

Since 1990



MT8250 User's Manual V1.4

MT8250

2D Handheld Scanner

User's Manual

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Chapter 1 General Settings

Barcode Configurability

Scanning below configuration barcodes will allow/prohibit user to change settings by scanning configuration barcodes in this manual.



Enable Barcode Configurability*



Disable Barcode Configurability

Factory Default

Scanning below configuration barcode will reset all parameters to factory default settings (the ones with * asterisk mark)



DEFALT

Factory Default

Custom Default

Scan **Save Custom Default** configuration barcode below and all the current settings will be saved to your custom default, overwriting, if any, the previous one. Scan **Clear Custom Default** to erase all custom default settings.



MNUCDS

Save Custom Default

DEFOVR

Clear Custom Default

Check Version

To check firmware version, please scan below configuration barcode.



VERNUM

Check Version

Beep Settings

Power Up Beep



BEPPWR1

On*



BEPPWRO

Off

Good Read Beep



BEPBEP1

On*



BEPBEP0

Off

Good Read Beep Duration



BEPBIP1

Short*



BEPBIP0

Long

Good Read Beep Frequency



BEPFQL2

Low



BEPFQL1

Medium



BEPFQL0

High*

Good Read Beep Volume



BEPLVL1

Low



BEPLVL3

High*

Error Beep Frequency



BEPFQE0

Low*



BEPFQE1

Medium



BEPFQE2

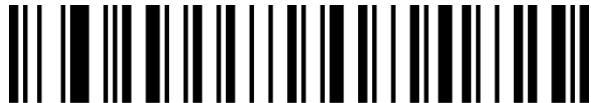
High

Data Format

Data Encoding Format



English/Latin-1*



KBDENC1

GBK



KBDENC2

Unicode



Imaging Settings

Inverse Barcode



VIDREVO

Normal Barcode Only*

VIDREV1

Inverse Barcode Only

VIDREV2

Normal Barcode & Inverse Barcode

Decode Area

When Centering is on, the scanner only decodes barcode at the center area.



CENTER0

Centering Off*

CENTER1

Centering On

Chapter 2 Interface

USB HID



USBKBD

USB HID*

USB VCP



USBCDC

USB VCP

Keyboard Layout



KBDCTY0

English (US)*



KBDCTY66

Greek



KBDCTY11

Dutch



KBDCTY10

Spanish



KBDCTY51

Spanish (Latin America)



KBDCTY16

Portuguese (Brazil)



KBDCTY56

Italian (Italian142)



KBDCTY7

English (UK)



KBDCTY5

Italian



KBDCTY3

French



KBDCTY4

German



KBDCTY2

Finnish



KBDCTY23

Swedish

KBDCTY99

Arabic(101)

KBDCTY13

Portugese

KBDCTY38

Czech

KBDCTY1

French (Belgium)

KBDCTY27

Turkish-F

KBDCTY24

Turkish-Q

KBDCTY57

Polish (Polish214)

KBDCTY58

Polish (Programmers)

KBDCTY73

Irish

KBDCTY67

Russian (MS)

KBDCTY28

Japanese

KBDCTY68

Russian (Typewriter)

Alt Code - Mode

Mode 1: 0x20 ~ 0xFF are sent in Alt Code when not supported by current keyboard layout,

0x00~0x1F are sent in Control Code (see Appendix-Control Code)

Mode 2: 0x20 ~ 0xFF are sent in Alt Code, 0x00~0x1F are sent in Control Code (see Appendix-Control Code)

Mode 3: 0x00 ~ 0xFF are all sent in Alt Code (see Appendix-ASCII Code)



KBDALT0

Disable Alt Code*



KBDALT1

Enable Alt Code (Mode 1)



KBDALT2

Enable Alt Code (Mode 2)



KBDALT3

Enable Alt Code (Mode 3)

Alt Code - Operating System



USBWIN

WINDOWS*



USBMAC

MAC OS



USBUBU

LINUX

GS Replacement

Since GS cannot be displayed properly in USB HID, below configurations enable the scanner to replace GS by specific character.



GSCH0

As Is*



GSCH1

Replaced by Ç



GSCH2

Replaced by |



GSCH3

Replaced by ^]



GSCH4

Replaced by]



GSCH5

Replaced by <GS>

Note:

When replaced by Ç , Alt Code must be enabled (Mode 1 ~ Mode 3)

Control Code Conversion



KBDCAS1

Enable Control Code Conversion



KBDCAS0

Disable Control Code Conversion*

Upper/Lower Case



KBDCNV0

As Is*



KBDCNV2

All Upper Case



KBDCNV3

All Lower Case



Invert Case

Intercharacter Delay



KBDDLY0

Short*



KBDDLY1

Medium



KBDDLY2

Long

Set Intercharacter Delay

The configurable range is from 2 to 50ms. The larger the number, the longer the delay.



PKBDDLY

Set Intercharacter Delay

Example: Set Intercharacter Delay to 8ms

Step1: Scan Set Intercharacter Delay

Step2: Scan “8” in Appendix-Data

Step3: Scan “Save“ in Appendix-Save&Abort

Chapter 3 Reading Mode

Trigger Mode



TRIGMAN

Trigger Mode*

Auto-sensing Mode



TRIGPRE

Auto-sensing Mode

Auto-sensing Mode - Identical Read Interval

Identical Read Interval defines the period of time after which an identical barcode can be re-scanned. Default is 750ms.



REREAD0

500ms



REREAD1

750ms*



REREAD2

1000ms



REREAD3

2000ms

Chapter 4 Data Format

By default data format is as follows:

<Code ID> <AIM ID> <Preamble> <Barcode Data> <Postamble> <Code ID> <AIM ID>
<Terminator>

Leading Sequence



PRESEQ0

Code ID+AIM ID+Preamble*



PRESEQ1

Preamble+Code ID+AIM ID

Trailing Sequence



SUFSEQ0

**Postamble+Code ID+
AIM ID+Terminator***



SUFSEQ1

**Code ID+AIM ID+
Postamble+Terminator**

Code ID



IDENA0

Disable Code ID*



IDENA1

Enable Leading Code ID



IDENA2

Enable Trailing Code ID

Set Code ID



PRGCID

Set Code ID



CLRAID

Reset Code ID

AIM ID



AIMENAO

Disable AIM ID*



AIMENA1

Enable Leading AIM ID



AIMENA2

Disable Trailing AIM ID

Preamble

Enable/Disable Preamble



Enable Preamble



Disable Preamble*

Set Preamble

Preamble can be up to 10 bytes of data.



Set Preamble

Example: Set XYZ as Preamble for all symbologies

Check the corresponding Code ID of All Symbologies in Appendix-Code ID which is 99 in hex, and XYZ equals to 58,59,5A in hex.

- Step 1: Scan “**Set Preamble**”
- Step 2: Scan “**9**” “**9**” in Appendix-Data
- Step 3: Scan “**5**” “**8**” “**5**” “**9**” “**5**” “**A**” in Appendix-Data
- Step 4: Scan “**Save**” in Appendix-Save&Abort
- Step 5: Scan “**Enable Preamble**”

Clear Preamble



Clear Preamble

Postamble

Enable/Disable Postamble



SUFENA1

Enable Postamble



SUFENAO

Disable Postamble*

Set Postamble

Postamble can be up to 10 bytes of data.



PRGSUF

Set Postamble

Example: Set XYZ as Postamble for all symbologies

Check the corresponding Code ID of All Symbologies in Appendix-Code ID which is 99 in hex, and XYZ equals to 58,59,5A in hex.

Step 1: Scan “**Set Postamble**”

Step 2: Scan “9” “9” in Appendix-Data

Step 3: Scan “5” “8” “5” “9” “5” “A” in Appendix-Data

Step 4: Scan “**Save**” in Appendix-Save&Abort

Step 5: Scan “**Enable Postamble**”

Clear Postamble



CLRASUF

Clear Postamble

Hide Data

Barcode Data, when divided into [Start] + [Center] + [End] by defining their length, can be partially displayed as desired.

Step1: Set Length



Set Start Length



Set End Length

Note: The unit of length is byte; decimal data is used for configuration.

Example: Set Start Length as 4, End Length as 12.

- Step1: Scan “**Set Start Length**”
- Step2: Scan “**4**” in Appendix-Data
- Step3: Scan “**Save**” in Appendix-Save&Abort
- Step4: Scan “**Set End Length**”
- Step5: Scan “**1**” “**2**” in Appendix-Data
- Step6: Scan “**Save**” in Appendix-Save&Abort

Step2: Define Which Part to Hide



DATSEQ0

As Is*
(Display All)



DATSEQ1

Hide Center & End
(Display Start Only)



DATSEQ3

Hide Start & End
(Display Center Only)



DATSEQ2

Hide Start & Center
(Display End Only)

Example: if Barcode Data is "12345678901234567890" with Start Length set as 4, End Length set as 12.

Scan "**As Is**", and the output data will be: 12345678901234567890

Scan "**Start Only**", and the output data will be: 1234

Scan "**Center Only**", and the output data will be: 5678

Scan "**End Only**", and the output data will be: 901234567890

Terminator



RETURN1

<CR>(0x0D)



RETURN2

<LF>(0x0A)



RETURN3

<CR><LF>(0x0D,0x0A)*



RETURN4

<HT>(0x09)



RETURN0

NONE



RETURN5

<ETX>(0x03)

Chapter 5 Symbologies

General Settings



CODALL1

Enable All Symbologies



CODALLO

Disable All Symbologies



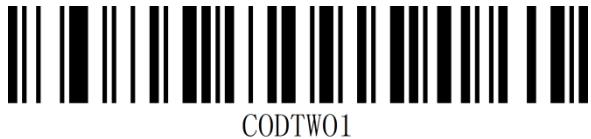
CODONE1

Enable All 1D Symbologies



CODONE0

Disable All 1D Symbologies



CODTWO1

Enable All 2D Symbologies



CODTWO0

Disable All 2D Symbologies

Note: When all symbologies are disabled, configuration barcodes are still readable.

UPC-A

Enable/Disable UPC-A



UPCA1

Enable UPC-A*



UPCA0

Disable UPC-A

Check Digit



UPCAS1

Send Check Digit*



UPCAS0

Not Send Check Digit

UPC-A to EAN-13



UPAENA1

Enable UPC-A to EAN-13



UPAENAO

Dis able UPC-A to EAN-13*

UPC-E

Enable/Disable UPC-E



UPCE1

Enable UPC-E*

UPCE0

Disable UPC-E

Check Digit



UPCES1

Send Check Digit*

UPCES0

Not Send Check Digit

UPC-E to UPC-A



UPENSX1

Enable UPC-E to UPC-A

UPENSX0

Disable UPC-E to UPC-A*

EAN-8

Enable/Disable EAN-8



EAN81

Enable EAN-8*



EAN80

Disable EAN-8

Check Digit



Send Check Digit*



Not Send Check Digit

EAN-13

Enable/Disable EAN-13



EAN131

Enable EAN-13*



EAN130

Disable EAN-13

Check Digit



Send Check Digit*



Not Send Check Digit

EAN-13 to ISBN



ISBN1

Enable EAN-13 to ISBN



ISBN0

Disable EAN-13 to ISBN*

EAN-13 to ISSN



ISSN1

Enable EAN-13 to ISSN



ISSN0

Disable EAN-13 to ISSN*

UPC/EAN/JAN Supplement



UESUPP1

Enable 2/5-digit Supplement



UESUPP0

Disable 2/5-digit Supplement*



UESUPP2

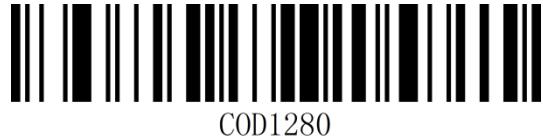
Auto 2/5-digit Supplement

Code 128

Enable/Disable Code 128



Enable Code 128*



Disable Code 128

GS1-128(UCC/EAN 128)

Enable/Disable GS1-128



Enable GS1-128*



Disable GS1-128

Code128/GS1-128 Min/Max Length



128MIN

Set Min Length

(Default = 04)



128MAX

Set Max Length

(Default = 50)

Example: Set Min Length as 8, Max Length as 12 for Code128/GS1-128

Step1: Scan “**Set Min Length**”

Step2: Scan “**8**” in Appendix-Data

Step3: Scan “**Save**” in Appendix-Save&Abort

Step4: Scan “**Set Max Length**”

Step5: Scan “**1**” “**2**” in Appendix-Data

Step6: Scan “**Save**” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.

ISBT 128

Enable/Disable ISBT 128



ISBT1

Enable ISBT 128*



ISBT0

Disable ISBT 128

Code 39

Enable/Disable Code 39



CODE391

Enable Code 39*



CODE390

Disable Code 39

Check Digit



C39CK0

Disable Verification*



C39CK2

**Enable MOD43 Verification
Send Check Digit**



C39CK1

**Enable MOD 43 Verification
Not Send Check Digit**

Full ASCII Code39



C39ACS1

Enable Full ASCII Code39



C39ACS0

Disable Full ASCII Code39*



Code39 Min/Max Length



C39MIN

Set Min Length

(Default = 04)



C39MAX

Set Max Length

(Default = 50)

Example: Set Min Length as 8, Max Length as 12 for Code39

Step1: Scan “**Set Min Length**”

Step2: Scan “**8**” in Appendix-Data

Step3: Scan “**Save**” in Appendix-Save&Abort

Step4: Scan “**Set Max Length**”

Step5: Scan “**1**” “**2**” in Appendix-Data

Step6: Scan “**Save**” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.

Code 32

Enable/Disable Code 32



CODE321

Enable Code 32*



CODE320

Disable Code 32

Notw: Please make sure Code39 is enabled with verification disabled before enabling Code32.

Code 93

Enable/Disable Code 93



Enable Code 93*



Disable Code 93

Code 93 Min/Max Length



Set Min Length
(Default = 04)



Set Max Length
(Default = 50)

Example: Set Min Length as 8, Max Length as 12 for Code93

Step1: Scan “**Set Min Length**”

Step2: Scan “**8**” in Appendix-Data

Step3: Scan “**Save**” in Appendix-Save&Abort

Step4: Scan “**Set Max Length**”

Step5: Scan “**1**” “**2**” in Appendix-Data

Step6: Scan “**Save**” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.

Code 11

Enable/Disable Code 11



C11ENA1

Enable Code 11

C11ENA0

Disable Code 11*

Verification



C11CKE0

Disable Verification*

C11CKE1

Single Digit

C11CKE2

Double Digit

Send Check Digit



C11CKT1

Send Check Digit

C11CKT0

Not Send Check Digit*

Code 11 Min/Max Length



C11MIN

Set Min Length

(Default = 04)



C11MAX

Set Max Length

(Default = 50)

Example: Set Min Length as 8, Max Length as 12 for Code11

Step1: Scan “**Set Min Length**”

Step2: Scan “**8**” in Appendix-Data

Step3: Scan “**Save**” in Appendix-Save&Abort

Step4: Scan “**Set Max Length**”

Step5: Scan “**1**” “**2**” in Appendix-Data

Step6: Scan “**Save**” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.

Codabar (NW-7)

Enable/Disable Codabar



CODBAR1

Enable Codabar*



CODBAR0

Disable Codabar

Send Start/Stop



CBRENA1

Send Start/Stop



CBRENA0

Not Send Start/Stop*

Codabar Min/Max Length



CBRMIN

Set Min Length

(Default = 04)



CBRMAX

Set Max Length

(Default = 50)

Example: Set Min Length as 8, Max Length as 12 for Codabar

Step1: Scan “Set Min Length”

Step2: Scan “8” in Appendix-Data

Step3: Scan “Save” in Appendix-Save&Abort

Step4: Scan “Set Max Length”

Step5: Scan “1” “2” in Appendix-Data

Step6: Scan “Save” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.



Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5



ITF251

Enable Interleaved 2 of 5*

ITF250

Disable Interleaved 2 of 5

Verification



I25CK0

Disable Verification*

I25CK2

**Enable Verification
Send Check Digit**

I25CK1

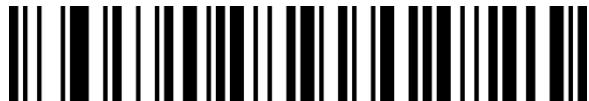
**Enable Verification
Not Send Check Digit**

Interleaved 2 of 5 Min/Max Length



I25LENO

Any Length (4-24 Digits)



I25LEN5

14 Digits Only



I25MIN

Set Min Length

(Default = 05)



I25MAX

Set Max Length

(Default = 50)

Example: Set Min Length as 8, Max Length as 12 for Interleaved 2 of 5

Step1: Scan “**Set Min Length**”

Step2: Scan “**8**” in Appendix-Data

Step3: Scan “**Save**” in Appendix-Save&Abort

Step4: Scan “**Set Max Length**”

Step5: Scan “**1**” “**2**” in Appendix-Data

Step6: Scan “**Save**” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.

Matrix 2 of 5

Enable/Disable Matrix 2 of 5



MAT251

Enable Matrix 2 of 5*



MAT250

Disable Matrix 2 of 5

Matrix2 of 5 Min/Max Length



X25MIN

Set Min Length

(Default = 04)



X25MAX

Set Max Length

(Default = 24)

Example: Set Min Length as 8, Max Length as 12 for Matrix 2 of 5

Step1: Scan “**Set Min Length**”

Step2: Scan “**8**” in Appendix-Data

Step3: Scan “**Save**” in Appendix-Save&Abort

Step4: Scan “**Set Max Length**”

Step5: Scan “**1**” “**2**” in Appendix-Data

Step6: Scan “**Save**” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.

Industrial 2 of 5

Enable/Disable Industrial 2 of 5



IDS251

Enable Industrial 2 of 5*



IDS250

Disable Industrial 2 of 5

Industrial 2 of 5 Min/Max Length



R25MIN

Set Min Length

(Default = 04)



R25MAX

Set Max Length

(Default = 24)

Example: Set Min Length as 8, Max Length as 12 for Industrial 2 of 5

Step1: Scan “**Set Min Length**”

Step2: Scan “**8**” in Appendix-Data

Step3: Scan “**Save**” in Appendix-Save&Abort

Step4: Scan “**Set Max Length**”

Step5: Scan “**1**” “**2**” in Appendix-Data

Step6: Scan “**Save**” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.

MSI Plessey

Enable/Disable MSI Plessey



MSIENA1

Enable MSI Plessey



MSIENAO

Disable MSI Plessey*

Verification



MSICDT1

Send Check Digit



MSICDTO

Not Send Check Digit*



MSICDB0

1 Check Digit*



MSICDB1

2 Check Digits



MSIAM10

MOD10/MOD10



MSIAM11

MOD10/MOD11

MSI Plessey Min/Max Length



MSIMIN

Set Min Length

(Default = 04)



MSIMAX

Set Max Length

(Default = 50)

Example: Set Min Length as 8, Max Length as 12 for MSI Plessey

Step1: Scan “**Set Min Length**”

Step2: Scan “**8**” in Appendix-Data

Step3: Scan “**Save**” in Appendix-Save&Abort

Step4: Scan “**Set Max Length**”

Step5: Scan “**1**” “**2**” in Appendix-Data

Step6: Scan “**Save**” in Appendix-Save&Abort

Note: Configurable range for Min/Max Length is 01 ~ 50.

Febraban

Note: Make sure AIM ID is disabled before enabling Febraban.

Enable/Disable Febraban (ITF25)



FEBRA1

Enable Febraban

FEBRA0

Disable Febraban*

Enable/Disable Febraban (Code 128)



FEBRC1

Enable Febraban

FEBRC0

Disable Febraban*

Verification



FEBCK1

Enable Febraban Verification

FEBCK0

Disable Febraban Verification*

GS1 DataBar (RSS-14)

Enable/Disable GS1 DataBar 14



RSS141

Enable GS1 DataBar*



RSS140

Disable GS1 DataBar

GS1 DataBar Limited (RSS-Limited)

Enable/Disable GS1 DataBar Limited



GS1LMT1

Enable GS1 DataBar Limited*



GS1LMT0

Disable GS1 DataBar Limited

GS1 DataBar Expanded (RSS-Expanded)

Enable/Disable GS1 DataBar Expanded



GS1EPD1

Enable GS1 DataBar Expanded*



GS1EPD0

Disable GS1 DataBar Expanded

QR Code

Enable/Disable QR Code



Enable QR Code*



Disable QR Code

Micro QR Code

Enable/Disable Micro QR Code



Enable Micro QR Code*



Disable Micro QR Code

Data Matrix

Enable/Disable Data Matrix



Enable Data Matrix*



Disable Data Matrix

PDF 417

Enable/Disable PDF 417



PDF4171

Enable PDF 417*



PDF4170

Disable PDF 417

Micro PDF 417

Enable/Disable Micro PDF 417



MPDF1

Enable Micro PDF 417*



MPDF0

Disable Micro PDF 417

Aztec

Enable/Disable Aztec



AZTEC1

Enable Aztec*



AZTEC0

Disable Aztec

MaxiCode

Enable/Disable MaxiCode



QaCbZa

Enable MaxiCode



QaCbPa

Disable MaxiCode*

Chapter 6 Appendix

Appendix-Data



K0K

0

K1K

1

K2K

2

K3K

3

K4K

4

K5K

5

K6K

6

K7K

7

K8K

8

K9K

9

KAK

A

KBK

B



KCK

C



KDK

D



KEK

E



KFK

F

Appendix-Save&Abort

If there is an error reading data barcode during configuration, you may cancel configuration by scanning below configuration barcodes.

For example, barcode data '1', '2' , '3' have been scanned respectively during configuration. If you want to cancel '3', scan **Abort 1 Data**. If you want to cancel '123', scan **Abort All Data**.

Alternatively you may scan **Abort Configuration** to cancel the whole configuration process.



Abort Configuration

KRSTP



Save

KSAVE



Abort 1 Data

KBACK



Abort All Data

KRSTN

Appendix-Default Table

Function	Default	Remark
General Settings		
Barcode Configurability	ON	
Power Up Beep	ON	
Good Read Beep	ON	
Good Read Beep Duration	Short	
Good Read Beep Frequency	Hlgh	
Good Read Beep Volume	Hlgh	
Error Beep Frequency	Low	
Illumination	ON	
Aimer	ON	
Data Encoding Format	English/Latin-1	
Inverse Barcode	Normal Barcode Only	
Decode Area	Centering Off	
Interface		
Interface	USB HID	
Keyboard Layout	English (US)	
Alt Code - Mode	OFF	
Alt Code - Operating System	WINDOWS	
GS Replacement	OFF	
Control Code Conversion	OFF	
Upper/Lower Case	OFF	
Intercharacter Delay	Short	
Reading Mode		
Reading Mode	Trigger Mode	
Auto-sensing Mode - Identical Read Interval	ON	750ms
Data Format		
Leading Sequence	Code ID+AIM ID+Preamble	
Trailing Sequence	Postamble+Code ID+AIM ID+Terminator	
Code ID	OFF	
AIM ID	OFF	
Preamble	OFF	
Postamble	OFF	
Hide Data	OFF	
Terminator	ON	CR+LF

Symbologies	
General Settings	OFF
UPC-A	
Enable/Disable	ON
Check Digit	ON
2-digit Supplement	OFF
5-digit Supplement	OFF
2-digit Supplement Required	OFF
5-digit Supplement Required	OFF
UPC-A to EAN-13	OFF
UPC-E	
Enable/Disable	ON
Check Digit	ON
2-digit Supplement	OFF
5-digit Supplement	OFF
2-digit Supplement Required	OFF
5-digit Supplement Required	OFF
EAN-8	
Enable/Disable	ON
2-digit Supplement	OFF
5-digit Supplement	OFF
2-digit Supplement Required	OFF
5-digit Supplement Required	OFF
EAN-13	
Enable/Disable	ON
2-digit Supplement	OFF
5-digit Supplement	OFF
2-digit Supplement Required	OFF
5-digit Supplement Required	OFF
EAN-13 to ISBN	OFF
EAN-13 to ISSN	OFF
Code 128	
Enable/Disable	ON
GS1-128	
Enable/Disable	ON
Code 128/GS1-128	
Min Length	04
Max Length	50
ISBT 128	
Enable/Disable	ON

Code 39

Enable/Disable	ON
Send Check Digit	OFF
MOD43 Verification	ON
Full ASCII Code39	OFF
Min Length	04
Max Length	50

Code 32

Enable/Disable	ON
----------------	----

Code 93

Enable/Disable	ON
Min Length	04
Max Length	50

Code 11

Enable/Disable	OFF
Verification	OFF
Send Check Digit	OFF
Min Length	04
Max Length	50

Codabar

Enable/Disable	ON
Send Start/Stop	OFF
Start/Stop	ABCD/ABCD
Min Length	04
Max Length	50

Interleaved 2 of 5

Enable/Disable	ON
Verification	OFF
Send Check Digit	OFF
Min Length	05
Max Length	50

Matrix 2 of 5

Enable/Disable	ON
Min Length	04
Max Length	24

Industrial 2 of 5

Enable/Disable	ON
Min Length	04
Max Length	24

MSI Plessey

Enable/Disable	OFF	
Verification	ON	1 Check Digit
Send Check Digit	OFF	
Min Length	04	
Max Length	50	
Febraban		
Enable/Disable (ITF25)	OFF	
Enable/Disable (Code 128)	OFF	
Verification	OFF	
GS1 DataBar (RSS-14)		
Enable/Disable	ON	
GS1 DataBar Limited (RSS-Limited)		
Enable/Disable	ON	
GS1 DataBar Expanded (RSS-Expanded)		
Enable/Disable	ON	
QR Code		
Enable/Disable	ON	
Micro QR Code		
Enable/Disable	ON	
Data Matrix		
Enable/Disable	ON	
PDF 417		
Enable/Disable	ON	
Micro PDF 417		
Enable/Disable	ON	
Aztec		
Enable/Disable	ON	
MaxiCode		
Enable/Disable	OFF	

Appendix-Code ID

#	Symbology	Code ID	HEX
0	All Symbologies		99
1	UPC-A/UPC-E	c	63
2	EAN-8/EAN-13	d	64
3	ISBN	B	42
4	ISSN	N	6E
5	Code 128/GS1-128/ISBT 128	j	6A
6	Code 39	b	62
7	Code 93	i	69
8	Code 32	<	3C
9	Code 11	H	48
10	Codabar	a	61
11	Interleaved 2 of 5	e	65
12	Matrix 2 of 5	v	76
13	Industrial 2 of 5	D	44
14	GS1 DataBar	R	52
15	MSI Plessey	m	6D
16	PDF 417	r	72
17	Micro PDF 417	s	53
18	Data Matrix	u	75
19	QR Code/Micro QR Code	Q	51
20	Aztec	z	7A
21	MaxiCode	x	78

Note: To check Code ID of ISBN & ISSN, EAN-13 to ISBN/ISSN must be enabled.

Appendix-AIM ID

#	Symbology	AIM ID	Remark
1	UPC-A/UPC-E	]Em	m: 0, 3
2	UPC-E	c	63
3	EAN-8/EAN-13	]Em	m: 0, 1, 3, 4
4	EAN-13	d	64
5	ISBN	]X0	
6	ISSN	]X0	
7	Code 128	]C0	m: 0, 1, 2, 4
8	Code 39	]Am	m: 0, 1, 3, 4, 5, 7
9	Code 93	]G0	
10	Code 32	]A0	
11	Code 11	]Hm	m: 0, 1, 3, 8, 9
12	Codabar	]Fm	m: 0~1
13	Interleaved 2 of 5	]Im	m: 0, 1, 3
14	Matrix 2 of 5	]X0	
15	Industrial 2 of 5	]S0	
16	GS1-128 (UCC/EAN 128)	]C1	
17	GS1 DataBar	]e0	
18	PDF 417 /Micro PDF 417	]Lm	m: 0~5
19	Data Matrix	]dm	m: 0~6
20	QR Code/Micro QR Code	]Qm	m: 0~6
21	Aztec	]z0	
22	MaxiCode	]U0	

Appendix-Control Code

Note: ASCII 0~31 have different definition among different interfaces.

Hex	Dec	Definition (Control Code Conversion Off)	Definition (Control Code Conversion On)	USB VCP Definition (ASCII)
00	00	(Reserved)	Ctrl+@	NUL
01	01	Insert	Ctrl+A	SOH
02	02	Home	Ctrl+B	STX
03	03	End	Ctrl+C	ETX
04	04	Delete	Ctrl+D	EOT
05	05	PageUp	Ctrl+E	ENQ
06	06	PageDown	Ctrl+F	ACK
07	07	ESC	Ctrl+G	BEL
08	08	Backspace	Ctrl+H	BS
09	09	Tab	Ctrl+I	HT
0A	10	Enter	Ctrl+J	LF
0B	11	Caps Lock	Ctrl+K	VT
0C	12	Print Screen	Ctrl+L	FF
0D	13	Enter	Ctrl+M	CR
0E	14	Scroll Lock	Ctrl+N	SO
0F	15	Pause/Break	Ctrl+O	SI
10	16	F11	Ctrl+P	DLE
11	17	Arrow Key ↑	Ctrl+Q	DC1
12	18	Arrow Key ↓	Ctrl+R	DC2
13	19	Arrow Key ←	Ctrl+S	DC3
14	20	Arrow Key →	Ctrl+T	DC4
15	21	F12	Ctrl+U	NAK
16	22	F1	Ctrl+V	SYN
17	23	F2	Ctrl+W	ETB
18	24	F3	Ctrl+X	CAN
19	25	F4	Ctrl+Y	EM
1A	26	F5	Ctrl+Z	SUB
1B	27	F6	Ctrl+[	ESC
1C	28	F7	Ctrl+\	FS
1D	29	F8	Ctrl+]	GS
1E	30	F9	Ctrl+^	RS
1F	31	F10	Ctrl+_	US

Appendix-ASCII Table

Note: ASCII 0~31 are non-printable characters, ASCII 32~127 are printable characters.

Hex	Dec	ASCII
00	00	NUL (Null char.)
01	01	SOH (Start of Header)
02	02	STX (Start of Text)
03	03	ETX (End of Text)
04	04	EOT (End of Transmission)
05	05	ENQ (Enquiry)
06	06	ACK (Acknowledgment)
07	07	BEL (Bell)
08	08	BS (Backspace)
09	09	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)
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)
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)

Version History

Rev	Date	Description	Issued
1.0	2021.05.10	Initial Release	Shaw
1.1	2021.10.12	Revised configurable range for Min/Max length Revised Code 32 default setting	Shaw
1.2	2022.03.14	Added EAN-8/EAN-13 Check Digit	Shaw
1.3	2022.07.05	Added MaxiCode	Shaw
1.4	2024.02.28	Updated Decode Area, Upper/Lower Case	Shaw