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# **330 Barcode Scanner User Manual**

*Release v1.1.1*

**2026-09-02**

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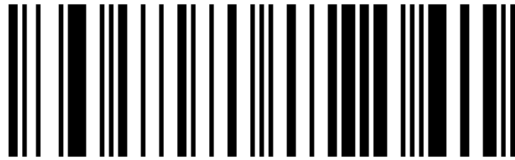
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# 1 System Settings

## 1.1 Factory Default Settings

Scan the following Parameter Barcode to restore the product to factory default settings.



Restore Secondary Factory Defaults

## 1.2 Product User Configuration

Scan the following Parameter Barcode to save the current parameters as user configuration.



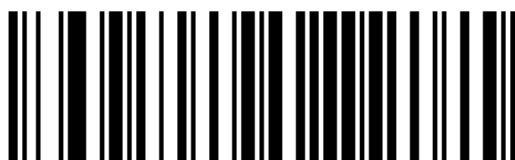
Save User Configuration

Scan the following Parameter Barcode to restore the saved user configuration.



Restore User Configuration

## 1.3 Firmware Version



Firmware Version

## 1.4 Buzzer Settings

### Volume Level

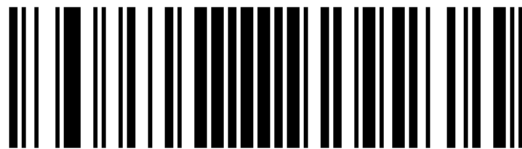


Low Volume

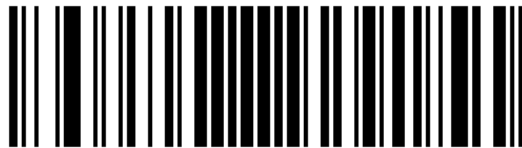


\* High Volume

### Barcode Reader Power-On Beep Enable/Disable



Disable Barcode Reader Power-On Beep



\* Enable Barcode Reader Power-On Beep

### Good Read Beep Enable/Disable



Disable Good Read Beep

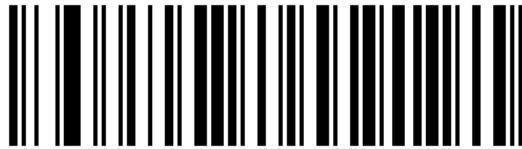


\* Enable Good Read Beep

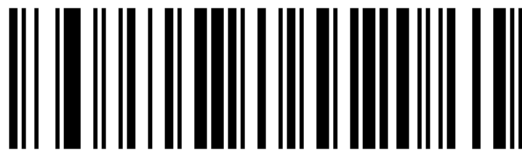
## Good Read Beep Frequency (Tone)



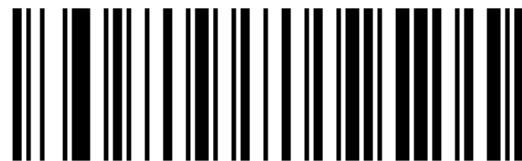
\* Good Read Beep Frequency 1



Good Read Beep Frequency 2

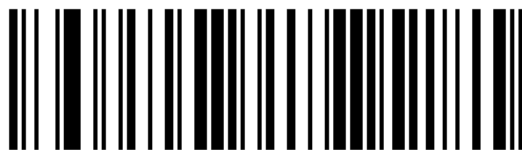


Decode Beep Frequency 3



Custom Decode Beep Frequency

## Decode Beep Duration



\* Decode Beep 1



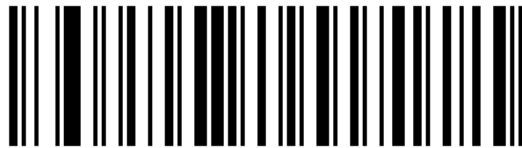
Decode Beep 2

## Error Alert Tone Frequency

Four consecutive error beeps sound when data transmission fails. A single error beep sounds when an unrecognized Parameter Barcode is scanned.



\* Low Error Alert Tone Frequency



Medium Error Alert Tone Frequency



High Error Alert Tone Frequency

## 2 Device Feature Settings

### 2.1 Light Settings

#### LED Indicator



Disable Good Read LED Indicator



\* Enable Good Read LED Indicator

### 2.2 Invoice function

#### Enable/Disable Invoice Function



\* Disable Invoice Function



Enable Invoice Function

#### Important

Enabling the invoice function depends on correct Chinese character and encoding output settings. GBK encoding is recommended (Notepad/Excel). Also disable features such as Code ID, custom prefixes/suffixes, and start characters that modify the original barcode content.

### Invoice Type Selection



\* Special invoice



Ordinary invoice

## 3 Trigger Settings

### 3.1 Scan Mode



\* Normal mode



1D Quick Scan Mode

### Same Symbol Timeout

Used to configure the interval for decoding the same barcode. If the configured time has not elapsed, the same barcode will be decoded only once.



Same Symbol Timeout: 300 ms



\* Same Symbol Timeout: 500 ms



Same Symbol Timeout: 750 ms



Same Symbol Timeout: 1 s



Same Symbol Timeout: 2 s



Same Symbol Timeout: 5 s



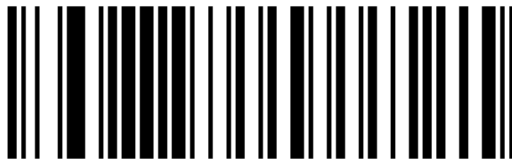
Same Symbol Timeout: 10 s

## 4 Interface Settings

This barcode reader supports USB HID Keyboard and USB COM interface modes.

### 4.1 USB HID Keyboard

Scan the parameter barcode below to configure the barcode reader for USB HID Keyboard.



USB HID Keyboard

### 4.2 USB COM

Scan the parameter barcode below to configure the barcode reader for USB COM. Install the required driver before using this mode.



USB COM

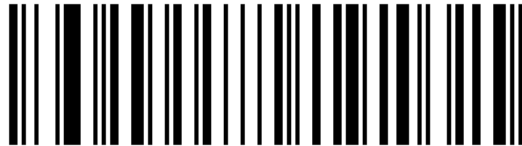
## 5 Keyboard Settings

### 5.1 USB Keyboard Settings

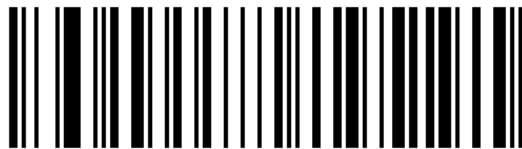
#### Control Character Escape



Enable Control Character Escape 1

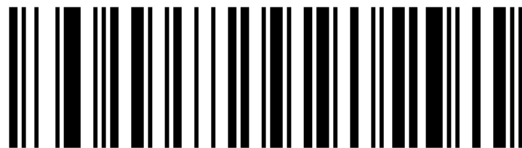


Enable Control Character Escape 2



Disable Control Character Escape

### Handling of Carriage Return/Line Feed in Barcode Data (USB Keyboard)



Use Only 0A (LF) as Line Feed



\* Use Only 0D (CR) as Line Feed



Use Both 0A (LF) and 0D (CR) as Line Feed

### USB Keyboard Output Speed

**Note**

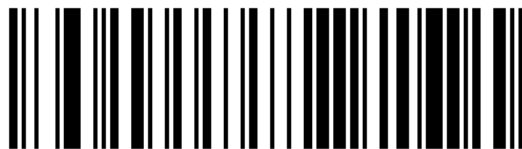
Used to configure the output speed in USB keyboard mode. If the host performance is limited, low speed is recommended to ensure reliable transmission.



\* Low Output Speed



Medium Output Speed



High Output Speed



Custom Output Speed (2 ms to 50 ms)

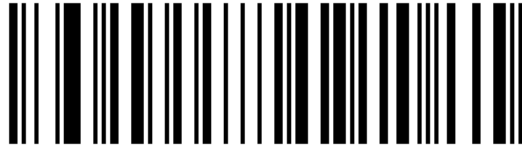
## USB Keyboard Letter Case Control



\* Normal Output



Invert Letter Case

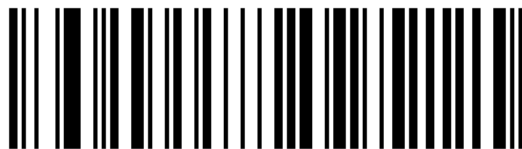


all caps

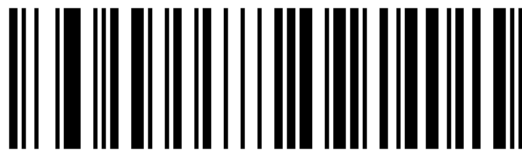


all lowercase

## Keyboard Layout Selection



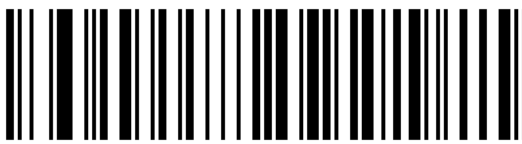
\* English (United States)



French (France)



Italian (Italy)



Italian 142 (Italy)



German (Germany)



Spanish (Spain)



Spanish (Latin America)



Finnish



Japanese



Russian (MS)



Russian (typewriter)



Arabic (101)



Irish



Polish (214)



Polish (Programmers)



Dutch (Netherlands)



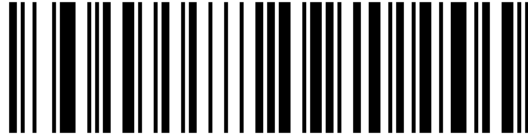
Czech (QWERTZ)



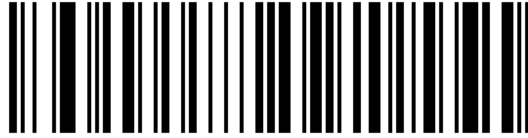
Portuguese (Portugal)



Portuguese (Brazil)



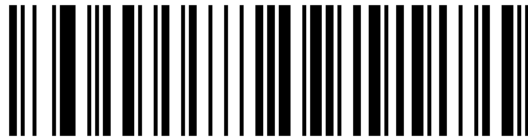
Swedish (Sweden)



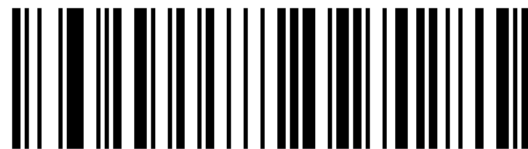
Turkish Q



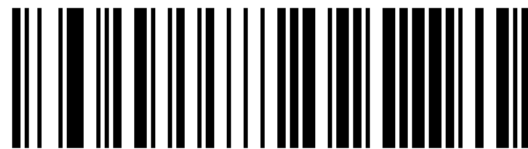
Turkish F



Greek (MS)



French (Belgium)



English (UK)

## Virtual Keyboard

Mode 1: Characters between 0x20 and 0xFF that are not supported in the current keyboard layout are output using the virtual keyboard. Characters between 0x00 and 0x1F are output according to *Control Character Set (USB Keyboard Mode)*.

Mode 2: All characters between 0x20 and 0xFF are output using the virtual keyboard. Characters between 0x00 and 0x1F are output according to *Control Character Set (USB Keyboard Mode)*.

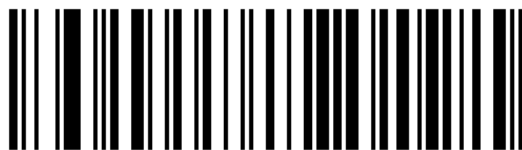
Mode 3: All characters used between 0x00 and 0xFF are output using the virtual keyboard.



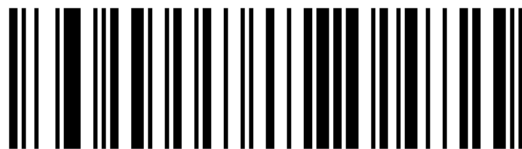
\* Virtual Keyboard Disable



Virtual Keyboard Enable (Mode 1)



Virtual Keyboard Enable (Mode 2)



Virtual Keyboard Enable (Mode 3)

### Host Operating System Selection in Virtual Keyboard Mode



\\* WINDOWS



MAC OS

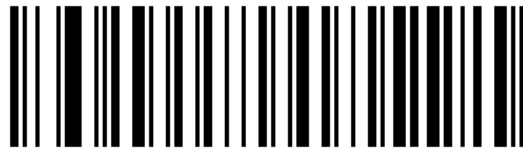


LINUX

## Output Encoding Format

To output correctly in the specified encoding format, configure the output encoding format accordingly. For example, use GBK for Simplified Chinese output in Notepad/Excel, and Unicode for output in Word.

When the output encoding format is set to English/Latin-1, USB keyboard output is affected by the virtual keyboard switch. When it is set to GBK or Unicode, USB keyboard output is forced to use the virtual keyboard.



\* Native Keyboard Output



Chinese GBK Encoding (Notepad/Excel)



Unicode Encoding (Word)

## 6 Data Editing

### 6.1 Prefix and Suffix Settings

#### Prefix



\* Do Not Use Prefix



Set Prefix to STX

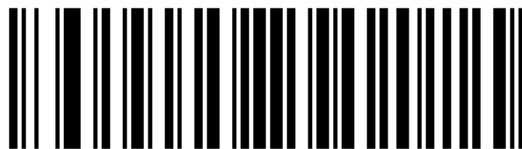
## Terminator



Do Not Use terminator



Set terminator to Carriage Return



Set terminator to Line Feed



\* Set terminator to Carriage Return + Line Feed



Set terminator to Tab



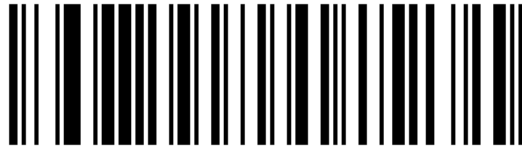
Set terminator to ETX

## Custom Prefix

## Output Options



Enable Custom Prefix Output



\* Disable Custom Prefix Output

## Edit



Clear All Custom Prefixes



Custom Prefix

### See also

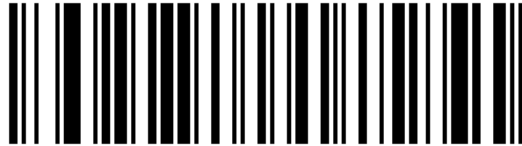
After scanning this Parameter Barcode, refer to *Barcode Type ID Table* and *Data and Editing Barcodes* to complete the remaining input.

## Custom Suffix

### Output Options

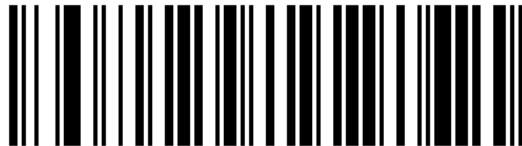


Enable Custom Suffix Output

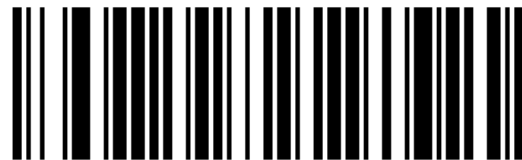


\* Disable Custom Suffix Output

## Edit



Clear All Custom Suffixes



Custom Suffix

### See also

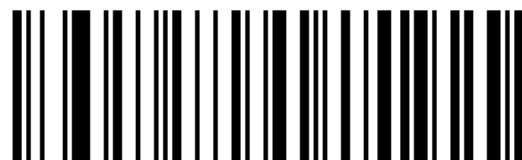
After scanning this Parameter Barcode, refer to *Barcode Type ID Table* and *Data and Editing Barcodes* to complete the remaining input.

## Code ID

### Output Options



\* Disable Code ID

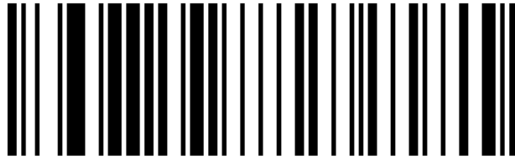


Enable Code ID Before Barcode Data



Enable Code ID After Barcode Data

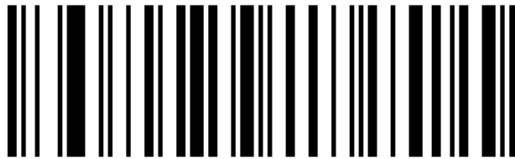
## Edit



Custom Code ID

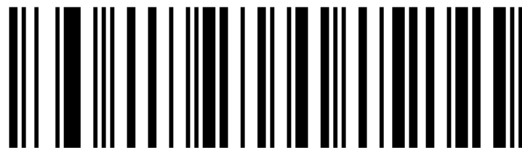
### See also

After scanning this Parameter Barcode, refer to *Barcode Type ID Table* and *Data and Editing Barcodes* to complete the remaining input.



Clear All Custom Code IDs

## AIM ID



\* Disable AIM ID



Enable AIM ID Before Barcode Data



Enable AIM ID After Barcode Data

## Barcode Prefix/Suffix Order Selection

### Prefix



\* Start Character + Code ID + AIM ID + Custom Prefix

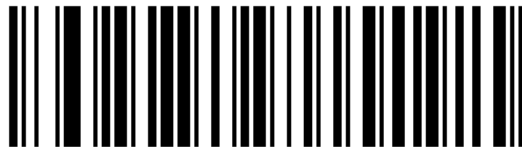


Start Character + Custom Prefix + Code ID + AIM ID

### Suffix



\* Custom Suffix + Code ID + AIM ID + Terminator



Code ID + AIM ID + Custom Suffix + Terminator

## 6.2 Data Editing Field Settings

The data editing function can divide the complete Data field of the barcode content into the Start, Center, and End fields by configuring the Start/End field lengths. Configure the Start/End field lengths and transmission options as needed.

### Note

Custom prefixes and suffixes, start characters, terminators, Code ID, AIM ID, and other content outside the barcode data itself are not affected by the data editing function.

## Transmission Settings



\* Transmit Complete Data Field



Transmit Start Field Only



Transmit Center Field Only



Transmit End Field Only

## Field Length Settings



Set Start Field Length



Set End Field Length

### Note

Field lengths are configured in bytes using decimal values.

### Example

Set the Start field length to 10 bytes:

1. Scan the “Set Start Field Length” Parameter Barcode.
2. Scan 1 and 0 in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.

## 7 Character Settings

### 7.1 GS Control Character Replacement



\* Do Not Replace

### Important

To output the character “Ç”, first scan “Enable Virtual Keyboard (Mode 1)”, (Mode 2), or (Mode 3).



Replace with Ç



Replace with I



Replace with ^)]

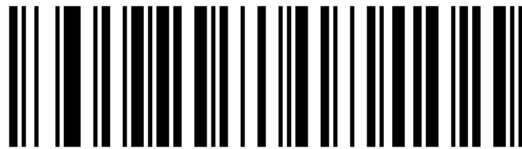


Replace with ]

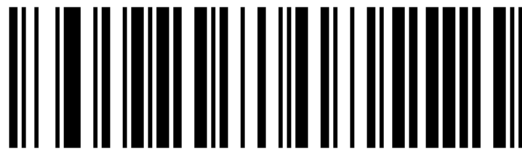


Replace with

## 7.2 Control Character Output



Do Not Output Control Characters in Barcode Data



\* Output Control Characters in Barcode Data

## 8 Barcode Settings

### 8.1 Symbology Selection

#### Enable/Disable All Barcodes

##### Note

Enabling all barcode types may reduce decoding speed. Enable only the required barcode types based on your application. All barcode types are enabled by default.

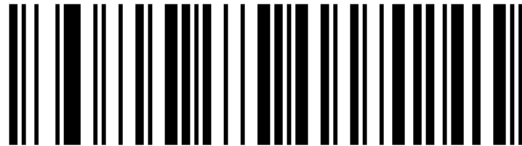


Enable All Barcode Types

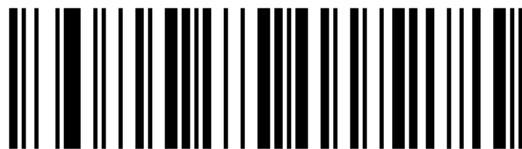


Disable All Barcode Types

### **Enable/Disable All 1D Barcodes**

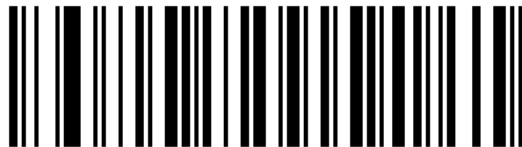


Enable All 1D Symbolologies



Disable All 1D Symbolologies

### **Enable/Disable All 2D Barcodes**



Enable All 2D Symbolologies



Disable All 2D Symbolologies

### **Codabar**

#### **Enable/Disable Symbology**



Codabar Enable



Codabar Disable

## Codabar Start/Stop Characters



\* Do Not Transmit Codabar Start/Stop Characters

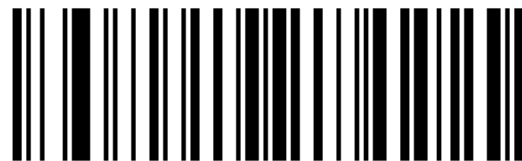


Transmit Codabar Start/Stop Characters

## Codabar Length Restriction Settings

### Note

Length Range: 0–50 digits.



Codabar Minimum Length Restriction

### Note

Length Range: 0–50 digits.



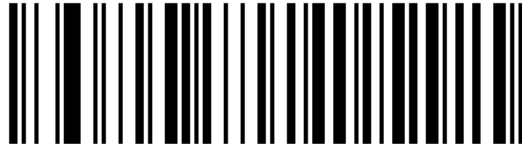
Codabar Maximum Length Restriction

## Code 39

### Enable/Disable Symbology



Code 39 Enable



Code 39 Disable

### Code 39 Check Digit



\* Disable Code 39 Check Digit



Enable Code 39 Check Digit Without Transmitting the Check Digit



Enable Code 39 Check Digit and Transmit the Check Digit

### Code 39 Full ASCII

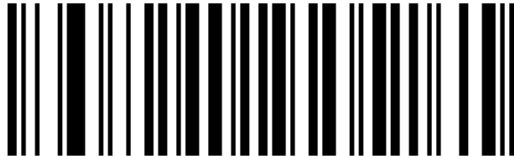


Enable Full ASCII



\* Disable Full ASCII

## Code 39 Start/Stop Characters



\* Do Not Transmit Code 39 Start/Stop Characters



Transmit Code 39 Start/Stop Characters

## Code 39 Length Limit Settings

### Note

Length Range: 0-50 digits.



Code 39 Minimum Length Limit

### Note

Length Range: 0-50 digits.



Code 39 Maximum Length Limit

## Code 32

### Important

Enable Code 39 before using this function.

### Enable/Disable Symbology

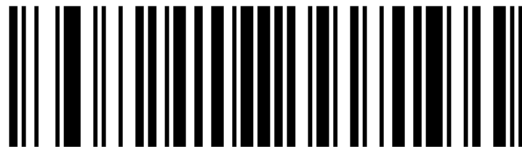


Code 32 Enable



Code 32 Disable

### Code 32 prefix



Code 32 Prefix Enable



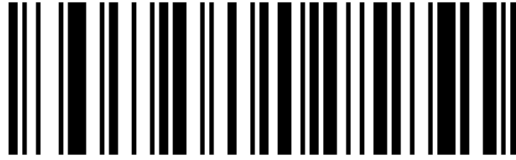
\* Disable Code 32 Prefix

### Interleaved 2 of 5 (ITF25)

#### Enable/Disable Symbology

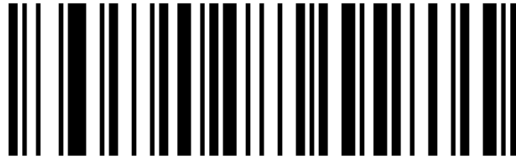


ITF25 Enable

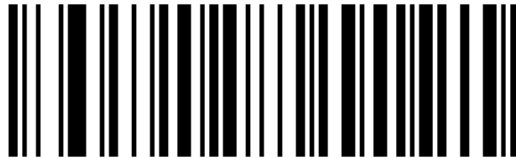


ITF25 Disable

### Interleaved 2 of 5 (ITF25) Check Digit



\* Disable ITF25 Check Digit



ITF25 Check Digit Enable Without Transmission



ITF25 Check Digit Enable and Transmit

### Interleaved 2 of 5 (ITF25) Length Selection

#### Note

Length range: 4-24 digits.



\* ITF25 Any Length



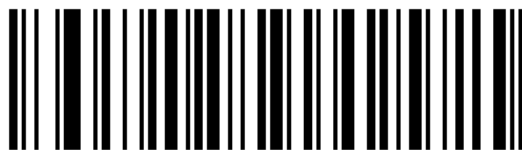
ITF25 6-Digit Length



ITF25 8-Digit Length



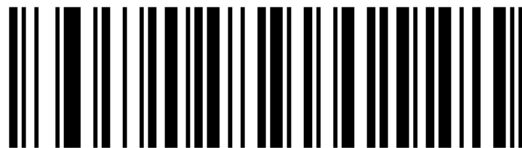
ITF25 10-Digit Length



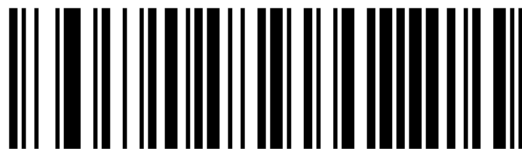
ITF25 12-Digit Length



ITF25 14-Digit Length



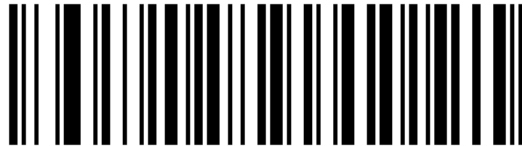
ITF25 16-Digit Length



ITF25 18-Digit Length



ITF25 20-Digit Length



ITF25 22-Digit Length



ITF25 24-Digit Length

## Interleaved 2 of 5 Length Limit Settings

### Note

Length Range: 0-50 digits.



Interleaved 2 of 5 Minimum Length Limit

### Note

Length Range: 0-50 digits.



Interleaved 2 of 5 Maximum Length Limit

## Industrial 2 of 5 / IATA

### Enable/Disable Symbology



Industrial 2 of 5 / IATA Enable

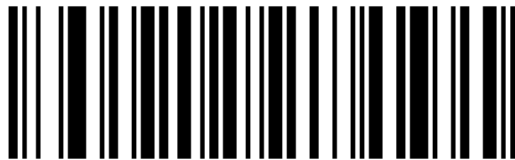


Industrial 2 of 5 / IATA Disable

### Industrial 2 of 5 / IATA Length Limit Settings

#### Note

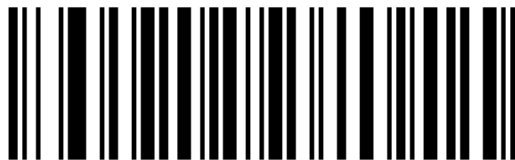
Length Range: 0-50 digits.



Industrial 2 of 5 / IATA Minimum Length Limit

#### Note

Length Range: 0-50 digits.



Industrial 2 of 5 / IATA Maximum Length Limit

## Matrix 2 of 5

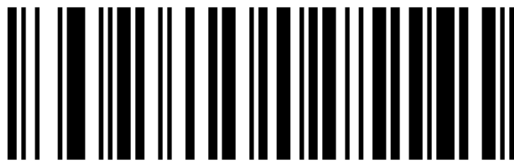
**Note**

Setting range: 4–24 digits.

### Enable/Disable Symbology



Matrix 2 of 5 Enable



Matrix 2 of 5 Disable

### Matrix 2 of 5 Length Limit Settings

**Note**

Length Range: 0–50 digits.



Matrix 2 of 5 Minimum Length Limit

**Note**

Length Range: 0–50 digits.



Matrix 2 of 5 Maximum Length Limit

## Code 93

### Enable/Disable Symbology



Code 93 Enable

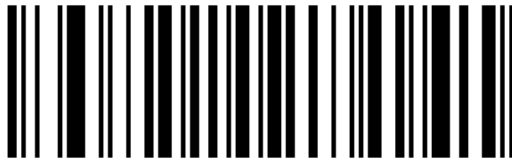


Code 93 Disable

### Code 93 Length Limit Settings

#### Note

Length Range: 0-50 digits.



Code 93 Minimum Length Limit

#### Note

Length Range: 0-50 digits.



Code 93 Maximum Length Limit

## Code 11

### Enable/Disable Symbology

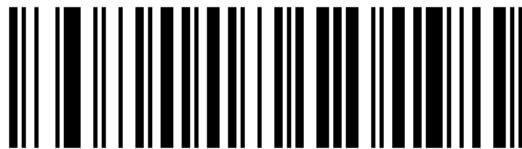


Code 11 Enable



\* Code 11 Disable

### Code 11 Check Digit Output



Code 11 Check Digit Output Enable



\* Disable Code 11 Check Digit Output

### Code 11 Check Selection



\* Disable Code 11 Check Digit



Code 11 1-Digit Check



Code 11 2-Digit Check

## Code 11 Length Limit Settings

### Note

Length Range: 0-50 digits.



Code 11 Minimum Length Limit

### Note

Length Range: 0-50 digits.



Code 11 Maximum Length Limit

## Code 128



Code 128 Enable



Code 128 Disable

## GS1-128



GS1-128 Enable



GS1-128 Disable

## ISBT-128



ISBT 128 Disable



ISBT 128 Enable

## Code 128 Length Limit Settings

### Note

Length Range: 0–50 digits.



Code 128 Minimum Length Limit

**Note**

Length Range: 0–50 digits.



Code 128 Maximum Length Limit

## UPC-A

### Enable/Disable Symbology



\* UPC-A Enable



UPC-A Disable

### UPC-A Check Digit



\* Transmit UPC-A Check Digit



Do Not Transmit UPC-A Check Digit

## UPC-A Leading Character



(UPC-A to EAN-13) UPC-A Transmit Country Code + System Character



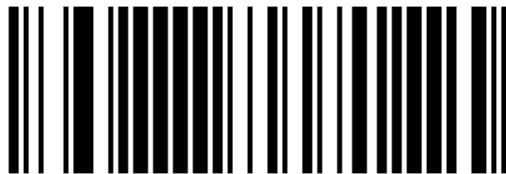
\* UPC-A Transmit System Character



Do Not Transmit UPC-A Leading Character

## UPC-E

### Enable/Disable Symbology



\* UPC-E Enable



UPC-E Disable

## UPC-E Check Digit

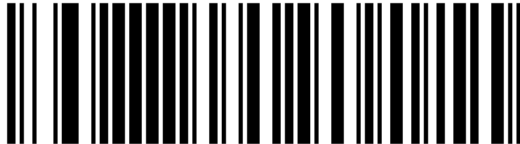


\* Transmit UPC-E Check Digit



Do Not Transmit UPC-E Check Digit

### UPC-E Expand to UPC-A



Enable UPC-E Expand to UPC-A



\* Disable UPC-E Expand to UPC-A

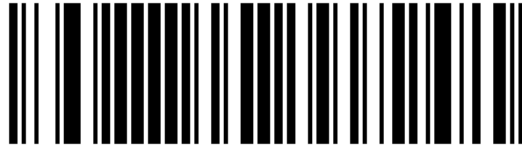
### UPC-E Leading Character



UPC-E Transmit Country Code + System Character



\* UPC-E Transmit System Character



Do Not Transmit UPC-E Leading Character

## **EAN/JAN-8**

### **Enable/Disable Symbology**

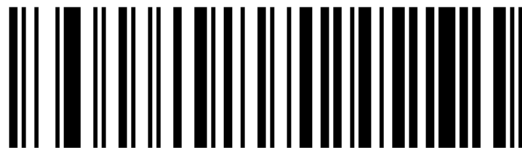


EAN/JAN-8 Enable

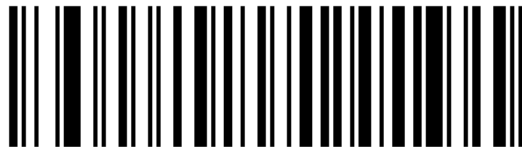


EAN/JAN-8 Disable

## **EAN-8 Convert to EAN-13**



\* Disable EAN-8 Convert to EAN-13

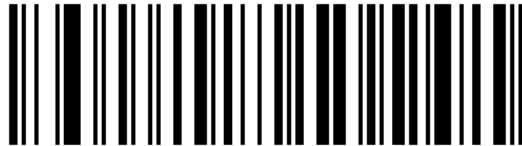


Enable EAN-8 Convert to EAN-13

## **EAN-8 Check Digit**



\* Transmit EAN-8 Check Digit

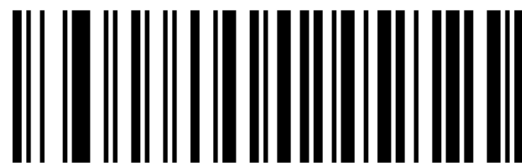


Do Not Transmit EAN-8 Check Digit

## **EAN/JAN-13**



\* EAN/JAN-13 Enable



EAN/JAN-13 Disable

## **EAN-13 Check Digit**



\* Transmit EAN-13 Check Digit

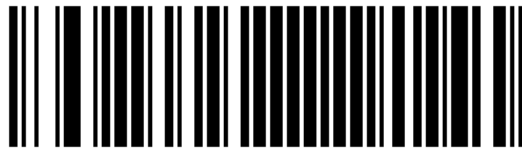


Do Not Transmit EAN-13 Check Digit

## UPC/EAN/JAN Supplemental Code



\* Ignore UPC/EAN/JAN Supplemental Code



Decode UPC/EAN/JAN Supplemental Code



Adaptive UPC/EAN/JAN Supplemental Code

## EAN-13 Convert to ISBN



Enable EAN-13 to ISBN Conversion



\* Disable EAN-13 to ISBN Conversion

## EAN-13 Convert to ISSN

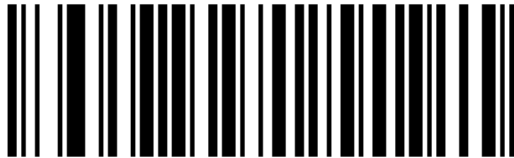


Enable EAN-13 to ISSN Conversion

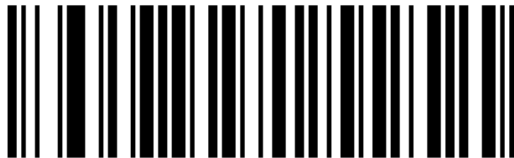


\* Disable EAN-13 to ISSN Conversion

### GS1 DataBar (RSS14)



GS1 DataBar Enable

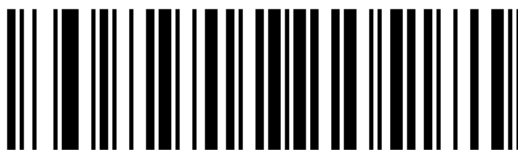


\* GS1 DataBar Disable

### GS1 DataBar Limited



GS1 DataBar Limited Enable



\* GS1 DataBar Limited Disable

### GS1 DataBar Expanded



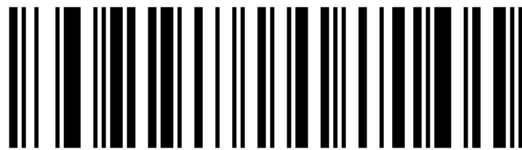
GS1 DataBar Expanded Enable



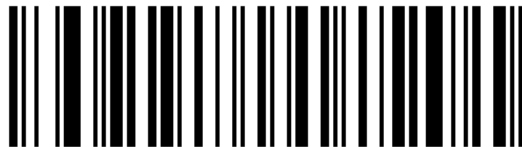
\* GS1 DataBar Expanded Disable

## MSI

### Enable/Disable MSI Symbology

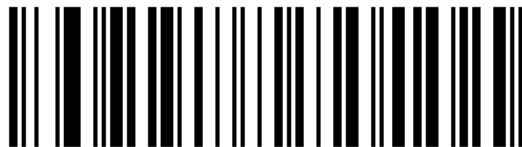


MSI Enable

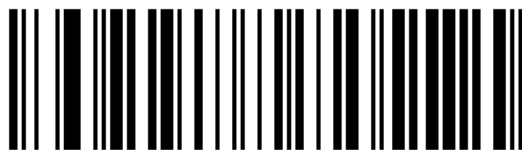


MSI Disable

### MSI Check Digit Output



MSI Check Digit Output Enable

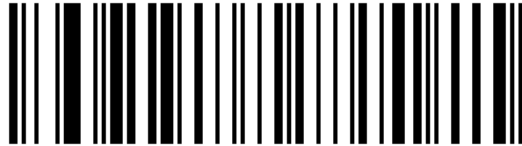


MSI Check Digit Output Disable

### MSI Check Digit Selection

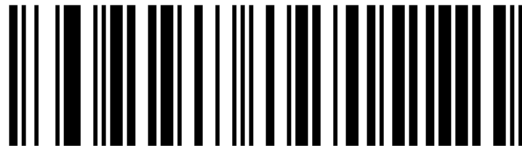


MSI 1-Digit Check Digit



MSI 2-Digit Check Digit

### MSI 2-Digit Check Selection



MOD10/MOD10

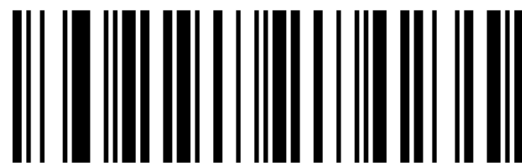


MOD10/MOD11

### MSI Length Limit Settings

**Note**

Length range: 0~50.



MSI Minimum Length

**Note**

Length range: 0~50.



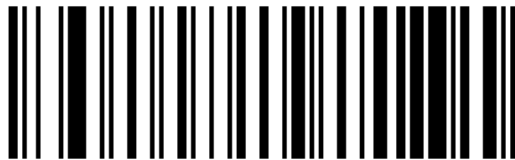
MSI Maximum Length

## Febraban

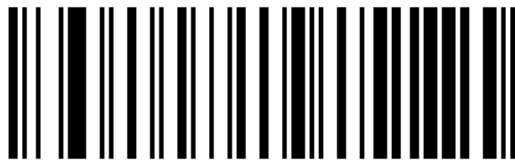
### Important

Disable the AIM ID function before enabling the Febraban function.

### Enable/Disable Febraban Symbology (ITF25)

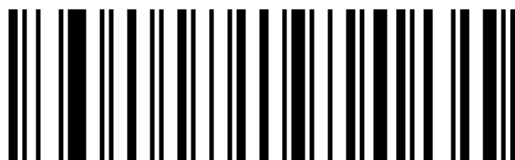


Febraban (ITF25) Enable



\* Febraban (ITF25) Disable

### Enable/Disable Febraban Symbology (Code 128)



Febraban (Code 128) Enable



\* Febraban (Code 128) Disable

### Febraban Check



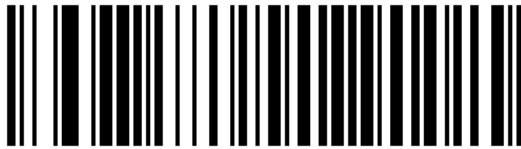
Febraban Check Enable



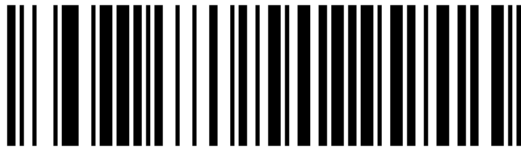
\* Febraban Check Disable

## PDF417

### Enable/Disable PDF417



PDF417 Enable



PDF417 Disable

### PDF417 Length Limit Settings

#### Note

Length range: 1~2750.



PDF417 Minimum Length Limit

#### Note

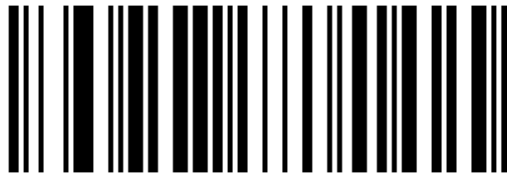
Length range: 1~2750.



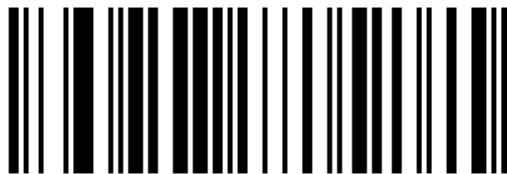
PDF417 Maximum Length Limit

## MicroPDF417

### Enable/Disable MicroPDF417



MicroPDF417 Enable



MicroPDF417 Disable

### MicroPDF417 Length Limit Settings

#### Note

Length range: 1~366.



MicroPDF417 Minimum Length Limit

#### Note

Length range: 1~366.



MicroPDF417 Maximum Length Limit

## QR Code

### Enable/disable QR Code



QR Code Enable



QR Code Disable

## QR Code Length Limit Settings

### Note

Length range: 1~7089.



QR Code Minimum Length Limit

### Note

Length range: 1~7089.

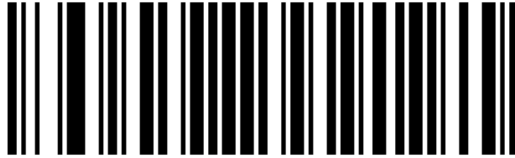


QR Code Maximum Length Limit

## QR Code URL Link



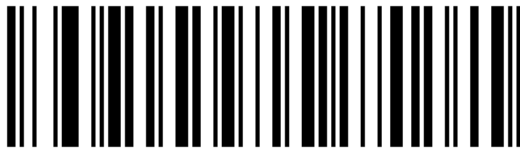
QR Code URL Link Disable



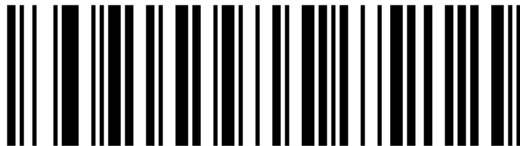
QR Code URL Link Enable

## Micro QR

### Enable/Disable Micro QR



Micro QR Enable



Micro QR Disable

### Micro QR Length Limit Settings

#### Note

Length range: 1~35.



Micro QR Minimum Length Limit

#### Note

Length range: 1~35.



Micro QR Maximum Length Limit

Data Matrix

Enable/Disable Data Matrix

*i* Note

Length range: 1~3116.



Data Matrix Enable



Data Matrix Disable

Data Matrix Length Limit Settings

*i* Note

Length range: 1~3116.



Data Matrix Minimum Length Limit

*i* Note

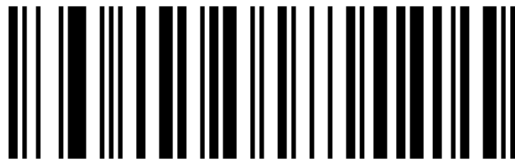
Length range: 1~3116.



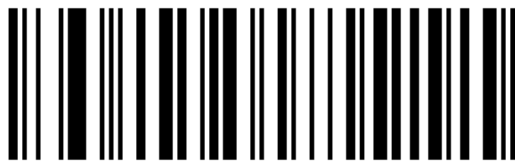
Data Matrix Maximum Length Limit

## Aztec Code

### Enable/Disable Aztec Code



Aztec Code Enable

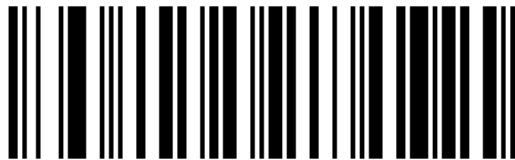


Aztec Code Disable

### Aztec Code Length Limit Settings

#### Note

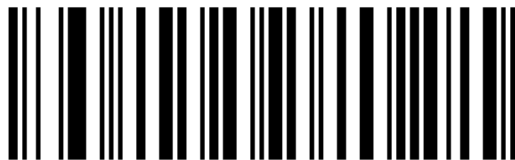
Length range: 1~3832.



Aztec Code Minimum Length Limit

#### Note

Length range: 1~3832.



Aztec Code Maximum Length Limit

## 8.2 Decode Enhancement Options

### Performance Demo Barcode

**Note**

This is a temporary setting and becomes invalid after restart.



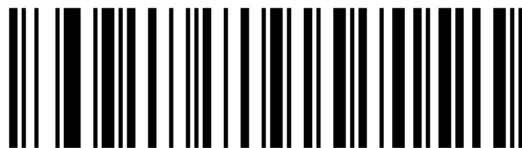
Enable Performance Demo Mode

## Inverse Barcode Decode Options

(For 1D barcodes / Data Matrix / Aztec Code)



\* Decode Normal Barcodes Only



Decode Inverse Barcodes Only



Decode Both Normal and Inverse Barcodes

## Non-standard Barcode Options

**Warning**

When non-standard barcode decoding is enabled, compatibility with some poorly printed barcodes is improved, but the probability of decoding errors also increases.



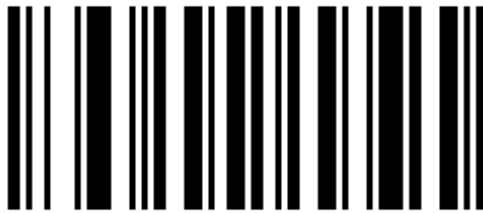
\* Non-standard Barcode Decoding Disable



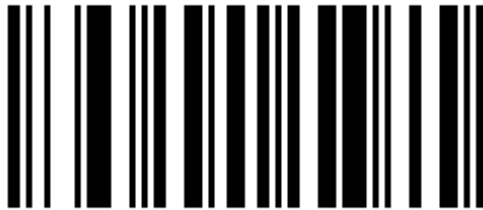
Non-standard Barcode Decoding Enable

## 9 Appendix

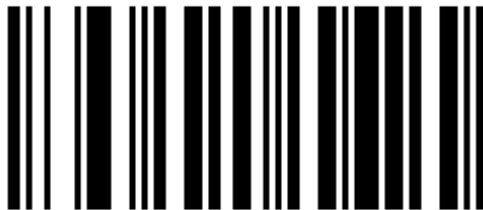
### 9.1 Data and Editing Barcodes



0



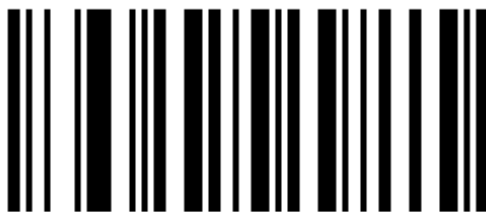
1



2



3



4



5



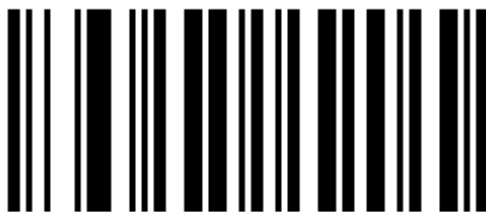
6



7



8



9



A



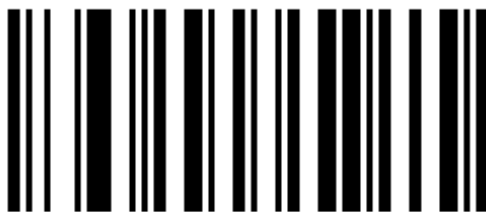
B



C



D



E



F



Cancel Current Setting



Cancel the Previously Scanned Data String



Cancel the Previously Scanned Data



Save

## 9.2 Barcode Type ID Table

| Symbology Type         | Hex Value | Default Code ID |
|------------------------|-----------|-----------------|
| All Symbologies        | 99        |                 |
| Codabar                | 61        | a               |
| Code 128               | 6A        | j               |
| Code 32                | 3C        | <               |
| Code 93                | 69        | i               |
| Code 39                | 62        | b               |
| Code 11                | 48        | H               |
| EAN-13                 | 64        | d               |
| EAN-8                  | 64        | d               |
| GS1 DataBar            | 52        | R               |
| GS1-128 (EAN-128)      | 6A        | j               |
| 2 of 5                 |           |                 |
| Interleaved 2 of 5     | 65        | e               |
| Matrix 2 of 5          | 76        | v               |
| Industrial 2 of 5/IATA | 44        | D               |
| UPC-A                  | 63        | c               |
| UPC-E                  | 63        | c               |
| ISBN                   | 42        | B               |
| ISSN                   | 6E        | n               |
| MSI                    | 6D        | m               |
| Aztec Code             | 7A        | z               |
| Data Matrix            | 75        | u               |
| PDF417                 | 72        | r               |
| MicroPDF417            | 53        | S               |
| QR Code                | 51        | Q               |
| Micro QR               | 51        | Q               |

### 9.3 AIM ID Table

| Symbology Type         | AIM ID | Description         |
|------------------------|--------|---------------------|
| Codabar                | JFm    | m: 0~1              |
| Code 128               | JCm    | m: 0, 1, 2, 4       |
| Code 32                | JA0    |                     |
| Code 93                | JG0    |                     |
| Code 39                | JAm    | m: 0, 1, 3, 4, 5, 7 |
| Code 11                | JHm    | m: 0, 1, 3, 8, 9    |
| EAN-13 / EAN-8         | JEm    | m: 0, 1, 3, 4       |
| GS1 DataBar            | Je0    |                     |
| GS1-128 (EAN-128)      | JC1    |                     |
| Interleaved 2 of 5     | JIm    | m: 0, 1, 3          |
| Matrix 2 of 5          | JX0    |                     |
| Industrial 2 of 5/IATA | JS0    |                     |
| UPC-A/ UPC-E           | JEm    | m: 0, 3             |
| ISBN                   | JX0    |                     |
| ISSN                   | JX0    |                     |
| MSI                    | JMm    | m: 0, 1             |
| Aztec Code             | Jz0    |                     |
| Data Matrix            | Jdm    | m: 0~6              |
| PDF417 / MicroPDF417   | JLm    | m: 0~5              |
| QR Code / Micro QR     | JQm    | m: 0~6              |

### 9.4 Printable ASCII Table

| Deci-<br>mal | Hex-<br>adecimal | Char-<br>acter | Deci-<br>mal | Hex-<br>adecimal | Char-<br>acter | Deci-<br>mal | Hex-<br>adecimal | Char-<br>acter |
|--------------|------------------|----------------|--------------|------------------|----------------|--------------|------------------|----------------|
| 32           | 20               |                | 64           | 40               | @              | 96           | 60               | `              |
| 33           | 21               | !              | 65           | 41               | A              | 97           | 61               | a              |
| 34           | 22               | “              | 66           | 42               | B              | 98           | 62               | b              |
| 35           | 23               | #              | 67           | 43               | C              | 99           | 63               | c              |
| 36           | 24               | \$             | 68           | 44               | D              | 100          | 64               | d              |
| 37           | 25               | %              | 69           | 45               | E              | 101          | 65               | e              |
| 38           | 26               | &              | 70           | 46               | F              | 102          | 66               | f              |
| 39           | 27               | ‘              | 71           | 47               | G              | 103          | 67               | g              |
| 40           | 28               | (              | 72           | 48               | H              | 104          | 68               | h              |
| 41           | 29               | )              | 73           | 49               | I              | 105          | 69               | i              |
| 42           | 2A               | *              | 74           | 4A               | J              | 106          | 6A               | j              |
| 43           | 2B               | +              | 75           | 4B               | K              | 107          | 6B               | k              |
| 44           | 2C               | ,              | 76           | 4C               | L              | 108          | 6C               | l              |
| 45           | 2D               | -              | 77           | 4D               | M              | 109          | 6D               | m              |
| 46           | 2E               | .              | 78           | 4E               | N              | 110          | 6E               | n              |
| 47           | 2F               | /              | 79           | 4F               | O              | 111          | 6F               | o              |
| 48           | 30               | 0              | 80           | 50               | P              | 112          | 70               | p              |
| 49           | 31               | 1              | 81           | 51               | Q              | 113          | 71               | q              |
| 50           | 32               | 2              | 82           | 52               | R              | 114          | 72               | r              |

continues on next page

Table 1 – continued from previous page

| Decimal | Hexadecimal | Character | Decimal | Hexadecimal | Character | Decimal | Hexadecimal | Character |
|---------|-------------|-----------|---------|-------------|-----------|---------|-------------|-----------|
| 51      | 33          | 3         | 83      | 53          | S         | 115     | 73          | s         |
| 52      | 34          | 4         | 84      | 54          | T         | 116     | 74          | t         |
| 53      | 35          | 5         | 85      | 55          | U         | 117     | 75          | u         |
| 54      | 36          | 6         | 86      | 56          | V         | 118     | 76          | v         |
| 55      | 37          | 7         | 87      | 57          | W         | 119     | 77          | w         |
| 56      | 38          | 8         | 88      | 58          | X         | 120     | 78          | x         |
| 57      | 39          | 9         | 89      | 59          | Y         | 121     | 79          | y         |
| 58      | 3A          | :         | 90      | 5A          | Z         | 122     | 7A          | z         |
| 59      | 3B          | ;         | 91      | 5B          | [         | 123     | 7B          | {         |
| 60      | 3C          | <         | 92      | 5C          | \         | 124     | 7C          |           |
| 61      | 3D          | =         | 93      | 5D          | ]         | 125     | 7D          | }         |
| 62      | 3E          | >         | 94      | 5E          | ^         | 126     | 7E          | ~         |
| 63      | 3F          | ?         | 95      | 5F          | _         |         |             |           |

## 9.5 Control Character Set (USB Keyboard Mode)

| Decimal | Hexadecimal | Corresponding Key Value (Control Character Escape Disabled) | Corresponding Key Value (Control Character Escape 1) | Corresponding Key Value (Control Character Escape 2) |
|---------|-------------|-------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|
| 0       | 00          | Reserved                                                    | Ctrl+@                                               | Ctrl+@                                               |
| 1       | 01          | Insert                                                      | Ctrl+A                                               | Ctrl+A                                               |
| 2       | 02          | Home                                                        | Ctrl+B                                               | Ctrl+B                                               |
| 3       | 03          | End                                                         | Ctrl+C                                               | Ctrl+C                                               |
| 4       | 04          | Delete                                                      | Ctrl+D                                               | Ctrl+D                                               |
| 5       | 05          | PageUp                                                      | Ctrl+E                                               | Ctrl+E                                               |
| 6       | 06          | PageDown                                                    | Ctrl+F                                               | Ctrl+F                                               |
| 7       | 07          | ESC                                                         | Ctrl+G                                               | Ctrl+G                                               |
| 8       | 08          | Backspace                                                   | Ctrl+H                                               | Backspace                                            |
| 9       | 09          | Tab                                                         | Ctrl+I                                               | Tab                                                  |
| 10      | 0A          | Enter (Behavior depends on the CR/LF handling setting)      | Ctrl+J                                               | Enter                                                |
| 11      | 0B          | Caps Lock                                                   | Ctrl+K                                               | Ctrl+K                                               |
| 12      | 0C          | Print Screen                                                | Ctrl+L                                               | Ctrl+L                                               |
| 13      | 0D          | Enter (Behavior depends on the CR/LF handling setting)      | Ctrl+M                                               | Enter                                                |
| 14      | 0E          | Scroll Lock                                                 | Ctrl+N                                               | Ctrl+N                                               |
| 15      | 0F          | Pause/Break                                                 | Ctrl+O                                               | Ctrl+O                                               |
| 16      | 10          | F11                                                         | Ctrl+P                                               | Ctrl+P                                               |

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Table 2 – continued from previous page

| Decimal | Hexadecimal | Corresponding Key Value (Control Character Escape Disabled) | Corresponding Key Value (Control Character Escape 1) | Corresponding Key Value (Control Character Escape 2) |
|---------|-------------|-------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|
| 17      | 11          | Arrow Key Up                                                | Ctrl+Q                                               | Ctrl+Q                                               |
| 18      | 12          | Arrow Key Down                                              | Ctrl+R                                               | Ctrl+R                                               |
| 19      | 13          | Arrow Key Left                                              | Ctrl+S                                               | Ctrl+S                                               |
| 20      | 14          | Arrow Key Right                                             | Ctrl+T                                               | Ctrl+T                                               |
| 21      | 15          | F12                                                         | Ctrl+U                                               | Ctrl+U                                               |
| 22      | 16          | F1                                                          | Ctrl+V                                               | Ctrl+V                                               |
| 23      | 17          | F2                                                          | Ctrl+W                                               | Ctrl+W                                               |
| 24      | 18          | F3                                                          | Ctrl+X                                               | Ctrl+X                                               |
| 25      | 19          | F4                                                          | Ctrl+Y                                               | Ctrl+Y                                               |
| 26      | 1A          | F5                                                          | Ctrl+Z                                               | Ctrl+Z                                               |
| 27      | 1B          | F6                                                          | Ctrl+[                                               | Ctrl+[                                               |
| 28      | 1C          | F7                                                          | Ctrl+\                                               | Ctrl+\                                               |
| 29      | 1D          | F8                                                          | Ctrl+]                                               | Ctrl+]                                               |
| 30      | 1E          | F9                                                          | Ctrl+^                                               | Ctrl+^                                               |
| 31      | 1F          | F10                                                         | Ctrl+_                                               | Ctrl+_                                               |

## 9.6 Control Character Set (Serial Port and USB Virtual COM Port)

| Decimal | Hexadecimal | Corresponding Character |
|---------|-------------|-------------------------|
| 0       | 00          | NUL                     |
| 1       | 01          | SOH                     |
| 2       | 02          | STX                     |
| 3       | 03          | ETX                     |
| 4       | 04          | EOT                     |
| 5       | 05          | ENQ                     |
| 6       | 06          | ACK                     |
| 7       | 07          | BEL                     |
| 8       | 08          | BS                      |
| 9       | 09          | HT                      |
| 10      | 0A          | LF                      |
| 11      | 0B          | VT                      |
| 12      | 0C          | FF                      |
| 13      | 0D          | CR                      |
| 14      | 0E          | SO                      |
| 15      | 0F          | SI                      |
| 16      | 10          | DLE                     |
| 17      | 11          | DC1                     |
| 18      | 12          | DC2                     |
| 19      | 13          | DC3                     |
| 20      | 14          | DC4                     |
| 21      | 15          | NAK                     |
| 22      | 16          | SYN                     |

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Table 3 – continued from previous page

| Decimal | Hexadecimal | Corresponding Character |
|---------|-------------|-------------------------|
| 23      | 17          | ETB                     |
| 24      | 18          | CAN                     |
| 25      | 19          | EM                      |
| 26      | 1A          | SUB                     |
| 27      | 1B          | ESC                     |
| 28      | 1C          | FS                      |
| 29      | 1D          | GS                      |
| 30      | 1E          | RS                      |
| 31      | 1F          | US                      |

## 9.7 Configuration Notes and Examples for Selected Functions

### Custom Prefix/Suffix Configuration Examples

#### Note

Scan barcodes to configure barcode prefixes and suffixes. Each prefix or suffix can contain up to 10 characters. (To ensure custom prefixes and suffixes can be output, enable the custom prefix/suffix output option on the Barcode Reader.)

#### Example 1.1: Add the custom prefix XYZ to all barcode types

Look up *Barcode Type ID Table*: the hexadecimal value for all symbologies is 99. Look up *Printable ASCII Table*: the hexadecimal values for XYZ are 58, 59, 5A.

1. Scan the “Custom Prefix” Parameter Barcode. The Barcode Reader will emit two beep tones.
2. Scan 9, 9, 5, 8, 5, 9, 5, and A in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.

#### Note

If you need to modify the scanned data before saving, scan Cancel the Last Scanned Data or Cancel the Previously Scanned Data String to reconfigure it. To abandon the current configuration midway, scan Cancel Current Setting directly.

#### Example 1.2: Add the custom prefix R to QR Code

Look up *Barcode Type ID Table*: the hexadecimal value for QR Code is 51. Look up *Printable ASCII Table*: the hexadecimal value for R is 52.

1. Scan the “Custom Prefix” Parameter Barcode.
2. Scan 5, 1, 5, and 2 in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.

### **Example 1.3: Clear the custom prefix for QR Code**

When configuring custom prefixes/suffixes, saving the barcode type characters without adding other characters clears the custom prefix/suffix for that barcode type.

1. Scan the “Custom Prefix” Parameter Barcode.
2. Scan 5 and 1 in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.

### **Note**

If a prefix was previously configured for all barcodes, the QR Code prefix will revert to that all-barcode prefix after configuration.

To clear prefixes and suffixes configured for various barcode types, scan the Clear All Custom Prefixes and Clear All Custom Suffixes Parameter Barcodes.

## **Barcode Length Limit Configuration Examples**

### **Important**

When configuring the minimum barcode length, the configured minimum value must not be greater than the current maximum length, otherwise an error is prompted. Likewise, when configuring the maximum barcode length, the configured maximum value must not be less than the current minimum length.

### **Example 2.1: Set the Code 128 barcode length to 4-12 digits**

1. Scan the “Code 128 Minimum Length Limit” Parameter Barcode.
2. Scan 4 in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.
4. Scan the “Code 128 Maximum Length Limit” Parameter Barcode.
5. Scan 1 and 2 in *Data and Editing Barcodes* in sequence.
6. Scan the “Save” Parameter Barcode.

### **Example 2.2: Set the Interleaved 2 of 5 barcode length to 14 digits**

To set the Interleaved 2 of 5 barcode length to 14 digits, you can scan the Quick Parameter Barcode ITF25 14-Digit Length directly, or configure it through the minimum and maximum barcode lengths:

1. Scan the “Interleaved 2 of 5 Minimum Length Limit” Parameter Barcode.
2. Scan 1 and 4 in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.

4. Scan the “Interleaved 2 of 5 Maximum Length Limit” Parameter Barcode.
5. Scan 1 and 4 in *Data and Editing Barcodes* in sequence.
6. Scan the “Save” Parameter Barcode.

#### **Example 2.3: Set the Code 39 barcode length to any supported length**

1. Scan the “Code 39 Minimum Length Limit” Parameter Barcode.
2. Scan 0 in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.
4. Scan the “Code 39 Maximum Length Limit” Parameter Barcode.
5. Scan 0 in *Data and Editing Barcodes* in sequence.
6. Scan the “Save” Parameter Barcode.

### USB Keyboard Output Speed Configuration Example

If the host performance is weak and transmission errors are likely to occur, customize the USB keyboard output speed to a slower value, such as 50 ms:

1. Scan the “Custom Output Speed” Parameter Barcode.
2. Scan 5 and 0 in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.

### Custom Decode Beep Frequency

Set the decode beep frequency to 2K:

1. Scan the “Custom Decode Beep Frequency” Parameter Barcode. The Barcode Reader will emit two beep tones.
2. Scan 2, 0, 0, and 0 in *Data and Editing Barcodes* in sequence.
3. Scan the “Save” Parameter Barcode.

### Warning Beep

When data transmission is abnormal, the Barcode Reader emits four consecutive warning beeps. If this occurs, check whether the connection cable is normal.

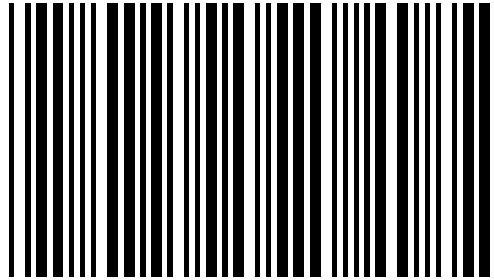
#### **Tip**

The following methods can help improve decoding success. For best results, aim the Barcode Reader beam at the center of the barcode, although the barcode can be read from any orientation.

Hold the Barcode Reader in front of the barcode, press the button, and aim the targeting beam at the center of the barcode.

The closer the Barcode Reader is to the barcode, the smaller the aiming beam becomes; the farther away it is, the larger the beam becomes. For small barcodes, hold the Barcode Reader closer. For larger barcodes, move the Barcode Reader slightly farther away for easier decoding.

If the barcode has high reflectivity (for example, a coated surface), you may need to tilt the Barcode Reader at a certain angle to scan it successfully.



Safety



Safety

## Safety Notice

### **Warning**

The illumination light is bright during Barcode Reader operation. Do not stare directly into it or point it at the eyes to avoid discomfort or injury.