] (Right / Closing Bracket) |
| 5e          | 94      | ^ (Caret/Circumflex)        |
| 5f          | 95      | _ (Underscore)              |
| 60          | 96      | ` (Grave Accent)            |
| 61          | 97      | a                           |
| 62          | 98      | b                           |
| 63          | 99      | c                           |
| 64          | 100     | d                           |
| 65          | 101     | e                           |
| 66          | 102     | f                           |
| 67          | 103     | g                           |
| 68          | 104     | h                           |
| 69          | 105     | i                           |
| 6a          | 106     | j                           |
| 6b          | 107     | k                           |
| 6c          | 108     | l                           |
| 6d          | 109     | m                           |
| 6e          | 110     | n                           |
| 6f          | 111     | o                           |
| 70          | 112     | p                           |
| 71          | 113     | q                           |
| 72          | 114     | r                           |
| 73          | 115     | s                           |
| 74          | 116     | t                           |
| 75          | 117     | u                           |
| 76          | 118     | v                           |
| 77          | 119     | w                           |
| 78          | 120     | x                           |
| 79          | 121     | y                           |
| 7a          | 122     | z                           |
| 7b          | 123     | { (Left/Opening Brace)      |
| 7c          | 124     | (Vertical Bar)              |
| 7d          | 125     | } (Right/Closing Brace)     |
| 7e          | 126     | ~ (Tilde)                   |
| 7f          | 127     | DEL (Delete)                |

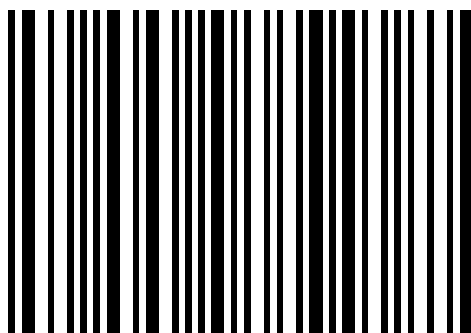
## 5.5 Barcode example



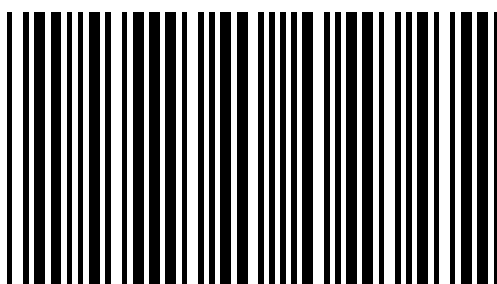
Example content: 1234567890



Example content: 0012345678905



Example content: A13579B



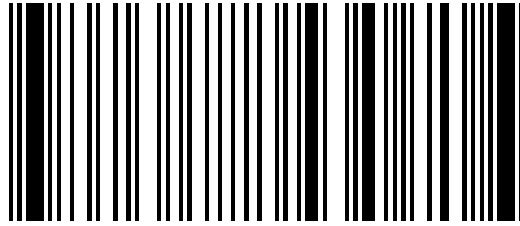
Example content: BC321



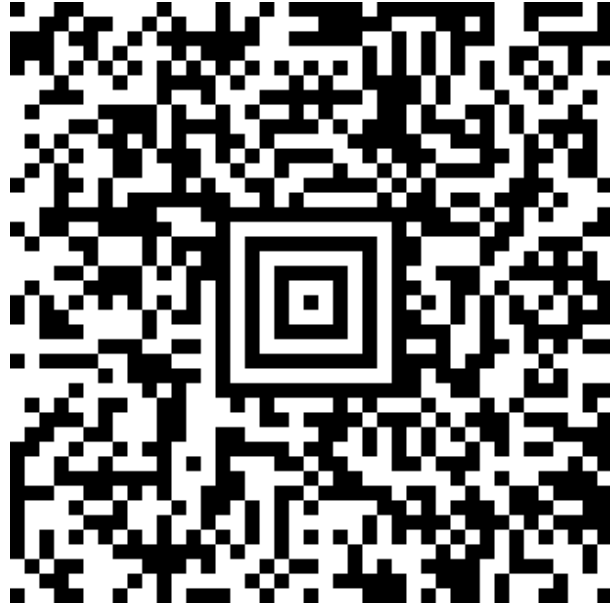
Example content: 9780330290951



Example content: Code 128



Example content: 123456-9\$



Example content: Package #98765-43210<CR><LF>Ship To:<CR><LF>Jane Doe<CR><LF>123 Main  
Street<CR><LF>Anywhere, NY 12345<SUB>



Example content: 01234567

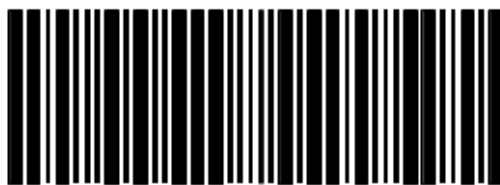
## Matrix 2 of 5



6543210

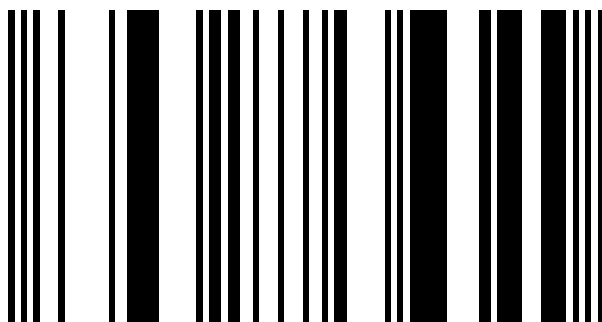
Barcode example picture

## Straight 2 of 5 Industrial

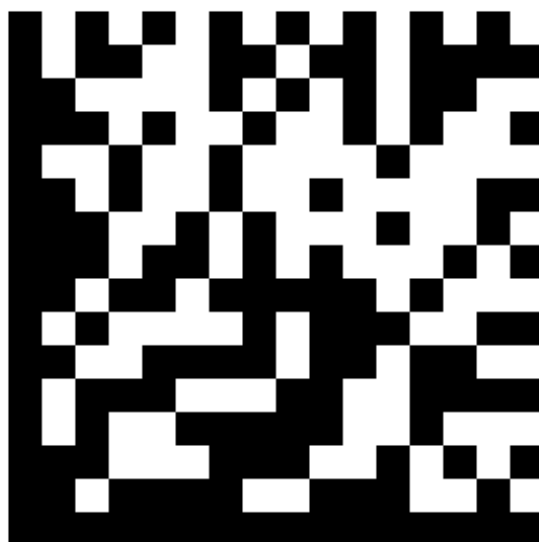


123456

Barcode example picture



Example content: (01) 00123456789012



Example content: Test Symbol

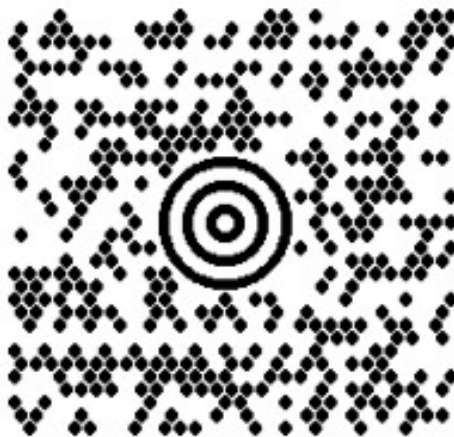
## Micro PDF417



Test Message

Barcode example picture

## MaxiCode



Test Message

Barcode example picture



Example content: 1998 Chev Blazer<CR>123437486089J672<CR>Reg PAN 123 ABC Dec 1999

5.6 Appendix Charts



0



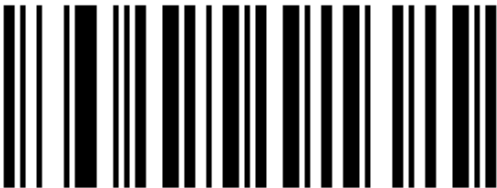
1



2



3



4



5



6



7



8



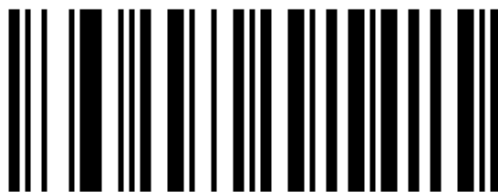
9



A



B



C



D



E



F



Save



give up

**Note**

If an error occurs while scanning letters or numbers (before scanning the Save barcode), scan the Abandon barcode, rescan the correct letters or numbers, and then scan the Save barcode.

## 5.7 Keyboard operation ASCII conversion

| Hexadecimal | decimal | CTRL+X | Description          |
|-------------|---------|--------|----------------------|
| 00          | 0       | CTRL+@ |                      |
| 01          | 1       | CTRL+A | Select all           |
| 02          | 2       | CTRL+B | Bold                 |
| 03          | 3       | CTRL+C | copy                 |
| 04          | 4       | CTRL+D | Font format          |
| 05          | 5       | CTRL+E | center alignment     |
| 06          | 6       | CTRL+F | Find                 |
| 07          | 7       | CTRL+G | position             |
| 08          | 8       | CTRL+H | replace              |
| 09          | 9       | CTRL+I | italics              |
| 0a          | 10      | CTRL+J | Justify              |
| 0b          | 11      | CTRL+K | hyperlink            |
| 0c          | 12      | CTRL+L | left aligned         |
| 0d          | 13      | CTRL+M | left indent          |
| 0e          | 14      | CTRL+N | New                  |
| 0f          | 15      | CTRL+O | Enable               |
| 10          | 16      | CTRL+P | Print                |
| 11          | 17      | CTRL+Q |                      |
| 12          | 18      | CTRL+R | Align right          |
| 13          | 19      | CTRL+S | Save                 |
| 14          | 20      | CTRL+T | First line indent    |
| 15          | 21      | CTRL+U | Underline F12        |
| 16          | 22      | CTRL+V | Paste F1             |
| 17          | 23      | CTRL+W | Write disk closed F2 |
| 18          | 24      | CTRL+X | cut F3               |
| 19          | 25      | CTRL+Y | repeat F4            |
| 1a          | 26      | CTRL+Z | Cancel F5            |
| 1b          | 27      | CTRL+[ | F6                   |
| 1c          | 28      | CTRL+\ | F7                   |
| 1d          | 29      | CTRL+] | F8                   |
| 1e          | 30      | CTRL+^ | F9                   |
| 1f          | 31      | CTRL+- | F10                  |
| 7f          | 32      | CTRL+  |                      |