



**MT82VB**  
**2D Scan Engine**  
**User's Manual**



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## 1. Introduction

### 1.1 Manual Description

This user's manual mainly provides instruction on configuring MT82VB. By scanning the configuration barcodes in this manual, you can change MT82VB's interface, reading mode, data format and so on. The appendix lists the default configurations of MT82VB. In most cases, user can use MT82VB without further configuration.

### 1.2 Product Requirements

Model	Firmware Version	Interface
MT82VB	V2.2.18-Apr 26 2021 or up	UART
		USB HID
		USB VCP

### 1.3 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**

Scanning below configuration barcodes will allow/prohibit configuration barcode data output.



**Enable Config Barcode Data Output**



**Disable Config Barcode Data Output\***

### 1.4 Factory Default

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



Factory Default

### 1.5 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 **Restore Custom Default** to reset current settings to the custom default.



Save Custom Default



Restore Custom Default

### 1.6 Check Version

To check firmware version, please scan below configuration barcode.



Check Version

## 2. Interface

MT82VB provides UART serial interface and multiple USB interfaces to communicate with the host. Through communication interface, it is possible to receive barcode data and send command to control MT82VB at the same time.

### 2.1 UART

Scanning below configuration barcode will set MT82VB to UART interface.



UART

Parameter	Default
Serial communication type	UART
Baud Rate	9600
Parity	None
Data Bits	8
Stop Bits	1
Hardware Flow Control	None

#### 2.1.1 Baud Rate

The unit of Baud Rate is bps (bits per second); below are available options:



1200



2400



4800



9600



19200



38400



57600



9600\*



38400



115200

### 2.1.2 Parity

Three parity options are available:



None\*



Odd



Even

### 2.1.3 Stop Bit



1 Stop Bit\*



2 Stop Bits

### 2.1.4 Handshaking



Disable ACK/NAK\*



Enable ACK/NAK

## 2.2 USB HID

Scanning below configuration barcode will set MT82VB to USB HID interface, in which MT82VB becomes an HID keyboard device.



USB HID\*

### 2.2.1 Keyboard Layout



English (USA)\*



Belgian



Finnish



French



German/Austrian



Italian



Swedish



Dennish



Spnish



Turkish F



Japanese



Czech



Ukrainian



English (UK)



Norwegian



Portuguese



Turkish Q



Russian



Thai



Brazilian (ABNT2)



Greek



Dutch



Romanian



Hungarian



Polish (214)



Slovakian

### 2.2.2 Alt Code

When alt code is enabled, data can be transmitted correctly regardless of keyboard layout. Please ensure numeric keypad is functional before using alt code.



Disable Alt Code\*



Enable Alt Code

### 2.2.3 Intercharacter Delay

Intercharacter delay is the time interval between the release of last key and the pressing of the next key. The configurable range is from 0 to 1000ms; default is 5ms (unit = 5ms).



0ms



10ms

## 2.2.4 Control Code Output

Control code includes 0x00 to 0x20. You may decide the way they are transmitted:

1. Function key: see Appendix for definition
2. Ctrl key combination: see Appendix for definition
3. Alt code: see standard ASCII table for definition
4. Enter & DownArrow only: transmits Enter for 0x07 or 0x0D, DownArrow for 0x0A, ignoring all else.



Function Key



Ctrl Key Combination



Alt Code



Enter & DownArrow Only

## 2.3 USB VCP

When configured to USB VCP interface, MT82VB can communicate with the host via USB Virtual COM, which requires VCP driver to be installed.



USB VCP



### 3. Operation Mode

#### 3.1 Power Mode

In sleep mode, MT82VB sleeps after a period of inactivity, which can be woken up by command.

In non-sleep mode, MT82VB stays active after each scanning operation.



Non-Sleep Mode\*



Sleep Mode

#### 3.2 Manual Trigger Mode

##### 3.2.1 Trigger Mode

In trigger mode, MT82VB starts scanning barcode when trigger is pressed, stops scanning barcode after trigger is released. When a barcode is successfully scanned or LED timeout expires, the scanning stops.



Trigger Mode\*

##### 3.2.2 Toggle Mode

In toggle mode, MT82VB starts scanning barcode when trigger is pressed, and keeps scanning barcode after trigger is released. When a barcode is successfully scanned or LED timeout expires, the scanning stops.



Toggle Mode\*

### 3.3 Continuous Mode

In continuous mode, MT82VB keeps scanning barcodes continuously.



**Continuous Mode**

#### 3.3.1 Scan Interval

Scan interval is the period of time between two consecutive scans. The configurable range is from 0 to 9900ms; default is 500ms (unit = 100ms). To configure scan interval, scan **Set Scan Interval**, scan two numeric barcodes. For example, scan '0' and '5' respectively for 500ms.



**Set Scan Interval**

### 3.4 Auto-sensing Mode

In auto-sensing mode, MT82VB automatically starts scanning barcode when image change is detected within its field of view. When a barcode is successfully scanned or LED timeout expires, the scanning stops and will restarts scanning if any image change is detected.



**Auto-sensing Mode**

### 3.4.1 Image Stabilization Timeout

The configurable range is from 0 to 9900ms; default is 500ms (unit = 100ms).

To configure image stabilization timeout, scan **Set Image Stabilization Timeout**, scan two numeric barcodes. For example, scan '0' and '2' respectively for 200ms.



Set Image Stabilization Timeout

### 3.4.2 Auto-sensing Sensitivity



High\*



Medium



Low

### 3.5 LED Timeout

LED timeout is the maximum scanning duration. When LED timeout expires, the scanning operation stops automatically. The configurable range is from 0.5 to 25.5s (unit = 0.1s); default is 3s. To configure LED timeout, scan **Set LED Timeout**, scan three numeric barcodes. For example, scan '0' '0' '5' respectively for 0.5s; scan '1' '0' '5' respectively for 10.5s.



Unlimited



3s



5s



10s



15s



20s



Set LED Timeout

### 3.6 Identical Read Interval

When identical read interval > 0ms, a barcode (or an identical one) can be re-scanned only after the defined amount of interval expires. The configurable range is from 0 to 9900ms (unit = 100ms); default is 500ms. To configure identical read interval, scan **Set Identical Read Interval**, scan two numeric barcodes. For example, scan '0' '5' respectively for 500ms.



0s



1s



3s



5s



7s



Unlimited



Set Identical Read Interval

## 4. Illumination and Aimer

### 4.1 Illumination



Normal\*



Always Off



Always On

### 4.2 Aimer



Normal\*



Always Off



Always On



Flash



Not Flash

## 5. Indicator

### 5.1 Mute



Mute



Unmute\*

### 5.2 Beep Volume



High\*



Medium



Low

### 5.3 Good Read Beep



On\*

Off

**5.4 Power Up Beep**



On\*



Off

**5.5 Configuration Barcode Beep**



On\*



Off

**5.6 Good Read LED**



On\*



Off

**5.7 Good Read LED Mode**



Normal\*



Always On

### 5.8 NR (No Read) Message

When enabled, NR message is sent when LED timeout expires.



On



Off\*

### 5.9 Capital Lock



None\*



All Upper Case



All Lower Case



Invert Case

### 5.10 Output Encoding Format



raw



GBK\*



UNICODE



### 5.11 Input Encoding Format



Auto\*



GBK(GB2312)



UTF8



ASCII



Japanese

## 6. Data Format

### 6.1 Code ID

Please refer to Appendix for Code ID of each symbology.



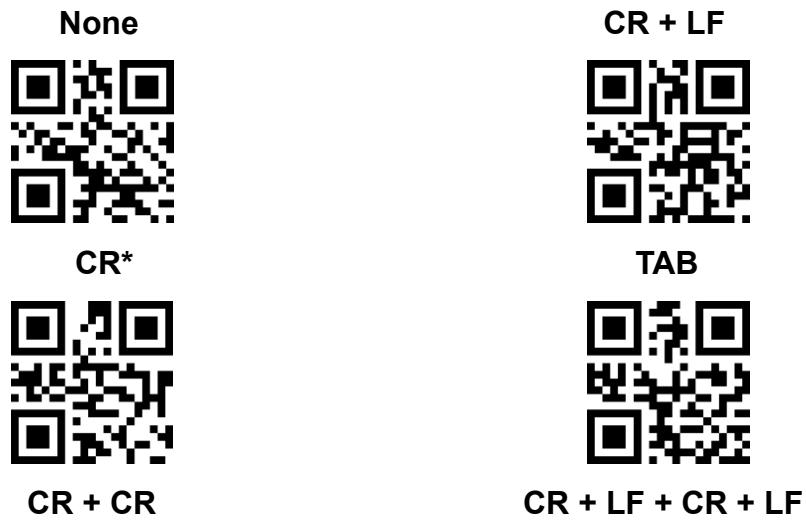
Enable Code ID



Disable Code ID\*

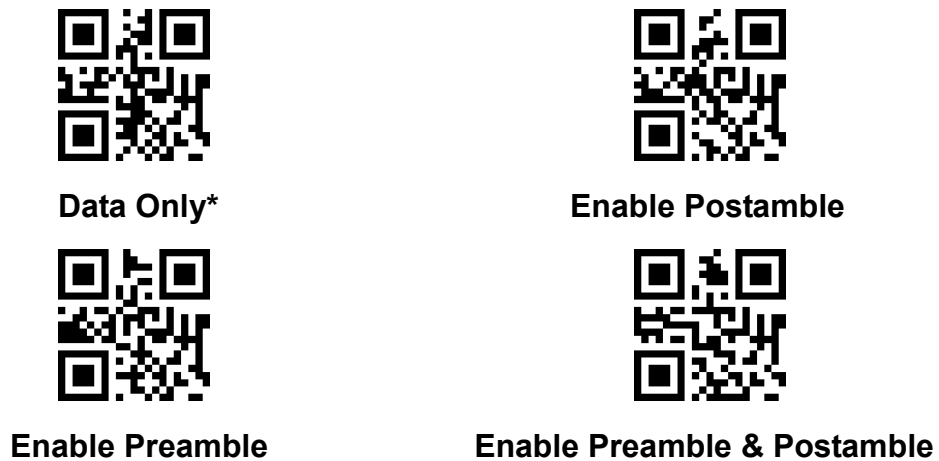
### 6.2 Terminator





### 6.3 Preamble/Postamble

#### 6.3.1 Enable/Disable Preamble/Postamble



#### 6.3.2 Set Preamble

Step1: Scan **Set Preamble**



Step2: Enter desired data as preamble by scanning configuration barcodes

from **Appendix 1**. There will be a beep indicator for every 4 data.

Step3: Scan **Save Configuration**



**Save Configuration**

### 6.3.3 Set Postamble

Step1: Scan **Set Postamble**



**Set Postamble**

Step2: Enter desired data as postamble by scanning configuration barcodes from **Appendix 1**. There will be a beep indicator for every 4 data.

Step3: Scan **Save Configuration**



**Save Configuration**

## 6.4 Preamble/Postamble of a Symbology

### 6.4.1 Enable/Disable Preamble/Postamble



Data Only\*



Enable Preamble

Enable Postamble



Enable Preamble & Postamble

## 6.4.2 Set Preamble

Step 1: Scan **Set Preamble of a Symbology**



**Set Preamble of a Symbology**

Step 2: Select symbology from **Appendix 5**, convert its hex value to scan value based on **Appendix 4**, and scan corresponding numeric barcodes from **Appendix 1**. For example, if your desired symbology is QR Code (0xF1), then scan 1, 2, 4, 1 ( $1000+241(0xF1)=1241$ ) respectively.

Step 3: Enter data as preamble. For example, if your desired preamble is '1' (0x31), scan 1, 0, 4, 9 ( $1000+49(0x31)=1049$ ) respectively.

Step4: Scan **Save Configuration**



**Save Configuration**

## 6.4.3 Set Postamble of a Symbology

Step 1: Scan **Set Postamble of a Symbology**



### Set Postamble of a Symbology

Step 2: Select symbology from **Appendix 5**, convert its hex value to scan value based on **Appendix 4**, and scan corresponding numeric barcodes from **Appendix 1**. For example, if your desired symbology is QR Code (0xF1), then scan 1, 2, 4, 1 (1000+241(0xF1)=1241) respectively.

Step 3: Enter data as postamble. For example, if your desired preamble is '1' (0x31), scan 1, 0, 4, 9 (1000+49(0x31)=1049) respectively.

Step4: Scan **Save Configuration**



### Save Configuration

#### 6.4.4 Clear Preamble of a Symbology

Step 1: Scan **Clear Preamble of a Symbology**



### Clear Preamble of a Symbology

Step 2: Select symbology from **Appendix 5**, convert its hex value to scan value based on **Appendix 4**, and scan corresponding numeric barcodes from **Appendix 1**. For example, if your desired symbology is QR Code (0xF1), then scan 1, 2, 4, 1 (1000+241(0xF1)=1241) respectively. If you want to clear preamble to all symbologies (0xFF), scan 1, 2, 5, 5 (1000+255(0xFF)=1255) respectively.

### 6.4.5 Clear Postamble of a Symbology

Step 1: Scan Clear Postamble of a Symbology



Clear Postamble of a Symbology

Step 2: Select symbology from **Appendix 5**, convert its hex value to scan value based on **Appendix 4**, and scan corresponding numeric barcodes from **Appendix 1**. For example, if your desired symbology is QR Code (0xF1), then scan 1, 2, 4, 1 ( $1000+241(0xF1)=1241$ ) respectively. If you want to clear preamble to all symbologies (0xFF), scan 1, 2, 5, 5 ( $1000+255(0xFF)=1255$ ) respectively.

### 6.5 Hide Start/Center/End

Data can be divided into [Start] + [Center] + [End] if their length is defined.

#### 6.5.1 Hide/Unhide Start

If the defined length of start is longer than barcode data, the entire content will be hidden.



Unhide Start\*



Hide Start

#### 6.5.2 Set Start Length

The configurable range is from 1 to 255. To configure start length, scan **Set Start Length**, scan three numeric barcodes. For example, scan '0' '1' '6' respectively for a start length of 16 digits.



**Set Start Length**

### 6.5.3 Hide/Unhide Center

If the defined starting point of center is longer than barcode data, no content will be hidden. If the defined center length is longer than the rest of data, all the content after starting point will be hidden.



**Unhide Center\***



**Hide Center**

### 6.5.4 Set Starting Point/Center Length

The configurable range is from 1 to 255. To configure starting point, scan **Set Starting Point**, scan three numeric barcodes. For example, scan '0' '0' '3' respectively if you want to hide the content from 4<sup>th</sup> digit on.



**Set Starting Point**

The configurable range is from 1 to 255. To configure center length, scan **Set Center Length**, scan three numeric barcodes. For example, scan '0' '1' '6' respectively for a center length of 16 digits.



**Set Center Length**

### 6.5.5 Hide/Unhide End

If the defined length of end is longer than barcode data, the entire content will be hidden.



Unhide End\*



Hide End

### 6.5.6 Set End Length

The configurable range is from 1 to 255. To configure end length, scan **Set End Length**, scan three numeric barcodes. For example, scan '0' '1' '6' respectively for an end length of 16 digits.



Set End Length

## 6.6 Hide Start/End of a Symbology

### 6.6.1 Hide/Unhide Start



Unhide Start\*



Hide Start

### 6.6.2 Set Start Length

Step 1: Scan **Set Start Length of a Symbology**





### Set Start Length of a Symbology

Step 2: Select symbology from **Appendix 5**, convert its hex value to scan value based on **Appendix 4**, and scan corresponding numeric barcodes from **Appendix 1**. For example, if your desired symbology is QR Code (0xF1), then scan 1, 2, 4, 1 (1000+241(0xF1)=1241) respectively. If you want to hide start of all symbologies (0xFF), scan 1, 2, 5, 5 (1000+255(0xFF)=1255) respectively.

Step 3: Scan 4 numeric barcodes as start length. For example, scan '0' '0' '0' '5' respectively for a start length of 5 digits.

### 6.6.3 Hide/Unhide End



Unhide End\*



Hide End

### 6.6.4 Set End Length

Step 1: Scan **Set End Length of a Symbology**



### Set End Length of a Symbology

Step 2: Select symbology from **Appendix 5**, convert its hex value to scan value based on **Appendix 4**, and scan corresponding numeric barcodes from **Appendix 1**. For example, if your desired symbology is QR Code (0xF1), then scan 1, 2, 4, 1 (1000+241(0xF1)=1241) respectively. If you want to hide end of all symbologies (0xFF), scan 1, 2, 5, 5 (1000+255(0xFF)=1255) respectively.

Step 3: Scan 4 numeric barcodes as start length. For example, scan '0' '0' '0' '5' respectively for an end length of 5 digits.

## 6.7 Insert Data

### 6.7.1 Enable/Disable Insert Data

The maximum insert data is 10 digits.



Disable\*



Enable

### 6.7.2 Set Starting Point/Insert Data

Step 1: To configure starting point, scan **Set Starting Point**, scan four numeric barcodes. The configurable range is from 0 to 5000. When configured to 0, data will be inserted from the beginning. If starting point is longer than barcode data, then data will be inserted to the end. For example, scan '0' '0' '0' '3' respectively if you want to insert data behind the 3<sup>rd</sup> digit.



Set Starting Point

Step 2: To configure center length, scan **Set Insert Data**, scan numeric barcodes according to scan value of Appendix 4. The maximum number of insert data is 10 digits. For example, if your desired insert data is 'QR' (0x51,0x52), scan 1, 0, 8, 1 (1000+81(0x51)=1081) 1, 0, 8, 2 (1000+82(0x52)=1082) respectively. If 10 insert data is entered, the programming of set insert data finishes automatically. If less than 10 insert data is entered, please scan **Save Configuration** after the last insert data.



Set Insert Data



Save Configuration

## 6.8 STX/ETX



Disable



Enable STX



Enable ETX



Enable STX & ETX

## 6.9 Replace Data

This function supports any content within barcode data being replaced by desired one. Data replacement can be 1 on 1 or 1 on many. For example, A-B, A-BC, A-BCD and so on.

### 6.9.1 Enable/Disable Replace Data



Disable



Enable

### 6.9.2 Set Original Data/Replacement Data

Step 1: To configure the original data to be replaced, scan **Set Original Data**, scan four numeric barcodes. For example, scan '1' '0' '2' '9' (1000+29(0x1D)=1029) respectively for control code 'GS'.



**Set Original Data**

Step 2: To configure replacement data, scan **Set Replacement Data**, scan four numeric barcodes. For example, scan '1' '1' '2' '5' (1000+125(0x7D)=1125) respectively for symbol '}'.



**Set Replacement Data**

Step 3: Scan **Save Configuration**.



**Save Configuration**

## 7 Symbologies

### 7.1 General Settings



Enable All Symbologies



Disable All Symbologies



Enable All 1D Symbologies



Disable All 1D Symbologies



Enable All 2D Symbologies



Disable All 2D Symbologies

### 7.2 Inverse Barcode



Enable All 1D Inverse Barcodes



Disable All 1D Inverse Barcodes\*



Enable Inverse Data Matrix



Disable Inverse Data Matrix\*



**Enable Inverse QR Code**

**Disable Inverse QR Code\***

### 7.3 Mirrored Barcode



**Enable Mirrored Data Matrix**



**Disable Mirrored Data Matrix\***



**Enable Mirrored QR Code**



**Disable Mirrored QR Code\***

### 7.4 UPC-A

#### 7.4.1 Enable/Disable UPC-A



**Enable UPC-A\***



**Disable UPC-A**

#### 7.4.2 UPC-A to EAN-13



**Disable UPC-A to EAN-13\***



**Enable UPC-A to EAN-13**

### 7.4.3 Check Digit



Send Check Digit\*



Not Send Check Digit

### 7.4.4 System Number



Send System Number\*



Not Send System Number

### 7.4.5 Supplement



Disable 2-digit Supplement\*



Enable 2-digit Supplement



Disable 5-digit Supplement\*



Enable 5-digit Supplement

### 7.4.6 Supplement Required



**Disable Supplement Required\***



**Enable Supplement Required**

## **7.5 UPC-E**

### **7.5.1 Enable/Disable UPC-E**



**Enable UPC-E\***



**Disable UPC-E**

### **7.5.2 UPC-E to UPC-A**



**Disable UPC-E to UPC-A\***



**Enable UPC-E to UPC-A**

### **7.5.3 Enable/Disable UPC-E1**



**Enable UPC-E1\***



**Disable UPC-E1**



### 7.5.4 Check Digit



Send Check Digit\*



Not Send Check Digit

### 7.5.5 System Number



Send System Number\*



Not Send System Number

### 7.5.6 Supplement



Disable 2-digit Supplement\*



Enable 2-digit Supplement



Disable 5-digit Supplement\*



Enable 5-digit Supplement

### 7.5.7 Supplement Required



**Disable Supplement Required\***



**Enable Supplement Required**

## 7.6 EAN-8

### 7.6.1 Enable/Disable EAN-8



**Enable EAN-8\***



**Disable EAN-8**

### 7.6.2 Check Digit



**Send Check Digit\***



**Not Send Check Digit**

### 7.6.3 Supplement



**Disable 2-digit Supplement\***



**Enable 2-digit Supplement**



**Disable 5-digit Supplement\***



**Enable 5-digit Supplement**

### 7.6.4 Supplement Required



**Disable Supplement Required\***



**Enable Supplement Required**

### 7.7 EAN-13

#### 7.7.1 Enable/Disable EAN-13



**Enable EAN-13\***



**Disable EAN-13**

#### 7.7.2 Check Digit



**Send Check Digit\***



**Not Send Check Digit**

### 7.7.3 Supplement



**Disable 2-digit Supplement\***



**Enable 2-digit Supplement**



**Disable 5-digit Supplement\***



**Enable 5-digit Supplement**

### 7.7.4 Bookland EAN (ISBN)



**Disable Bookland EAN\***



**Enable Bookland EAN**

### 7.7.5 Supplement Required



**Disable Supplement Required\***



**Enable Supplement Required**

### 7.8 Code128



Enable Code128\*



Disable Code128

### 7.9 GS1-128 (UCC/EAN-128)



Enable GS1-128\*



Disable GS1-128

### 7.10 Interleaved 2/5

#### 7.10.1 Enable/Disable Interleaved 2/5



Enable Interleaved 2/5\*



Disable Interleaved 2/5

#### 7.10.2 Min/Max Length

To configure specific length, please scan **Set Length**, and scan four numeric barcodes. For example, if you want minimum length of 4 digits and maximum length of 20 digits, scan '0', '4', '2', '0' respectively.



Any Length\*



Set Length

### 7.10.3 Verification



Enable Verification



Disable Verification\*

### 7.10.4 Check Digit



Send Check Digit



Not Send Check Digit\*

## 7.11 Matrix 2/5

### 7.11.1 Enable/Disable Matrix 2/5



Enable Matrix 2/5



Disable Matrix 2/5\*

### 7.11.2 Length

To configure specific length, please scan **Set Length**, and scan four numeric barcodes. For example, if you want minimum length of 4 digits and maximum length of 20 digits, scan '0', '4', '2', '0' respectively.



Any Length\*

Set Length

### 7.11.3 Verification



Enable Verification



Disable Verification\*

### 7.11.4 Check Digit



Send Check Digit



Not Send Check Digit\*

## 7.12 Industrial 2/5

### 7.12.1 Enable/Disable Industrial 2/5



Enable Industrial 2/5



Disable Industrial 2/5\*

### 7.12.2 Length

To configure specific length, please scan **Set Length**, and scan four numeric barcodes. For example, if you want minimum length of 4 digits and maximum length of 20 digits, scan '0', '4', '2', '0' respectively.



**Any Length\***



**Set Length**

## 7.13 Standard 2/5

### 7.13.1 Enable/Disable Standard 2/5



**Enable Standard 2/5**



**Disable Standard 2/5\***

### 7.13.2 Length

To configure specific length, please scan **Set Length**, and scan four numeric barcodes. For example, if you want minimum length of 4 digits and maximum length of 20 digits, scan '0', '4', '2', '0' respectively.



**Any Length\***



**Set Length**

## 7.14 Code39

### 7.14.1 Enable/Disable Code39





**Enable Code39\***



**Disable Code39**

### 7.14.2 Send Start & Stop



**Send Start & Stop**



**Not Send Start & Stop\***

### 7.14.3 Length



**Any Length\***

### 7.14.4 Verification



**Enable Verification**



**Disable Verification\***

### 7.14.5 Check Digit



Send Check Digit

Not Send Check Digit\*

## 7.15 Full ASCII Code39

### 7.15.1 Enable/Disable Full ASCII Code39



Enable Full ASCII Code39



Disable Full ASCII Code39\*

## 7.16 Code32

### 7.16.1 Enable/Disable Code32



Disable Code32\*



Enable Code32

### 7.16.2 Code32 Preamble ('A')



Disable\*



Enable

## 7.17 Code93

### 7.17.1 Enable/Disable Code93



**Enable Code93**



**Disable Code93\***

### 7.17.2 Length



**Any Length\***

### 7.18 Code11

#### 7.18.1 Enable/Disable Code11



**Enable Code11**



**Disable Code11\***

### 7.18.2 Length



**Any Length\***

### 7.18.3 Verification



Enable Verification



1-Digit Verification



2-Digit Verification

### 7.18.4 Check Digit



Send Check Digit



Not Send Check Digit\*

### 7.19 Codabar

#### 7.19.1 Enable/Disable Codabar



Enable Codabar



Disable Codabar\*

### 7.19.2 Length



Any Length\*

### 7.19.3 Start & Stop Format



Start & Stop = ABCD/ABCD\*



Start & Stop = ABCD/TN\*E

### 7.19.4 Send Start & Stop



Send Start & Stop\*



Not Send Start & Stop

## 7.20 MSI Plessey

### 7.20.1 Enable/Disable Plessey



Enable MSI Plessey



Disable MSI Plessey\*

### 7.20.2 Length



Any Length\*

### 7.21 GS1 Databar



Enable GS1 Databar



Disable GS1 Databar\*

### 7.22 GS1 Composite



Enable GS1 Composite



Disable GS1 Composite\*

### 7.23 QR Code



Enable QR Code\*



Disable QR Code

### 7.24 Data Matrix



**Enable Data Matrix\***



**Disable Data Matrix**

### 7.25 PDF417



**Enable PDF417\***



**Disable PDF417**

### 7.26 Aztec



**Enable Aztec**



**Disable Aztec\***

### 7.27 MaxiCode



**Enable MaxiCode**



**Disable MaxiCode\***

### 7.28 Chinese Sensible Code (Han Xin)



**Enable**



**Disable\***



**Appendix**

**Appendix A - Numeric Barcode**



0



2



4



6



8



1



3



5



7



9

## Appendix B - Cancel

To cancel the wrong data input during configuration process, scan **Cancel**.



**Cancel**

## Appendix C - Code ID

Symbology	Code ID
UPC-A, UPC-E, EAN-8, EAN-13	A
Code39, Code32	B
Codabar	C
Code128, GS1-128, ISBT 128	D
Code93	E
Interleaved 2/5 (ITF), ITF14	F
Industrial 2/5, Standard 2/5	G
Code11	H
MSI Plessey	J
GS1 Databar	R
Matrix 2/5	V
PDF417	r
DataMatrix	u
QR Code	q
Aztec	a
MaxiCode	x
Chinese Sensible Code (Han Xin)	c

## Appendix D - Scan/Hex/Function/Ctrl Key Table

Scan Value	Hex	Function Key	Ctrl Key Combination
1000	00h	Null	CTRL 2
1001	01h	Keypad Enter	CTRL A
1002	02h	Caps lock	CTRL B
1003	03h	RightArrow	CTRL C
1004	04h	Up Arrow	CTRL D
1005	05h	Null	CTRL E
1006	06h	Null	CTRL F
1007	07h	Enter	CTRL G
1008	08h	Left Arrow	CTRL H
1009	09h	Horizontal Tab	CTRL I
1010	0Ah	Down Arrow	CTRL J
1011	0Bh	Vertical Tab	CTRL K
1012	0Ch	Backspace	CTRL L
1013	0Dh	Enter	CTRL M
1014	0Eh	Insert	CTRL N
1015	0Fh	Esc	CTRL O
1016	10h	F11	CTRL P
1017	11h	Home	CTRL Q
1018	12h	Print Screen	CTRL R
1019	13h	Delete	CTRL S
1020	14h	tab+shift	CTRL T
1021	15h	F12	CTRL U
1022	16h	F1	CTRL V
1023	17h	F2	CTRL W
1024	18h	F3	CTRL X
1025	19h	F4	CTRL Y
1026	1Ah	F5	CTRL Z
1027	1Bh	F6	CTRL [
1028	1Ch	F7	CTRL \
1029	1Dh	F8	CTRL ]
1030	1Eh	F9	CTRL 6
1031	1Fh	F10	CTRL -
1032	20h	Space	



1033	21h	!
1034	22h	'
1035	23h	#
1036	24h	\$
1037	25h	%
1038	26h	&
1039	27h	'
1040	28h	(
1041	29h	)
1042	2Ah	*
1043	2Bh	+
1044	2Ch	,
1045	2Dh	-
1046	2Eh	.
1047	2Fh	/
1048	30h	0
1049	31h	1
1050	32h	2
1051	33h	3
1052	34h	4
1053	35h	5
1054	36h	6
1055	37h	7
1056	38h	8
1057	39h	9
1058	3Ah	:
1059	3Bh	;
1060	3Ch	<
1061	3Dh	=
1062	3Eh	>
1063	3Fh	?
1064	40h	@
1065	41h	A
1066	42h	B
1067	43h	C
1068	44h	D



1069	45h	E
1070	46h	F
1071	47h	G
1072	48h	H
1073	49h	I
1074	4Ah	J
1075	4Bh	K
1076	4Ch	L
1077	4Dh	M
1078	4Eh	N
1079	4Fh	O
1080	50h	P
1081	51h	Q
1082	52h	R
1083	53h	S
1084	54h	T
1085	55h	U
1086	56h	V
1087	57h	W
1088	58h	X
1089	59h	Y
1090	5Ah	Z
1091	5Bh	[
1092	5Ch	\
1093	5Dh	]
1094	5Eh	^
1095	5Fh	_
1096	60h	'
1097	61h	a
1098	62h	b
1099	63h	c
1100	64h	d
1101	65h	e
1102	66h	f
1103	67h	g
1104	68h	h



1105	69h	i
1106	6Ah	j
1107	6Bh	k
1108	6Ch	l
1109	6Dh	m
1110	6Eh	n
1111	6Fh	o
1112	70h	p
1113	71h	q
1114	72h	r
1115	73h	s
1116	74h	t
1117	75h	u
1118	76h	v
1119	77h	w
1120	78h	x
1121	79h	y
1122	7Ah	z
1123	7Bh	{
1124	7Ch	
1125	7Dh	}
1126	7Eh	~
1127	7Fh	Undefined

## Appendix E - Symbology Table

Symbology	Hex	Symbology	Hex
Not Applicable	0x00	EAN 13 with 5 Supps.	0x8B
Code 39	0x01	EAN 13	0x0B
Codabar	0x02	EAN 13 with 2 Supps.	0x4B
Code 128, Setup128	0x03	EAN 13 with 5 Supps.	0x8B
Discrete 2 of 5	0x04	MSI	0x0E
IATA 2 of 5	0x05	GS1-128	0x0F
Interleaved 2 of 5	0x06	UPC E1	0x10
Code 93	0x07	UPC E1 with 2 Supps.	0x50
UPC A	0x08	UPC E1 with 5 Supps.	0x90
UPC A with 2 Supps.	0x48	Trioptic Code 39	0x15
UPC A with 5 Supps.	0x88	Bookland EAN	0x16
UPC E0	0x09	Coupon Code	0x17
UPC E0 with 2 Supps.	0x49	GS1 DataBar-14	0x30
UPC E0 with 5 Supps.	0x89	GS1 DataBar Limited	0x31
EAN 8	0x0A	GS1 DataBar Expanded	0x32
EAN 8 with 2 Supps	0x4A	Code11	0x0C
EAN 8 with 5 Supps	0x8A	PDF417	0xF0
QR	0xF1	Data Matrix(DM)	0xF2
Aztec Code	0xF3	Maxi Code	0xF4
Veri Code	0xF5	Han Xin	0xF7
AIM128	0xA2	ISSN	0xA3
PLESSEY	0xA4		

## Appendix F - Serial Commands

Please switch interface to USB VCP or UART before using serial commands. To trigger MT82VB by command, please switch reading mode to Host Mode first and then send START\_DECODE command.

Table F-1

Function	Command
CMD_ACK	04 D0 04 00 FF 28
CMD_NAK	RESEND:05 D1 04 00 01 FF 25 BAD_CONTEXT:05 D1 04 00 02 FF 24 DENIED:05 D1 04 00 06 FF 20
DECODE_DATA	None
LED_OFF	05 E8 04 00 01 FF 0E
LED_ON	05 E7 04 00 01 FF 0F
PARAM_DEFAULTS	04 C8 04 00 FF 30
PARAM_REQUEST	As listed below table
PARAM_SEND	As listed below table
REQUEST_REVISION	04 A3 04 00 FF 55
REPLY_REVISION	None
SCAN_DISABLE	04 EA 04 00 FF 0E
SCAN_ENABLE	04 E9 04 00 FF 0F
SLEEP	4 EB 04 00 FF 0D
START_DECODE	04 E4 04 00 FF 14
STOP_DECODE	04 E5 04 00 FF 13
WAKEUP	N/A
RESET	04 FA 04 00 FE FE
Customize Beep Sound	05 E6 04 00 00 FF 11 05 E6 04 00 01 FF 10

Table F-2

Function	Command
Default	08 C6 04 08 00 F2 FF 00 FD 35
LED Timeout	4s: 07 C6 04 08 00 88 28 FE 77 10s:07 C6 04 08 00 88 64 FE 3B
LED Timeout	Unlimited: 08 C6 04 08 00 F2 FA 00 FD 3A





	<p>3s: 08 C6 04 08 00 F2 FA 03 FD 37</p> <p>5s: 08 C6 04 08 00 F2 FA 05 FD 35</p> <p>10s: 08 C6 04 08 00 F2 FA 0A FD 30</p> <p>15s: 08 C6 04 08 00 F2 FA 0B FD 2F</p> <p>20s: 08 C6 04 08 00 F2 FA 0C FD 2E</p> <p>30s: 08 C6 04 08 00 F2 FA 0D FD 2D</p> <p>60s: 08 C6 04 08 00 F2 FA 0E FD 2C</p>
Power Mode	<p>Non-Sleep Mode: 07 C6 04 08 00 80 00 FE A7</p> <p>Sleep Mode: 07 C6 04 08 00 80 01 FE A6</p>
Reading Mode	<p>Trigger Mode: 07 C6 04 08 00 8A 00 FE 9D</p> <p>Toggle Mode: 07 C6 04 08 00 8A 02 FE 9B</p> <p>Continuous Mode: 07 C6 04 08 00 8A 04 FE 99</p> <p>Auto-sensing Mode: 07 C6 04 08 00 8A 09 FE 94</p> <p>Host Mode: 07 C6 04 08 00 8A 08 FE 95</p>
Scan Interval	<p>0s: 07 C6 04 08 00 89 00 FE 9E</p> <p>0.5s: 07 C6 04 08 00 89 05 FE 99</p> <p>3s: 07 C6 04 08 00 89 1E FE 80</p>
Beep Volume	<p>Low: 07 C6 04 08 00 8C 02 FE 99</p> <p>Medium: 07 C6 04 08 00 8C 01 FE 9A</p> <p>High: 07 C6 04 08 00 8C 00 FE 9B</p>
Buzzer Type	<p>Passive Buzzer: 08 C6 04 08 00 F2 D8 00 FD 5C</p> <p>Active Buzzer: 08 C6 04 08 00 F2 D8 01 FD 5B</p>
Good Read Beep	<p>On: 07 C6 04 08 00 38 01 FE EE</p> <p>Off: 07 C6 04 08 00 38 00 FE EF</p>
Terminator	<p>None: 08 C6 04 08 00 F2 05 00 FE 2F</p> <p>CR + LF: 08 C6 04 08 00 F2 05 01 FE 2E</p> <p>CR: 08 C6 04 08 00 F2 05 02 FE 2D</p> <p>TAB: 08 C6 04 08 00 F2 05 03 FE 2C</p> <p>CR + CR: 08 C6 04 08 00 F2 05 04 FE 2B</p> <p>CR + LF + CR + LF: 08 C6 04 08 00 F2 05 05 FE 2A</p>
Good Read LED	<p>Off: 08 C6 04 08 00 F2 0B 00 FE 29</p> <p>On: 08 C6 04 08 00 F2 0B 01 FE 28</p>
Good Read LED Mode	<p>Noraml: 08 C6 04 08 00 F2 CB 00 FD 69</p> <p>Always On: 08 C6 04 08 00 F2 CB 01 FD 68</p>
Mute	<p>Unmute: 08 C6 04 08 00 F2 0C 00 FE 28</p> <p>Mute: 08 C6 04 08 00 F2 0C 01 FE 27</p>



Power Up Beep	Off: 08 C6 04 08 00 F2 0D 00 FE 27 On: 08 C6 04 08 00 F2 0D 01 FE 26
Configuration Barcode Beep	Off: 08 C6 04 08 00 F2 0E 00 FE 26 On: 08 C6 04 08 00 F2 0E 01 FE 25
NR (No Read) Message	On: 07 C6 04 08 00 5E 01 FE C8 Off: 07 C6 04 08 00 5E 00 FE C9
Barcode Configurability	Enable: 07 C6 04 08 00 EC 01 FE 3A Disable: 07 C6 04 08 00 EC 00 FE 3B
Config Barcode Data Output	Enable: 08 C6 04 08 00 F1 71 01 FD C3 Disable: 08 C6 04 08 00 F1 71 00 FD C4
Preamble/Postamble Preamble Postamble 1 Postamble 2	Preamble 31 Postamble 32 33: 0B C6 04 08 00 69 31 68 32 6A 33 FD 52 Preamble: 0x00 Postamble 0x0D 0x0A: 0B C6 04 08 00 69 00 68 0D 6A 0A FD D1
Data Format	Data: 07 C6 04 08 00 EB 00 FE 3C Data + Postamble 1: 07 C6 04 08 00 EB 01 FE 3B Data + Postamble 2: 07 C6 04 08 00 EB 02 FE 3A Data + Postamble 1 + Postamble 2: 07 C6 04 08 00 EB 03 FE 39 Preamble + Data: 07 C6 04 08 00 EB 04 FE 38 Preamble + Data + Postamble 1: 07 C6 04 08 00 EB 05 FE 37 Preamble + Data + Postamble 2: 07 C6 04 08 00 EB 06 FE 36 Preamble + Data + Postamble 1+ Postamble 2: 07 C6 04 08 00 EB 07 FE 35
Baud Rate	1200: 07 C6 04 08 00 9C 03 FE 88 2400: 07 C6 04 08 00 9C 04 FE 87 4800: 07 C6 04 08 00 9C 05 FE 86 9600: 07 C6 04 08 00 9C 06 FE 85 19200: 07 C6 04 08 00 9C 07 FE 84 38400: 07 C6 04 08 00 9C 08 FE 83 57600: 07 C6 04 08 00 9C 09 FE 82 115200: 07 C6 04 08 00 9C 0A FE 81
Parity	Odd: 07 C6 04 08 00 9E 00 FE 89 Even: 07 C6 04 08 00 9E 01 FE 88 Mark: 07 C6 04 08 00 9E 02 FE 87



	Space: 07 C6 04 08 00 9E 03 FE 86 None: 07 C6 04 08 00 9E 04 FE 85
Handshaking	Enable: 07 C6 04 08 00 9F 01 FE 87 Disable: 07 C6 04 08 00 9F 00 FE 88
Packet Format	Disable: 07 C6 04 08 00 EE 00 FE 39 Enable: 07 C6 04 08 00 EE 01 FE 38
Host Response Timeout	0.1s: 07 C6 04 08 00 9B 01 FE 8B
Stop Bit	1 Stop Bit: 07 C6 04 08 00 9D 01 FE 89 2 Stop Bits: 07 C6 04 08 00 9D 02 FE 88
Intercharacter Delay	1s: 07 C6 04 08 00 6E 01 FE B8
Flow Control Timeout	500ms: 07 C6 04 08 00 EF 32 FE 06 200ms: 07 C6 04 08 00 EF 14 FE 24 50ms: 07 C6 04 08 00 EF 05 FE 33
Interface	UART: 08 C6 04 08 00 F2 01 00 FE 33 USB HID: 08 C6 04 08 00 F2 01 01 FE 32 USB VCP: 08 C6 04 08 00 F2 01 02 FE 31 HID POS: 08 C6 04 08 00 F2 01 0E FE 25
PS2 Mode	AUTO: 08 C6 04 08 00 F2 A6 00 FD 8E Independent PS2: 08 C6 04 08 00 F2 A6 01 FD 8D
Illumination	Normal: 08 C6 04 08 00 F2 02 00 FE 32 Always On: 08 C6 04 08 00 F2 02 01 FE 31 Always Off: 08 C6 04 08 00 F2 02 02 FE 30
Aimer	Normal: 08 C6 04 08 00 F2 03 00 FE 31 Always On: 08 C6 04 08 00 F2 03 01 FE 30 Always Off: 08 C6 04 08 00 F2 03 02 FE 2F
Aimer Flash	Flash: 08 C6 04 08 00 F2 B8 00 FD 7C Not Flash: 08 C6 04 08 00 F2 B8 01 FD 7B
Auto-sensing Sensitivity	Ultra High: 08 C6 04 08 00 F2 04 00 FE 30 High: 08 C6 04 08 00 F2 04 01 FE 2F Medium: 08 C6 04 08 00 F2 04 02 FE 2E Low: 08 C6 04 08 00 F2 04 03 FE 2D
Auto-sensing Threshold	00: 08 C6 04 08 00 F3 01 00 FE 32 01: 08 C6 04 08 00 F3 01 01 FE 31 05: 08 C6 04 08 00 F3 01 05 FE 2D 10: 08 C6 04 08 00 F3 01 0A FE 28 15: 08 C6 04 08 00 F3 01 0F FE 23



Image Stabilization Timeout	500ms: 08 C6 04 08 00 F3 02 05 FE 2C 1000ms: 08 C6 04 08 00 F3 02 0A FE 27 300ms: 08 C6 04 08 00 F3 02 03 FE 2E
Enable/Disable All 1D Inverse Barcodes	Disable: 08 C6 04 08 00 F2 91 00 FD A3 Enable: 08 C6 04 08 00 F2 91 01 FD A2
Encoding Format	Raw: 08 C6 04 08 00 F2 06 00 FE 2E GBK: 08 C6 04 08 00 F2 06 01 FE 2D UNICODE: 08 C6 04 08 00 F2 06 02 FE 2C
Keyboard Layout	English (US): 08 C6 04 08 00 F6 01 01 FE 2E Belgian: 08 C6 04 08 00 F6 01 02 FE 2D Brazilian ABNT2: 08 C6 04 08 00 F6 01 03 FE 2C Danish: 08 C6 04 08 00 F6 01 06 FE 29 Finnish: 08 C6 04 08 00 F6 01 07 FE 28 French: 08 C6 04 08 00 F6 01 08 FE 27 German, Austrian: 08 C6 04 08 00 F6 01 09 FE 26 Greek: 08 C6 04 08 00 F6 01 0A FE 25 Hungarian: 08 C6 04 08 00 F6 01 0B FE 24 Italian: 08 C6 04 08 00 F6 01 0D FE 22 Dutch: 08 C6 04 08 00 F6 01 0F FE 20 Norwegian: 08 C6 04 08 00 F6 01 10 FE 1F Polish: 08 C6 04 08 00 F6 01 11 FE 1E Portuguese: 08 C6 04 08 00 F6 01 12 FE 1D Romanian: 08 C6 04 08 00 F6 01 13 FE 1C Russian: 08 C6 04 08 00 F6 01 14 FE 1B Slovakian: 08 C6 04 08 00 F6 01 15 FE 1A Spanish: 08 C6 04 08 00 F6 01 16 FE 19 Swedish: 08 C6 04 08 00 F6 01 17 FE 18 Turkish _F: 08 C6 04 08 00 F6 01 19 FE 16 Turkish _Q: 08 C6 04 08 00 F6 01 1A FE 15 English (UK): 08 C6 04 08 00 F6 01 1B FE 14 Japanese: 08 C6 04 08 00 F6 01 1C FE 13 Czech: 08 C6 04 08 00 F6 01 1D FE 12 Thai Kedmanee: 08 C6 04 08 00 F6 01 1E FE 11 Ukrainian: 08 C6 04 08 00 F6 01 1F FE 10 Arabic_101: 08 C6 04 08 00 F6 01 20 FE 0F Croatian: 08 C6 04 08 00 F6 01 21 FE 0E Korean: 08 C6 04 08 00 F6 01 22 FE 0D



	Bulgarian: 08 C6 04 08 00 F6 01 23 FE 0C
Intercharacter Delay	0ms: 08 C6 04 08 00 F3 04 00 FE 2F 5ms: 08 C6 04 08 00 F3 04 01 FE 2E 10ms: 08 C6 04 08 00 F3 04 02 FE 2D
Interblock Delay	0ms: 08 C6 04 08 00 F2 B2 00 FD 82 10ms: 08 C6 04 08 00 F2 B2 01 FD 81 50ms: 08 C6 04 08 00 F2 B2 02 FD 80
Capital Lock	None: 08 C6 04 08 00 F2 A1 00 FD 93 All Upper Case: 08 C6 04 08 00 F2 A1 01 FD 92 All Lower Case: 08 C6 04 08 00 F2 A1 02 FD 91 Invert Case: 08 C6 04 08 00 F2 A1 03 FD 90
Alt Code	Disable: 08 C6 04 08 00 F2 B4 00 FD 80 Enable: 08 C6 04 08 00 F2 B4 01 FD 7F
STX/ETX	Disable: 08 C6 04 08 00 F2 B7 00 FD 7D STX: 08 C6 04 08 00 F2 B7 01 FD 7C ETX: 08 C6 04 08 00 F2 B7 02 FD 7B STX + ETX: 08 C6 04 08 00 F2 B7 03 FD 7A
Control Code Output	Function Key: 08 C6 04 08 00 F2 AD 00 FD 87 Ctrl Key Combination: 08 C6 04 08 00 F2 AD 01 FD 86 Alt Code: 08 C6 04 08 00 F2 AD 02 FD 85 Enter & DownArrow Only: 08 C6 04 08 00 F2 AD 03 FD 84
Enable/Disable All 1D Symbologies	Disable: 08 C6 04 08 00 F2 11 00 FE 23 Enable: 08 C6 04 08 00 F2 11 01 FE 22
Enable/Disable All 2D Symbologies	Disable: 08 C6 04 08 00 F2 50 00 FD E4 Enable: 08 C6 04 08 00 F2 50 01 FD E3
Enable/Disable All Symbologies	Disable: 08 C6 04 08 00 F2 90 00 FD A4 Enable: 08 C6 04 08 00 F2 90 01 FD A3
Hide Start	Unhide: 08 C6 04 08 00 F2 C6 00 FD 6E Hide: 08 C6 04 08 00 F2 C6 01 FD 6D
Hide Center	Unhide: 08 C6 04 08 00 F2 C7 00 FD 6D Hide: 08 C6 04 08 00 F2 C7 01 FD 6C
Hide End	Unhide: 08 C6 04 08 00 F2 C8 00 FD 6C Hide: 08 C6 04 08 00 F2 C8 01 FD 6B
Insert Data	Disable: 08 C6 04 08 00 F2 DE 00 FD 56 Enable: 08 C6 04 08 00 F2 DE 01 FD 55
Identical Read Interval	1500ms: 08 C6 04 08 00 F3 03 0F FE 21



	500ms: 08 C6 04 08 00 F3 03 05 FE 2B 300ms: 08 C6 04 08 00 F3 03 03 FE 2D
Identical Read Interval	0s: 08 C6 04 08 00 F2 C9 00 FD 6B 1s: 08 C6 04 08 00 F2 C9 01 FD 6A 3s: 08 C6 04 08 00 F2 C9 03 FD 68 5s: 08 C6 04 08 00 F2 C9 05 FD 66 7s: 08 C6 04 08 00 F2 C9 07 FD 64 Unlimited: 08 C6 04 08 00 F2 C9 09 FD 62
Set Preamble	08 C6 04 08 00 F3 10 00 FE 23
Set Postamble	08 C6 04 08 00 F3 11 00 FE 22
Save Configuration	08 C6 04 08 00 FF F6 00 FD 31
Enable/Disable Preamble/Postamble	Data + Postamble: 07 C6 04 08 00 EB 08 FE 34 Preamble + Data: 07 C6 04 08 00 EB 09 FE 33 Preamble + Data + Postamble: 07 C6 04 08 00 EB 0A FE 32
<b>UPC-A</b>	
Enable/Disable	Disable: 07 C6 04 08 00 01 00 FF 26 Enable: 07 C6 04 08 00 01 01 FF 25
Check Digit	Disable: 07 C6 04 08 00 28 00 FE FF Enable: 07 C6 04 08 00 28 01 FE FE
Supplement	Disable(00): 07 C6 04 08 00 10 00 FF 17 Enable(01): 07 C6 04 08 00 10 01 FF 16 Automatic(02): 07 C6 04 08 00 10 02 FF 15
System Number	None(00): 07 C6 04 08 00 22 00 FF 05 System Number(01): 07 C6 04 08 00 22 01 FF 04 Country, System Number(02): 07 C6 04 08 00 22 02 FF 03
2-digit Supplement	Enable: 08 C6 04 08 00 F2 40 01 FD F3 Disable: 08 C6 04 08 00 F2 40 00 FD F4
5-digit Supplement	Enable: 08 C6 04 08 00 F2 41 01 FD F2 Disable: 08 C6 04 08 00 F2 41 00 FD F3
Supplement Required	Enable: 08 C6 04 08 00 F2 42 01 FD F1 Disable: 08 C6 04 08 00 F2 42 00 FD F2
<b>UPC-E</b>	
Enable/Disable	Disable: 07 C6 04 08 00 02 00 FF 25 Enable: 07 C6 04 08 00 02 01 FF 24
Check Digit	Not Send: 07 C6 04 08 00 29 00 FE FE Send: 07 C6 04 08 00 29 01 FE FD



Supplement	Disable(00): 07 C6 04 08 00 10 00 FF 17 Enable(01): 07 C6 04 08 00 10 01 FF 16 Automatic(02): 07 C6 04 08 00 10 02 FF 15
System Number	None(00): 07 C6 04 08 00 23 00 FF 04 System Number(01): 07 C6 04 08 00 23 01 FF 03 Country, System Number(02): 07 C6 04 08 00 23 02 FF 02
UPC-E to UPC-A	Disable: 07 C6 04 08 00 25 00 FF 02 Enable: 07 C6 04 08 00 25 01 FF 01
2-digit Supplement	Enable: 08 C6 04 08 00 F2 3D 01 FD F6 Disable: 08 C6 04 08 00 F2 3D 00 FD F7
5-digit Supplement	Enable: 08 C6 04 08 00 F2 3E 01 FD F5 Disable: 08 C6 04 08 00 F2 3E 00 FD F6
Supplement Required	Enable: 08 C6 04 08 00 F2 3F 01 FD F4 Disable: 08 C6 04 08 00 F2 3F 00 FD F5
UPC-E1	Disable: 08 C6 04 08 00 F2 15 00 FE 1F Enable: 08 C6 04 08 00 F2 15 01 FE 1E
<b>EAN-8</b>	
Enable/Disable	Disable: 07 C6 04 08 00 04 00 FF 23 Enable: 07 C6 04 08 00 04 01 FF 22
Supplement	Disable(00): 07 C6 04 08 00 10 00 FF 17 Enable(01): 07 C6 04 08 00 10 01 FF 16
2-digit Supplement	Enable: 08 C6 04 08 00 F2 37 01 FD FC Disable: 08 C6 04 08 00 F2 37 00 FD FD
5-digit Supplement	Enable: 08 C6 04 08 00 F2 38 01 FD FB Disable: 08 C6 04 08 00 F2 38 00 FD FC
Supplement Required	Enable: 08 C6 04 08 00 F2 39 01 FD FA Disable: 08 C6 04 08 00 F2 39 00 FD FB
Check Digit	Disable: 08 C6 04 08 00 F2 80 00 FD B4 Enable: 08 C6 04 08 00 F2 80 01 FD B3
<b>EAN-13</b>	
Enable/Disable	Disable: 07 C6 04 08 00 03 00 FF 24 Enable: 07 C6 04 08 00 03 01 FF 23
2-digit Supplement	Enable: 08 C6 04 08 00 F2 3A 01 FD F9 Disable: 08 C6 04 08 00 F2 3A 00 FD FA
5-digit Supplement	Enable: 08 C6 04 08 00 F2 3B 01 FD F8 Disable: 08 C6 04 08 00 F2 3B 00 FD F9



Supplement Required	Enable: 08 C6 04 08 00 F2 3C 01 FD F7 Disable: 08 C6 04 08 00 F2 3C 00 FD F8
Check Digit	Not Send: 08 C6 04 08 00 F2 16 00 FE 1E Send: 08 C6 04 08 00 F2 16 01 FE 1D
Supplement	Disable(00): 07 C6 04 08 00 10 00 FF 17 Enable(01): 07 C6 04 08 00 10 01 FF 16
<b>Bookland EAN(ISBN)</b>	
Enable/Disable	Disable: 07 C6 04 08 00 53 00 FE D4 Enable: 07 C6 04 08 00 53 01 FE D3
Output Format	10 Digits:08 C6 04 08 00 F1 40 00 FD F5 13 Digits:08 C6 04 08 00 F1 40 01 FD F4
<b>Code128</b>	
Enable/Disable	Disable: 07 C6 04 08 00 08 00 FF 1F Enable: 07 C6 04 08 00 08 01 FF 1E
Code128	One Discrete Length: 06: 0B C6 04 08 00 F5 04 06 F5 05 00 FD 2A Two Discrete Lengths: 04 & 06: 0B C6 04 08 00 F5 04 06 F5 05 04 FD 26 Length Within Range 04 ~ 09: 0B C6 04 08 00 F5 04 04 F5 05 09 FD 23 Any Length: 0B C6 04 08 00 F5 04 00 F5 05 00 FD 30
<b>GS1-128</b>	
Enable/Disable	Disable: 07 C6 04 08 00 0E 00 FF 19 Enable: 07 C6 04 08 00 0E 01 FF 18
Check Digit	Send: 08 C6 04 08 00 F2 36 01 FD FD Not Send: 08 C6 04 08 00 F2 36 00 FD FE
Length	One Discrete Length: 06: 0B C6 04 08 00 F5 06 06 F5 07 00 FD 26 Two Discrete Lengths: 04 & 06: 0B C6 04 08 00 F5 06 06 F5 07 04 FD 22 Length Within Range 04 ~ 09: 0B C6 04 08 00 F5 06 04 F5 07 09 FD 1F Any Length: 0B C6 04 08 00 F5 06 00 F5 07 00 FD 2C
<b>ISBT 128</b>	





Enable/Disable	Disable: 07 C6 04 08 00 54 00 FE D3 Enable: 07 C6 04 08 00 54 01 FE D2
Code 39	
Enable/Disable	Disable: 07 C6 04 08 00 00 00 FF 27 Enable: 07 C6 04 08 00 00 01 FF 26
Length	<p>One Discrete Length:</p> <p>06: 09 C6 04 08 00 12 06 13 00 FE FA</p> <p>16: 09 C6 04 08 00 12 10 13 00 FE F0</p> <p>14: 09 C6 04 08 00 12 0E 13 00 FE F2</p> <p>Two Discrete Lengths:</p> <p>02 &amp; 04: 09 C6 04 08 00 12 04 13 02 FE FA</p> <p>16 &amp; 14: 09 C6 04 08 00 12 10 13 0E FE E2</p> <p>Length Within Range</p> <p>02 ~ 09: 09 C-6 04 08 00 12 02 13 09 FE F5</p> <p>0x02 ~ 0x37(55) default: 09 C6 04 08 00 12 02 13 37 FE C7</p> <p>14 ~ 15: 09 C6 04 08 00 12 0E 13 0F FE E3</p> <p>15 ~ 16: 09 C6 04 08 00 12 0F 13 10 FE E1</p> <p>Any Length: 09 C6 04 08 00 12 00 13 00 FE F0</p>
Verification	Disable: 07 C6 04 08 00 30 00 FE F7 Enable: 07 C6 04 08 00 30 01 FE F6
Check Digit	Not Send: 07 C6 04 08 00 2B 00 FE FC Send: 07 C6 04 08 00 2B 01 FE FB
Full ASCII Code39	07 C6 04 08 00 11 01 FF 15
Start & Stop	Not Send: 08 C6 04 08 00 F2 30 00 FE 04 Send: 08 C6 04 08 00 F2 30 01 FE 03
Enable/Disable Code32	Disable: 07 C6 04 08 00 56 00 FE D1 Enable: 07 C6 04 08 00 56 01 FE D0
Code32 Preamble ('A')	Disable: 07 C6 04 08 00 E7 00 FE 40



	Enable: 07 C6 04 08 00 E7 01 FE 3F
<b>Code93</b>	
Enable/Disable	Disable: 07 C6 04 08 00 09 00 FF 1E Enable: 07 C6 04 08 00 09 01 FF 1D
Length	One Discrete Length: 04: 09 C6 04 08 00 1A 041B 00 FE EC Two Discrete Lengths: 04 & 06: 09 C6 04 08 00 1A 06 1B 04 FE E6 Length Within Range 04 ~ 09: 09 C6 04 08 00 1A 04 1B 09 FE E3 Any Length: 09 C6 04 08 00 1A 00 1B 00 FE F0
<b>Code11</b>	
Enable/Disable	Disable: 07 C6 04 08 00 0A 00 FF 1D Enable: 07 C6 04 08 00 0A 01 FF 1C
Length	One Discrete Length: 06: 09 C6 04 08 00 1C 06 1D 00 FE E6 Two Discrete Lengths: 04 & 06: 09 C6 04 08 00 1C 06 1D 04 FE E2 Length Within Range 04 ~ 09: 09 C6 04 08 00 1C 04 1D 09 FE DF Any Length: 09 C6 04 08 00 1C 00 1D 00 FE EC
Verification	None: 07 C6 04 08 00 34 00 FE F3 1 Digit: 07 C6 04 08 00 34 01 FE F2 2 Digits: 07 C6 04 08 00 34 02 FE F1
Check Digit	Not Send: 07 C6 04 08 00 2F 00 FE F8 Send: 07 C6 04 08 00 2F 01 FE F7
<b>Interleaved 2/5</b>	
Enable/Disable	Disable: 07 C6 04 08 00 06 00 FF 21 Enable: 07 C6 04 08 00 06 01 FF 20
Length	One Discrete Length: 06: 09 C6 04 08 00 16 06 17 00 FE F2 Two Discrete Lengths: 04 & 06: 09 C6 04 08 00 16 06 17 04 FE EE Length Within Range 04 ~ 09: 09 C6 04 08 00 16 04 17 09 FE EB Any Length: 09 C6 04 08 00 16 00 17 00 FE F8



Verification	Disable: 07 C6 04 08 00 31 00 FE F6 Enable: 07 C6 04 08 00 31 01 FE F5
Check Digit	Disable: 07 C6 04 08 00 2C 00 FE FB Enable: 07 C6 04 08 00 2C 01 FE FA
<b>Industrial 2/5</b>	
Enable/Disable	Disable: 07 C6 04 08 00 05 00 FF 22 Enable: 07 C6 04 08 00 05 01 FF 21
Length	One Discrete Length: 06: 09 C6 04 08 00 14 06 15 00 FE F6 Two Discrete Lengths: 04 & 06: 09 C6 04 08 00 14 06 15 04 FE F2 Length Within Range 04 ~ 09: 09 C6 04 08 00 14 04 15 09 FE EF Any Length: 09 C6 04 08 00 14 00 15 00 FE FC
<b>Matrix 2/5</b>	
Enable/Disable	Disable: 08 C6 04 08 00 F2 20 00 FE 14 Enable: 08 C6 04 08 00 F2 20 01 FE 13
Verification	Disable: 08 C6 04 08 00 F2 21 00 FE 13 Enable: 08 C6 04 08 00 F2 21 01 FE 12
Check Digit	Not Send: 08 C6 04 08 00 F2 22 00 FE 12 Send: 08 C6 04 08 00 F2 22 01 FE 11
Length	One Discrete Length: 06: 0B C6 04 08 00 F5 00 06 F5 01 00 FD 32 Two Discrete Lengths: 04 & 06: 0B C6 04 08 00 F5 00 06 F5 01 04 FD 2E Length Within Range 04 ~ 09: 0B C6 04 08 00 F5 00 04 F5 01 09 FD 2B Any Length: 0B C6 04 08 00 F5 00 00 F5 01 00 FD 38
<b>Standard 2/5</b>	
Enable/Disable	Disable: 08 C6 04 08 00 F2 23 00 FE 11 Enable: 08 C6 04 08 00 F2 23 01 FE 10
Length	One Discrete Length: 06: 09 C6 04 08 00 F5 02 06 F5 03 00 FD 2E Two Discrete Lengths: 04 & 06: 09 C6 04 08 00 F5 02 06 F5 03 04 FD 2A



	<p>Length Within Range</p> <p>04 ~ 09: 09 C6 04 08 00 F5 02 04 F5 03 09 FD 27</p> <p>Any Length: 09 C6 04 08 00 F5 02 00 F5 03 00 FD 34</p>
<b>Codabar</b>	
Enable/Disable	<p>Disable: 07 C6 04 08 00 07 00 FF 20</p> <p>Enable: 07 C6 04 08 00 07 01 FF 1F</p>
Length	<p>One Discrete Length:</p> <p>04: 09 C6 04 08 00 18 04 19 00 FE F0</p> <p>Two Discrete Lengths:</p> <p>09 C6 04 08 00 18 05 19 04 FE EB</p> <p>Length Within Range</p> <p>04 ~ 09: 09 C6 04 08 00 18 04 19 09 FE E7</p> <p>Any Length: 09 C6 04 08 00 18 00 19 00 FE F4</p>
Verification	<p>Enable: 08 C6 04 08 00 F2 4C 01 FD E7</p> <p>Disable: 08 C6 04 08 00 F2 4C 00 FD E8</p>
Check Digit	<p>Send: 08 C6 04 08 00 F2 4D 01 FD E6</p> <p>Not Send: 08 C6 04 08 00 F2 4D 00 FD E7</p>
NOTIS Format	<p>Disable: 07 C6 04 08 00 37 00 FE F0</p> <p>Enable: 07 C6 04 08 00 37 01 FE EF</p>
Start & Stop Format	<p>ABCD/ABCD: 08 C6 04 08 00 F2 31 00 FE 03</p> <p>ABCD/TN*E: 08 C6 04 08 00 F2 31 01 FE 02</p>
Start & Stop Upper/Lower Case	<p>Upper Case: 08 C6 04 08 00 F2 32 00 FE 02</p> <p>Lower Case: 08 C6 04 08 00 F2 32 01 FE 01</p>
<b>MSI Plessey</b>	
Enable/Disable	<p>Disable: 07 C6 04 08 00 0B 00 FF 1C</p> <p>Enable: 07 C6 04 08 00 0B 01 FF 1B</p>
Length	<p>One Discrete Length:</p> <p>04: 09 C6 04 08 00 1E 04 1F 00 FE E4</p> <p>Two Discrete Lengths:</p> <p>04 &amp; 05: 09 C6 04 08 00 1E 05 1F 04 FE DF</p> <p>Length Within Range</p> <p>02 ~ 09: 09 C6 04 08 00 1E 02 1F 09 FE DD</p> <p>Any Length: 09 C6 04 08 00 1E 00 1F 00 FE E8</p>
Verification	<p>1 Digit: 07 C6 04 08 00 32 00 FE F5</p> <p>2 Digits: 07 C6 04 08 00 32 01 FE F4</p>
Check Digit	<p>Not Send: 07 C6 04 08 00 2E 00 FE F9</p>



	Send: 07 C6 04 08 00 2E 01 FE F8
<b>GS1 Databar</b>	
Enable/Disable	Disable: 08 C6 04 08 00 F0 52 00 FD E4 Enable: 08 C6 04 08 00 F0 52 01 FD E3
<b>PDF417</b>	
Enable/Disable	Enable: 07 C6 04 08 00 0F 01 FF 17 Disable: 07 C6 04 08 00 0F 00 FF 18
<b>QR Code</b>	
Enable/Disable	Enable: 08 C6 04 08 00 F0 25 01 FE 10 Disable: 08 C6 04 08 00 F0 25 00 FE 11
Mirrored	Disable: 08 C6 04 08 00 F2 67 00 FD CD Enable: 08 C6 04 08 00 F2 67 02 FD CB
Micro QR Code	Enable: 08 C6 04 08 00 F1 3D 01 FD F7 Disable: 08 C6 04 08 00 F1 3D 00 FD F8
<b>DataMatrix</b>	
Enable/Disable	Enable: 08 C6 04 08 00 F0 24 01 FE 11 Disable: 08 C6 04 08 00 F0 24 00 FE 12
Mirrored	Disable: 08 C6 04 08 00 F2 6B 00 FD C9 Enable: 08 C6 04 08 00 F2 6B 02 FD C7
<b>MaxiCode</b>	
Enable/Disable	Disable: 08 C6 04 08 00 F0 26 00 FE 10 Enable: 08 C6 04 08 00 F0 26 01 FE 0F
<b>Aztec</b>	
Enable/Disable	Disable: 08 C6 04 08 00 F0 28 00 FE 0E Enable: 08 C6 04 08 00 F0 28 01 FE 0D
<b>Chinese Sensible Code (Han Xin)</b>	
Enable/Disable	Disable: 08 C6 04 08 00 F0 2F 00 FE 07 Enable: 08 C6 04 08 00 F0 2F 01 FE 06
<b>GS1 Composite</b>	
Enable/Disable	Disable: 08 C6 04 08 00 F2 17 00 FE 1D Enable: 08 C6 04 08 00 F2 17 01 FE 1C



### Version History

Rev	Date	Description	Issued
1.0	2021.12.09	Initial Release	Shaw

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