

MT8210P

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.



.B015\$

Enable Barcode Configurability*



.B016\$

Disable Barcode Configurability

Factory Default

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



.A001\$

Factory Default

Check Version

To check firmware version, please scan below configuration barcode.



.A007\$

Check Version

Good Read Indicator

Beep Tone



.F012\$

Off



.F022\$

Beep Low (2.0KHz)



.F018\$

Beep Medium (2.7KHz)*



.F019\$

Beep High (4.0KHz)

Vibrator



.D035\$

Off*



.D034\$

On

Indicator LED



.F054\$

Off



.F055\$

On

Data Format

UTF-8/Shift-JIS to Unicode Conversion



.C044\$

Disable*



.C045\$

UTF-8 to Unicode
(Word)



.C054\$

Shift-JIS
(Notepad)



.C055\$

Shift-JIS to Unicode
(Word)

HT/CR/ESC Converts to TAB/ENTER/ESCAPE



.D026\$

Off*



.D025\$

On

Note:

1. By default, HT [\$I], CR [\$M] and ESC [%A] is transmitted as <0x09>, <0x0D> and <0x1B> respectively.
2. When enabled, HT [\$I], CR [\$M] and ESC [%A] is transmitted as <TAB>, <ENTER> and <ESCAPE> on keyboard respectively.

Function Code Conversion



.C020\$

Off



.C019\$

On*

Note:

Once disabled, the scanner will output the original encoded data of the barcodes in Appendix - Function/Navigation/Modifier Keys.

Control Code Output Method



.D028\$

Ctrl Mode*



.D029\$

Alt Mode



.D027\$

Disable Output

Note:

Control code (0x01 ~ 0x1F) can be sent by two methods:

(1) Ctrl Mode:

A barcode of "A<HT>F" (0x41/0x09/0x46) is scanned, the output sequence is:

- Enter "A" – Press A key
- Enter "Ctrl + I" – Since 0x09 corresponds to "Ctrl + I", virtual keyboard will press and hold Ctrl key, press I key, and release Ctrl key and I key
- Enter "F" – Press F key

Since "Ctrl+I" is shortcut for italicizing text in some software applications, the result of above output sequence can be a regular A plus an italic F.

(2) Alt Mode:

For <HT>, the output sequence of virtual keyboard is:

Enter "Alt + 0 + 0 + 0 + 9" – Virtual keyboard will press and hold Alt key, press "0", "0", "0" and "9" on numeric keypad respectively, and release Alt key.

Control Code Table

ASCII	Hex	Dec	Ctrl Mode	Alt Mode
NUL	00	0	Ctrl+Shift+2	Alt+0+0+0+0
SOH	01	1	Ctrl+a	Alt+0+0+0+1
STX	02	2	Ctrl+b	Alt+0+0+0+2
ETX	03	3	Ctrl+c	Alt+0+0+0+3
EOT	04	4	Ctrl+d	Alt+0+0+0+4
ENQ	05	5	Ctrl+e	Alt+0+0+0+5
ACK	06	6	Ctrl+f	Alt+0+0+0+6
BEL	07	7	Ctrl+g	Alt+0+0+0+7
BS	08	8	Ctrl+h	Alt+0+0+0+8
HT	09	9	Ctrl+i	Alt+0+0+0+9
LF	0A	10	Ctrl+j	Alt+0+0+1+0
VT	0B	11	Ctrl+k	Alt+0+0+1+1
FF	0C	12	Ctrl+l	Alt+0+0+1+2
CR	0D	13	Ctrl+m	Alt+0+0+1+3
SO	0E	14	Ctrl+n	Alt+0+0+1+4
SI	0F	15	Ctrl+o	Alt+0+0+1+5
DLE	10	16	Ctrl+p	Alt+0+0+1+6
DC1	11	17	Ctrl+q	Alt+0+0+1+7
DC2	12	18	Ctrl+r	Alt+0+0+1+8
DC3	13	19	Ctrl+s	Alt+0+0+1+9
DC4	14	20	Ctrl+t	Alt+0+0+2+0
NAK	15	21	Ctrl+u	Alt+0+0+2+1
SYN	16	22	Ctrl+v	Alt+0+0+2+2
ETB	17	23	Ctrl+w	Alt+0+0+2+3
CAN	18	24	Ctrl+x	Alt+0+0+2+4
EM	19	25	Ctrl+y	Alt+0+0+2+5
SUB	1A	26	Ctrl+z	Alt+0+0+2+6
ESC	1B	27	Ctrl+[Alt+0+0+2+7

FS	1C	28	Ctrl+\	Alt+0+0+2+8
GS	1D	29	Ctrl+]	Alt+0+0+2+9
RS	1E	30	Ctrl+Shift+6	Alt+0+0+3+0
US	1F	31	Ctrl+Shift+-	Alt+0+0+3+1

Numeric Key



.D017\$

Numeric Key



.D018\$

Alphanumeric Key*

Note:

1. By default, the alphanumeric key is used for transmitting digits. Scan NUMERIC KEY if you want to use the keys on the numeric keypad.
2. If you select NUMERIC KEY, the Num Lock status of the physical keyboard should be ON.

OPOS



.A031\$

Off*



.A030\$

On

Capital Lock Mode



.A005\$

Capslock Off*



.A004\$

Capslock On



.A006\$

Capslock Free

Note:

When barcode scanner is set to Capslock Free mode, no matter keyboard Capslock LED indicator is ON or OFF, output will be always the same as the Original barcode. In other words, what you see is what output is.

Imaging Settings

Inverse Barcode



.D021\$

Disable Inverse Barcode*



.D022\$

Enable Inverse Barcode

Chapter 2 Interface

USB HID



.C008\$

USB HID

Keyboard Layout



.C010\$

English (US)*



.C018\$

English (UK)



.C027\$

Danish



.C013\$

Spanish



.C021\$

Hungarian (QWERTZ)



.C024\$

Hungarian (QWERTY)



.C025\$

Canadian French



.C028\$

Dutch



.C014\$

Italian



.C012\$

French



.C011\$

German



.C016\$

Swiss German



.C023\$

Swiss French



.C026\$

Swedish



.C022\$

Czech (QWERTZ)



.C017\$

Czech (QWERTY)



.C029\$

Norwegian



.C030\$

Belgian



.C031\$

Portuguese



.C032\$

Slovak



.C033\$

Brazilian (QWERTY)



.C034\$

Canadian (Traditional)



.C009\$

Japanese



.C015\$

Alt Code

Intercharacter Delay

The configurable range is from 0 to 255ms. The larger the number, the longer the delay.



.B009\$

Set Intercharacter Delay

(Default = 0ms)

Example: Set Intercharacter Delay to 8ms

Step1: Scan Set Intercharacter Delay

Step2: Scan “0” “0” “8” in Appendix - Numbers

Step3: Scan Set Intercharacter Delay

Interblock Delay

The configurable range is from 0 to 2550ms. The larger the number, the longer the delay.



.B007\$

Set Interblock Delay

(Default = 0ms)

Example: Set Interblock Delay to 20ms

Step1: Scan Set Interblock Delay

Step2: Scan “0” “0” “2” in Appendix - Numbers

Step3: Scan Set Interblock Delay

USB VCP



.C006\$

USB VCP

RS232



.C002\$

RS232

Baud Rate



.E003\$

1200



.E004\$

2400



.E005\$

4800



.E006\$

9600*



.E007\$

19200



.E022\$

38400



.E061\$

57600



.E063\$

115200

Data Bits & Parity



.E009\$

8 Bits Even



.E010\$

8 Bits Odd



.E012\$

8 Bits Space



.E011\$

8 Bits Mark



.E008\$

8 Bits None*



.E013\$

7 Bits Even



.E014\$

7 Bits Odd



.E021\$

7 Bits Space



.E015\$

7 Bits Mark

Stop Bits



.E016\$

1 Stop Bit*



.E017\$

2 Stop Bits

Handshaking



.E018\$

None*



.E019\$

RTS enable at Power On



.E020\$

RTS enable with Communication

ACK/NAK



.E023\$

On



.E024\$

Off*

BCC (Binary Check Character)



.E029\$

On



.E030\$

Off*

Chapter 3 Reading Mode

Trigger Mode

In Trigger Mode the LED will stay on once trigger is pressed and held, and will turn off automatically once a barcode is read or LED Auto-Off timeout expires.



Trigger Mode

Toggle Mode

In Toggle Mode the LED will stay on once trigger is pressed, and will turn off automatically once a barcode is read or LED Auto-Off Timeout expires.



Toggle Mode

Continuous Mode

In Continuous Mode the LED will stay on once trigger is pressed, and will not turn off until the trigger is pressed again.



Continuous Mode

Batch Mode

In Batch Mode the LED will stay on when trigger is pressed and held, during which the scanner will read each unique barcode once. It cannot be read again until the next cycle.



Auto-sensing Mode

In Auto-sensing Mode the LED will turn off automatically after LED Auto-Off timeout expires. Any change detected in image will make LED turn on again.



Auto-sensing Mode – Magnetic Switch

When magnetic switch is on, the scanner automatically enters Auto-sensing Mode when placed on Auto Stand (w/ magnet), and resumes Trigger Mode when held on hand. When magnetic switch is off, the scanner will always stay in Auto-sensing Mode.



Trigger / Toggle / Auto-sensing Mode – LED Auto-Off Timeout

The configurable range is 0.1 ~ 125 sec. 3 digits must be programmed during the multi-step configuration. (001 = 0.1 sec, 002 = 0.2 sec, 003 = 0.3 sec, 004 = 0.4 sec, 005 = 0.5 sec, 0.6 = 1 sec, 007 = 1.5 sec, 008 = 2.0 sec, 009 = 2.5 sec, 010 = 3 sec, 254 = 125 sec, 255 = unlimited)



LED Auto-Off Timeout
(Default = 3 sec)

Example: Set LED Auto-Off Timeout as 5 sec

Step1: Scan “**LED Auto-Off Timeout**”

Step2: Scan “**0**” “**1**” “**4**” in Appendix - Numbers

Step3: Scan “**LED Auto-Off Timeout**”

Chapter 4 Data Format

By default data format is as follows:

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

Code ID



.A009\$

Disable Code ID*



.A008\$

Enable Factory ID



.A015\$

Enable Set ID

Set ID

Set ID can be 0 ~ 2 alphanumerics for each symbology.



.P005\$

Set ID – Code39



.P007\$

Set ID – Codabar



.P010\$

Set ID – Code128



.P001\$

Set ID – EAN-13



.P002\$

Set ID – EAN-8



.P004\$

Set ID – UPC-A



.P003\$

Set ID – UPC-E



.P006\$

Set ID – Interleaved 2 of 5



.P017\$

Set ID – Matrix 2 of 5



.P018\$

Set ID – Industrial 2 of 5



.P013\$

Set ID – Code93



.P009\$

Set ID – Code11



.P014\$

Set ID – MSI Plessey



.P021\$

Set ID – Standard 2 of 5



.P025\$

Set ID – PDF417



.P029\$

Set ID – MicroPDF417



.P026\$

Set ID – QR Code



.P027\$

Set ID – Data Matrix



.P033\$

Set ID – Aztec

Example: Set Code39 Set ID as XY"

Step1: Scan "**Set ID – Code39**"

Step2: Scan "**X**" "**Y**" in Appendix - Upper Case Alphabets

Step3: Scan "**Set ID – Code39**"

Data Length



.D020\$

Send Data Length Off*



.D019\$

Send Data Length On

Preamble

Preamble can be up to 16 bytes of data.



.A012\$

Set Preamble

Example: Set XYZ123 as Preamble

Step 1: Scan "**Set Preamble**"

Step 2: Scan "**X**" "**Y**" "**Z**" "**1**" "**2**" "**3**" in Appendix - Upper Case Alphabets & Numbers

Step 3: Scan "**Set Preamble**"

Postamble

Postamble can be up to 16 bytes of data.



Set Postamble

Example: Set XYZ123 as Postamble

Step 1: Scan **"Set Postamble"**

Step 2: Scan **"X"** **"Y"** **"Z"** **"1"** **"2"** **"3"** in Appendix - Upper Case Alphabets & Numbers

Step 3: Scan **"Set Postamble"**

Clear Preamble/Postamble



Clear Preamble/Postamble

Terminator



None



<LF>



<CR>*



<CR><LF>



.D014\$

<TAB>



.D015\$

<Space>



.D016\$

<ESC>

Chapter 5 Symbolologies

General Settings



.A002\$

Enable All Symbolologies



.A003\$

Disable All Symbolologies



.G036\$

Enable All 1D Symbolologies



.G035\$

Disable All 1D Symbolologies



.G038\$

Enable All 2D Symbolologies



.G037\$

Disable All 2D Symbolologies

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

UPC-A

Enable/Disable UPC-A



.H001\$

Enable UPC-A*



.H002\$

Disable UPC-A

Check Digit



.H005\$

Send Check Digit*



.H006\$

Not Send Check Digit

Lead Digit (System Number)



.H003\$

Send Lead Digit*



.H004\$

Not Send Lead Digit

Supplement



.H033\$

5-digit Supplement On



.H034\$

5-digit Supplement Off*



.H035\$



.H036\$

2-digit Supplement On

2-digit Supplement Off*

UPC-A to EAN-13



.H068\$

Enable UPC-A to EAN-13



.H067\$

Disable UPC-A to EAN-13*

UPC-E

Enable/Disable UPC-E



.H007\$

Enable UPC-E*



.H008\$

Disable UPC-E

Check Digit



.H011\$

Send Check Digit*



.H012\$

Not Send Check Digit

Lead Digit (System Number)



.H009\$

Send Lead Digit*



.H010\$

Not Send Lead Digit

Supplement



.H037\$

5-digit Supplement On



.H038\$

5-digit Supplement Off*



.H039\$

2-digit Supplement On



.H040\$

2-digit Supplement Off*

EAN-8

Enable/Disable EAN-8



.H019\$

Enable EAN-8*



.H020\$

Disable EAN-8

Check Digit



.H024\$

Not Send Check Digit



.H023\$

Send Check Digit*

Supplement



.H029\$

5-digit Supplement On



.H030\$

5-digit Supplement Off*



.H031\$

2-digit Supplement On



.H032\$

2-digit Supplement Off*

EAN-13

Enable/Disable EAN-13



.H013\$

Enable EAN-13*



.H014\$

Disable EAN-13

Check Digit



.H018\$

Not Send Check Digit



.H017\$

Send Check Digit*

Supplement



.H025\$

5-digit Supplement On



.H026\$

5-digit Supplement Off*



.H027\$

2-digit Supplement On



.H028\$

2-digit Supplement Off*

ISBN



.H049\$

On



.H050\$

Off*

ISSN



.H051\$

On



.H052\$

Off*

Code 128/GS1-128(UCC/EAN 128)

Enable/Disable Code 128



.J010\$

Enable Code 128/GS1-128*



.J011\$

Disable Code 128/GS1-128

Code128/GS1-128 Min/Max Length



.J012\$

Set Min Length
(Default = 01)



.J013\$

Set Max Length
(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

Code 39

Enable/Disable Code 39



.G008\$

Enable Code 39*



.G009\$

Disable Code 39

Verification



.G003\$

Disable CDV*



.G004\$

CDV & Send CD



.G005\$

CDV & Not Send CD

Start/Stop



.G015\$

Not Send Start/Stop*



.G014\$

Send Start/Stop*

Full ASCII Code39



.G001\$

Enable Full ASCII Code39*



.G002\$

Disable Full ASCII Code39

Code39 Min/Max Length



.G006\$

Set Min Length
(Default = 01)



.G007\$

Set Max Length
(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

Code 32

Enable/Disable Code 32



.K010\$

Enable Code 32



.K011\$

Disable Code 32*

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

Leading/Tailing



.K012\$

Not Send Leading & Tailing



.K013\$

Send Leading Only



.K014\$

Send Tailing Only



.K015\$

Send Leading & Tailing*

Code 93

Enable/Disable Code 93



.G010\$

Enable Code 93*



.G011\$

Disable Code 93

Code 93 Min/Max Length



.G012\$

Set Min Length
(Default = 01)



.G013\$

Set Max Length
(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0"** **"8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1"** **"2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

Code 11

Enable/Disable Code 11



.I010\$

Enable Code 11



.I011\$

Disable Code 11*

Code 11 Min/Max Length



.I015\$

Set Min Length
(Default = 01)



.I016\$

Set Max Length
(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

Codabar (NW-7)

Enable/Disable Codabar



.1001\$

Enable Codabar*



.1002\$

Disable Codabar

Verification



.1005\$

Disable CDV*



.1006\$

CDV & Send CD



.1007\$

CDV & Not Send CD

Start/Stop



.1004\$

Not Send Start/Stop



.1029\$

ST/SP: ABCD/ABCD*



.1030\$



.1031\$

ST/SP: abcd/abcd

ST/SP: ABCD/TN*E



.1032\$

ST/SP: abcd/tn*e

Codabar Min/Max Length



.1008\$

Set Min Length

(Default = 01)



.1009\$

Set Max Length

(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5



.J001\$

Enable Interleaved 2 of 5*



.J002\$

Disable Interleaved 2 of 5

Verification



.J003\$

Disable CDV*



.J004\$

CDV & Send CD



.J005\$

CDV & Not Send CD

Interleaved 2 of 5 Min/Max Length



Set Min Length
(Default = 01)



Set Max Length
(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

Matrix 2 of 5

Enable/Disable Matrix 2 of 5



.M010\$

Enable Matrix 2 of 5



.M011\$

Disable Matrix 2 of 5*

Verification



.M012\$

Disable CDV*



.M013\$

CDV & Send CD



.M014\$

CDV & Not Send CD

Matrix 2 of 5 Min/Max Length



.M015\$

Set Min Length

(Default = 01)



.M016\$

Set Max Length

(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

Industrial 2 of 5

Enable/Disable Industrial 2 of 5



.N001\$

Enable Industrial 2 of 5



.N002\$

Disable Industrial 2 of 5*

Verification



.N003\$

Disable CDV*



.N004\$

CDV & Send CD



.N005\$

CDV & Not Send CD

Industrial 2 of 5 Min/Max Length



.N006\$

Set Min Length
(Default = 01)



.N007\$

Set Max Length
(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

Standard 2 of 5 (IATA)

Enable/Disable Standard 2 of 5



.N017\$

Enable Industrial 2 of 5



.N018\$

Disable Industrial 2 of 5*

Verification



.N019\$

Disable CDV*



.N020\$

CDV & Send CD



.N021\$

CDV & Not Send CD

Standard 2 of 5 Min/Max Length



.N022\$

Set Min Length

(Default = 01)



.N023\$

Set Max Length

(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

MSI Plessey

Enable/Disable MSI Plessey



.L001\$

Enable MSI Plessey



.L002\$

Disable MSI Plessey*

MSI Plessey Min/Max Length



.L005\$

Set Min Length

(Default = 01)



.L006\$

Set Max Length

(Default = 99)

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

Step1: Scan **"Set Min Length"**

Step2: Scan **"0" "8"** in Appendix - Numbers

Step3: Scan **"Set Min Length"**

Step4: Scan **"Set Max Length"**

Step5: Scan **"1" "2"** in Appendix - Numbers

Step6: Scan **"Set Max Length"**

Note: Configurable range for Min/Max Length is 01 ~ 99.

QR Code

Enable/Disable QR Code



.G025\$

Enable QR Code*



.G026\$

Disable QR Code

Micro QR Code

Enable/Disable Micro QR Code



.G027\$

Enable Micro QR Code



.G028\$

Disable Micro QR Code*

Data Matrix

Enable/Disable Data Matrix



.G031\$

Enable Data Matrix*



.G032\$

Disable Data Matrix

PDF417

Enable/Disable PDF417



.G021\$

Enable PDF417*



.G022\$

Disable PDF417

MicroPDF417

Enable/Disable MicroPDF417



.G039\$

Enable MicroPDF417*



.G040\$

Disable MicroPDF417

Aztec

Enable/Disable Aztec



.G055\$

Enable Aztec



.G056\$

Disable Aztec*

Chapter 6 Appendix

Appendix - Numbers



0



1



2



3



4



5



6



7



8



9

Appendix - Upper Case Alphabets



A



B



C



D



E



F



G



H



I



J



K



L



M



N



O



P



Appendix - Lower Case Alphabets



a



b



c



d



e



f



g



h



i



j



k



l



m



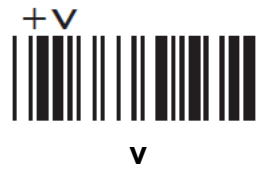
n



o



p



Appendix – Control Codes



NUL



SOH



STX



ETX



EOT



ENQ



ACK



BEL



BS



HT



LF



VT



FF



CR



SO



SI



Appendix – Symbols



+



-



.



\$



%



/



\



!



@



#



^



~



&



*



—



=





SP



DEL

Appendix – Function Keys



F1



F2



F3



F4



F5



F6



F7



F8



F9



F10



F11



F12



Home



End



Enter (Numeric Key)



App

Appendix – Navigation Keys

\$TP



Cursor Left

\$TO



Cursor Right

\$TQ



Cursor Up

\$TR



Cursor Down

\$TS



Page Up

\$TT



Page Down

\$TU



Tab

\$TV



Back Tab

\$TW



Esc

\$TX



Enter

\$TY



BS

\$TZ



Ins

\$T%K



Del

Appendix – Modifier Keys

\$T%L



Alt (Left) make *1

\$T%M



Alt (Left) break

\$T+E



Alt (Right) make

\$T+F



Alt (Right) break

\$T%N



Shift (Left) make *2

\$T%□



Shift (Left) break

\$T+I



Shift (Right) make

\$T+J



Shift (Right) break

\$T+K



Win (Left) make

\$T+L



Win (Left) break

\$T+M



Win (Right) make

\$T+N



Win (Right) break

\$T%W



Ctrl (Left) make *3

\$T+A



Ctrl (Left) break

\$T+G



Ctrl (Right) make

\$T+H



Ctrl (Right) break

Note:

*1: When "Alt (Left) make" is programmed, please scan "Alt (Left) break" to resume barcode setting.

*2: When "Shift (Left) make" is programmed, please scan "Shift (Left) break" to resume barcode setting.

*3: When "Ctrl (Left) make" is programmed, please scan "Ctrl (Left) break" to resume barcode setting.

Appendix - Abort

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



.P023\$

Abort

Appendix - Default Table

Function	Default	Remark
General Settings		
Barcode Configurability	ON	
Beep Tone	Medium (2.7KHz)	
Vibrator	OFF	
Indicator LED	ON	
Data Format		
UTF-8/Shift-JIS to Unicode Conversion	OFF	
HT/CR/ESC Converts to TAB/ENTER/ESCAPE	OFF	
Function Code Conversion	ON	
Control Code Output Method	Ctrl Mode	
Numeric Key	OFF	
OPOS	OFF	
Capital Lock Mode	OFF	
Image Settings		
Inverse Barcode	OFF	
Interface		
USB HID	N/A	
Keyboard Layout	English (US)	
Intercharacter Delay	0ms	
Interblock Delay	0ms	
USB VCP	N/A	
RS232	N/A	
Baud Rate	9600	
Data Bits & Parity	8 Bits None	
Stop Bits	1 Stop Bit	
Handshaking	None	
ACK/NAK	OFF	
BCC	OFF	
Reading Mode		
Trigger Mode	N/A	
Toggle Mode	N/A	
Continuous Mode	N/A	
Batch Mode	N/A	
Auto-sensing Mode	Auto-sensing Mode	

Auto-sensing Mode – Magnetic Switch	ON
Trigger / Toggle / Auto-sensing Mode – LED Auto-Off Timeout	3 sec
Data Format	
Code ID	Disable
Set ID	N/A
Data Length	OFF
Preamble	N/A
Postamble	N/A
Terminator	CR
Symbologies	
General Settings	N/A
UPC-A	
Enable/Disable	ON
Check Digit	Send
Lead Digit (System Number)	Send
Supplement	OFF
UPC-A to EAN-13	OFF
UPC-E	
Enable/Disable	ON
Check Digit	Send
Lead Digit (System Number)	Send
Supplement	OFF
EAN-8	
Enable/Disable	ON
Check Digit	Send
Supplement	OFF
EAN-13	
Enable/Disable	ON
Check Digit	Send
Supplement	OFF
ISBN	OFF
ISSN	OFF
Code 128/GS1-128(UCC/EAN 128)	
Enable/Disable	ON
Min Length	01
Max Length	99
Code 39	
Enable/Disable	ON
Verification	Disable CDV

Start/Stop	Not Send
Full ASCII Code39	ON
Min Length	01
Max Length	99
Code 32	
Enable/Disable	OFF
Leading/Tailing	Send Leading & Tailing
Code 93	
Enable/Disable	ON
Min Length	01
Max Length	99
Code 11	
Enable/Disable	OFF
Min Length	01
Max Length	99
Codabar	
Enable/Disable	ON
Verification	Disable CDV
Start/Stop	ST/SP: ABCD/ABCD
Min Length	01
Max Length	99
Interleaved 2 of 5	
Enable/Disable	ON
Verification	Disable CDV
Min Length	01
Max Length	99
Matrix 2 of 5	
Enable/Disable	OFF
Verification	Disable CDV
Min Length	01
Max Length	99
Industrial 2 of 5	
Enable/Disable	OFF
Verification	Disable CDV
Min Length	01
Max Length	99
Standard 2 of 5 (IATA)	
Enable/Disable	OFF
Verification	Disable CDV
Min Length	01

Max Length	99
MSI Plessey	
Enable/Disable	OFF
Min Length	01
Max Length	99
QR Code	
Enable/Disable	ON
Micro QR Code	
Enable/Disable	OFF
Data Matrix	
Enable/Disable	ON
PDF 417	
Enable/Disable	ON
Micro PDF 417	
Enable/Disable	ON
Aztec	
Enable/Disable	OFF

Appendix - Factory ID

#	Symbology	Code ID	HEX
0	UPC-E	E	45
1	UPC-A	A	41
2	EAN-8	S	53
3	EAN-13	F	46
4	Code 128	K	4B
5	GS1-128	T	54
6	Code 39/Code32	M	4D
7	Code 93	L	4C
8	Code 11	J	4A
9	Codabar	N	4E
10	Interleaved 2 of 5	I	49
11	Matrix 2 of 5	Y	59
12	Industrial 2 of 5	V	56
13	Standard 2 of 5 (IATA 2 of 5)	R	52
14	MSI Plessey	O	4F
15	PDF 417	Z	5A
16	Micro PDF 417	r	72
17	Data Matrix	X	58
18	QR Code/Micro QR Code	W	57
19	Aztec	z	7A

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	2021.07.14	Initial Release	Shaw
1.1	2023.02.24	FW: HM3-s-1.01.G1 Added Control Code Output Method Added Shift-JIS to Unicode Conversion	Shaw
1.2	2023.11.24	Updated Control Code Table	Shaw