

MT8230B

2D Wireless Scanner

User's Manual

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Chapter 1 Introduction

This user's manual is dedicated to MT8230B, a 2D wireless handheld scanner that provides freedom of mobility for user to transmit data to the host from up to 10 meters (33 feet) away. The charging cradle that comes with the scanner can also serve as a wireless transponder that instantly enables your host device with wireless communication using USB HID interface without the need of any driver. Supported by a 1620mAh battery, MT8230B helps user operate around the clock with less downtime ensuring mobile productivity during the entire busy shift.



Product Requirements

Model	Version
MT8230B	SW: LW-3.16A Jul 16 2021 15:18:04 Boot:LW-3.00F

Specifications

Optic & Performance	
Light Source	White LED Visible red LED
Sensor	640 x 480
Resolution	4mil / 0.1mm
Scan Angle	Horizontal 38° Vertical 29°
Pitch Angle	±55°
Skew Angle	±55°
Roll Angle	360°
Print Contrast Ratio	30%
Width of Field	161mm (13Mil Code39)
Memory	20,000 EAN-13 barcode
Guaranteed D.O.F (Environment : 800 lux)	5 Mil Code 39 : 35 ~ 65mm
	13 Mil UPC/EAN : 45 ~ 215mm
	15 Mil QR Code : 25 ~ 200mm
	6.67 Mil PDF417 : 25 ~ 105mm
	10 Mil Data Matrix : 40 ~ 65mm
Physical Characteristics	
Dimension	L166 x W71 x H84 mm (Scanner) D82 x H84mm (Cradle)
Weight	148g (Scanner) 238g (Cradle)
Color	White
Material	ABS
Cable	Option 1: Micro(M) to USB A(M) Cable, 1.5M Option 2: Micro(M) to D-sub9(F) Cable, 2.1M
Trigger	Scan Button
Indicator	LED, Buzzer, Vibrator
Electrical	
Operation Voltage	3.7 VDC ± 5%
Working Current	< 240mA
Standby Current	< 70mA
Charging Voltage/Current	5V, 1.5~2A
Battery	3.7V, 1620mAh, Li-Polymer Battery
Number of Scan (per full charge)	12,000 scans or 16 hours (1 scan/ 5 secs, Bluetooth connected)
Connectivity	

Radio	Bluetooth 4.2 & 3.0 (Class 2)
Range	33 ft/ 10m (line of sight)
Interface / Profile	Scanner: BT HID / BT SPP / Cradle Mode / Memory Mode Cradle: USB HID / RS232 (Factory configured)
User Environment	
Operating Temperature	0 ~ 40°C
Storage Temperature	-10 ~ 60°C
Humidity	0% ~ 95%RH (Non-condensing)
Drop Durability	1.2M
Sealing	IP42
Ambient Light	100,000 Lux (Sunlight)
1D Symbologies	UPC-A/UPC-E, EAN-8/EAN-13, ISBN, Code 128, GS1-128, Code 39, Code 93, Code 11, Interleaved 2 of 5, Industrial 2 of 5, Matrix 2 of 5, Standard 2 of 5, Codabar, MSI Plessey, GS1 Databar, GS1 Composite
2D Symbologies	QR Code, Micro QR Code, Data Matrix, PDF417, Aztec, MaxiCode, Han Xin
Regulatory	
ESD	Functional after 4KV contact, 8KV air discharge
EMC/RF	TBA
Safety Approval	TBA
Environmental	WEEE, RoHS 2.0

Beeper Indication

Beeper	Status
Single short beep	Wireless connection
	Good read
Single long beep	Power down
Two beeps	Wireless disconnection
Two beeps (high-low)	Successful configuration
Two beeps (low-high)	Good read (Memory Mode)
Three short beeps	Reads a barcode while disconnected
Three beeps (low-medium-high)	Successful configuration
One short beep & one long beep (low-high)	Power up
One short beep & one long beep (high-low)	Power off
Seven beeps (shuts down thereafter)	Low power (Battery life < 5%)

LED Indication

LED	Status
Flashing blue & green	Discoverable in BT HID
Flashing blue	Discoverable in BT SPP
Solid blue	Connected
1 green flash	Good read / Power up
2 green flashes	Disconnected
Solid red	Charging

Chapter 2 General Settings

Factory Default

Scanning below configuration barcode will reset all parameters to factory default settings (the ones with * asterisk mark). Please note that scanning the left Factory Default (Chapter 2) will reset all General Settings to default, and scanning the right Factory Default (Chapter 3~4) will reset all Reading Mode and Symbologies settings to default.



**Factory Default
(Chapter 2)**



**Factory Default
(Chapter 3 ~ 4)**

Check Version

To check firmware version, please scan below configuration barcode.



Check Version

Check Battery Life

To check battery life, please scan below configuration barcode.



Check Battery Life

Bluetooth Profile

Cradle Mode (USB version)

Cradle Mode allows barcode data to be transmitted to host device via the built-in Bluetooth transponder in charging cradle with a cable, providing wireless connectivity to the host device that does not have built-in Bluetooth adapter. Follow below steps:

1. Plug the charging cradle to host device with an USB cable.
2. Power up the scanner
3. Scan **USB HID Cradle Mode** (recommended) or **USB VCP Cradle Mode**
4. The scanner will emit one short beep with LED indicator turning solid blue after successfully connecting to charging cradle. If the charging cradle fails to connect to the scanner, scan **Disconnect** (see Disconnect section in page 14), unplug the cable from charging cradle and plug it back. The charging cradle will be able to connect to the nearest scanner when the cable is plugged.
5. To swap charging cradle, please follow step 1 ~ 3, and then scan **Disconnect** (see Disconnect section in page 14), unplug the cable from the charging cradle you want to disconnect, and plug the cable to the charging cradle you want to connect. The charging cradle will be able to connect to the nearest scanner when the cable is plugged.



**USB HID
Cradle Mode***



**USB VCP
Cradle Mode**

Cradle Mode (RS232 version)

Cradle Mode allows barcode data to be transmitted to host device via the built-in Bluetooth transponder in charging cradle with a cable, providing wireless connectivity to the host device that does not have built-in Bluetooth adapter. Follow below steps:

1. Plug the charging cradle to host device with an RS232 cable.
2. Power up the scanner
3. Scan **RS232 Cradle Mode**
4. The scanner will emit one short beep with LED indicator turning solid blue after successfully connecting to charging cradle. If the charging cradle fails to connect to the scanner, scan **Disconnect** (see Disconnect section in page 14), unplug the cable from charging cradle and plug it back. The charging cradle will be able to connect to the nearest scanner when the cable is plugged.
5. To swap charging cradle, please follow step 1 ~ 3, and then scan **Disconnect** (see Disconnect section in page 14), unplug the cable from the charging cradle you want to disconnect, and plug the cable to the charging cradle you want to connect. The charging cradle will be able to connect to the nearest scanner when the cable is plugged.



**RS232
Cradle Mode**

BT HID

BT HID is compatible with iOS, Android and Windows and requires applications that accept keyboard data. After scanning BT HID, press and hold the trigger until two beeps & blue/green LED flashing to make the scanner discoverable. Follow below steps:

1. Power up the scanner
2. Scan **BT HID**
3. Press and hold the trigger until beeps with LED indicator flashing blue and green. Alternatively you may scan **Disconnect** (see Disconnect section in the next page)
4. Pair with "BarCode Scanner HID" from the discovered device list.
5. The scanner will emit one short beep with LED indicator turning solid blue after successfully connecting to host device.



BT HID

BT SPP

BT SPP is compatible with Android and Windows. A serial communication software is required for this profile. Follow below steps:

1. Power up the scanner
2. Scan **BT SPP**, the scanner will emit two beeps with LED indicator flashing blue
3. Pair with "BarCode Scanner spp" from the discovered device list. If the host is unable to find the scanner in the discovered device list, scan **Disconnect** (see Disconnect in the next page)
4. Enter serial communication software (TeraTerm, PuTTY, etc...) and open the serial port occupied by the scanner.
5. The scanner will emit one short beep with LED indicator turning solid blue after successfully connecting to host device.



BT SPP

Disconnect

Scanning **Disconnect** allows the scanner to disconnect from the host, or become discoverable, which helps the host to find the scanner in the discovered device list (in BT SPP, BT HID mode) or prompts the charging cradle to connect to the scanner (in Cradle Mode).



Disconnect

iOS Touch Keyboard

To toggle iOS touch keyboard, please scan **Toggle iOS Touch Keyboard** below.



Toggle iOS Touch Keyboard

Alternatively, by enabling iOS Hotkey (enabled by default), you may simply double-click the trigger to toggle iOS touch keyboard.



Enable iOS Hotkey*



Disable iOS Hotkey

Memory Mode

Memory Mode enables the scanner to store barcode data (20,000 EAN-13 barcode) and transmit it in batch to the host device when needed. Memory Mode can be used among all the Bluetooth profiles (Cradle Mode, BT HID, BT SPP). Follow below steps:

1. Scan **Enter Memory Mode**
2. Scan desired barcodes.
3. Make sure the scanner is connected to the host device through Cradle Mode, BT HID or BT SPP.
4. Scan **Upload Memory Data** to transmit all stored barcode data
5. Scan **Erase Memory Data** if you want to clear all memory data
6. Scan **Exit Memory Mode** if you want to resume online operation



Enter Memory Mode



Exit Memory Mode



Upload Memory Data



Check Memory Data Counts



Erase Memory Data

Sleep Timeout



Sleep Timeout = 30 seconds



Sleep Timeout = 1 minute



Sleep Timeout = 2 minutes



Sleep Timeout = 5 minutes*



Sleep Timeout = 10 minutes



Sleep Timeout = 30 minutes



Sleep Timeout = Never
(Scanner Always On)



Sleep Timeout = Immediate

Bluetooth Device ID

Scan **Set Bluetooth Device ID** first, and then scan a barcode that contains your desired Bluetooth Device ID. The maximum length of custom Bluetooth Device ID is 16 digits. The complete Bluetooth Device ID is <Custom Bluetooth Device ID>+<Profile>, for example, if your custom Bluetooth Device ID is 'Scanner', in BT HID profile the complete ID will be ScannerHID; in BT SPP profile the complete ID will be ScannerSPP.



Set Bluetooth Device ID



Check Bluetooth Device ID

Good Read Indicator

Buzzer



Low Volume



Medium Volume



High Volume*

Vibrator



Vibrator On*



Vibrator Off

Data Format

Upper / Lower Case



All Lower Case



All Upper Case



Invert Case



As Is*

Keyboard Layout



English (US)*



English (UK)



German



German (iOS keyboard)



French



French (Belgian)



French (Canadian)



Spanish



Spanish (Mexican)



Italian



Italian (142)



Japanese



Universal



Portuguese



Portuguese (Brazilian)



Russian



Czech



Turkish Q



Turkish F



Swedish / Finnish



Danish



Norwegian



Croatian



Swiss (German)



Swiss (French)



Dutch



Hungarian



Polish



Argentine



Slovak

Data Transmission Speed

Data Transmission Speed only applies to BT HID interface.



Data Transmission Speed = High



Data Transmission Speed = Medium*



Data Transmission Speed = Low



Data Transmission Speed = Ultra Low

Encoding Format

1. Big 5 (Notepad, Excel).

To output characters (traditional Chinese only) encoded in Big 5 to Notepad or Excel, please scan below 3 configuration barcodes:



Input format = Auto*



Output format 1 = GBK



Output format 2 = GBK*

2. UTF8, GB2312 (Word).

To output double-byte characters (traditional Chinese, simplified Chinese, Japanese) encoded in UTF8 or GB2312 to Word, please scan below 3 configuration barcodes:



Input format = Auto*



Output format 1 = Unicode



Output format 2 = UTF8

3. Shift JIS (Word).

To output double-byte characters (Japanese only) encoded in Shift JIS to Word, Please scan below 3 configuration barcodes:



Input format = Japanese



Output format 1 = Unicode



Output format 2 = UTF8

Terminator



Terminator = CR*



Terminator = LF



Terminator = Tab



Terminator = None



Terminator = CR + LF

GS Replacement

GS Replacement enables the scanner to replace GS <0x1D> in barcode data by a specific character.



Set GS Replacement



Clear GS Replacement

To set GS Replacement, please follow below steps:

1. Scan **Set GS Replacement**
2. Scan a configuration barcode representing the replacement character from **Chapter 5 Configuration Barcode – Displayable Character** or **Control Character**
3. Scan one of the Character Set 0 ~ 4 in **Chapter 5 Configuration Barcode – Control Character** if the replacement character chosen in step 2 is from **Control Character**. If the replacement character is from **Displayable Character**, please skip this step.

To cancel GS Replacement, simply scan **Clear GS Replacement**.

Preamble / Postamble

Up to 32 bytes of characters can be set as Preamble / Postamble.



Set Preamble



Set Postamble



Exit Setup

To set Preamble / Postamble, please follow below steps:

1. Scan **Set Preamble** or **Set Postamble**
2. Scan configuration barcode(s) representing the Preamble / Postamble from **Chapter 5 Configuration Barcode – Displayable Character** or **Control Character**
3. Scan one of the Character Set 0 ~ 4 in **Chapter 5 Configuration Barcode – Control Character** if the character(s) chosen in step 2 is from **Control Character**. If the character(s) chosen in step 2 is from **Displayable Character**, please skip this step.

To cancel Preamble / Postamble, please follow below steps:

1. Scan **Set Preamble** or **Set Postamble**
2. Scan **Exit Setup**

Chapter 3 Reading Mode

Trigger Mode

In trigger mode, MT8230B 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*

Toggle Mode

In toggle mode, MT8230B 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

Continuous Mode

In continuous mode, MT8230B keeps scanning barcodes continuously.



Continuous Mode

Continuous Mode – 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 (see Chapter 5). For example, scan '0' and '5' respectively for 500ms.



Set Scan Interval

Auto-sensing Mode

In auto-sensing mode, MT8230B 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

Auto-sensing Mode – 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 (see Chapter 5). For example, scan '0' and '2' respectively for 200ms.



Set Image Stabilization Timeout

Auto-sensing Mode – Sensitivity



High*



Medium



Low

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 (see Chapter 5). 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

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 (see Chapter 5). For example, scan '0' '5' respectively for 500ms.



0s



1s



3s



5s



7s



Unlimited



Set Identical Read Interval

Illumination and Aimer

Illumination



Normal*



Always Off



Always On

Aimer



Normal*



Always Off



Always On



Flash



Not Flash

Chapter 4 Symbologies

General Settings



Enable All Symbologies



Disable All Symbologies



Enable All 1D Symbologies



Disable All 1D Symbologies



Enable All 2D Symbologies



Disable All 2D Symbologies

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*

Mirrored Barcode



Enable Mirrored Data Matrix



Disable Mirrored Data Matrix*



Enable Mirrored QR Code



Disable Mirrored QR Code*

UPC-A

Enable/Disable UPC-A



Enable UPC-A*



Disable UPC-A

UPC-A to EAN-13



Disable UPC-A to EAN-13*



Enable UPC-A to EAN-13

Check Digit



Send Check Digit*



Not Send Check Digit

System Number



Send System Number*



Not Send System Number

Supplement



Disable 2-digit Supplement*



Enable 2-digit Supplement



Disable 5-digit Supplement*



Enable 5-digit Supplement

Supplement Required



Disable Supplement Required*



Enable Supplement Required

UPC-E

Enable/Disable UPC-E



Enable UPC-E*



Disable UPC-E

UPC-E to UPC-A



Disable UPC-E to UPC-A*



Enable UPC-E to UPC-A

Enable/Disable UPC-E1



Enable UPC-E1*



Disable UPC-E1

Check Digit



Send Check Digit*



Not Send Check Digit

System Number



Send System Number*



Not Send System Number

Supplement



Disable 2-digit Supplement*



Enable 2-digit Supplement



Disable 5-digit Supplement*



Enable 5-digit Supplement

Supplement Required



Disable Supplement Required*



Enable Supplement Required

EAN-8

Enable/Disable EAN-8



Enable EAN-8*



Disable EAN-8

Check Digit



Send Check Digit*



Not Send Check Digit

Supplement



Disable 2-digit Supplement*



Enable 2-digit Supplement



Disable 5-digit Supplement*



Enable 5-digit Supplement

Supplement Required



Disable Supplement Required*



Enable Supplement Required

EAN-13

Enable/Disable EAN-13



Enable EAN-13*



Disable EAN-13

Check Digit



Send Check Digit*



Not Send Check Digit

Supplement



Disable 2-digit Supplement*



Enable 2-digit Supplement



Disable 5-digit Supplement*



Enable 5-digit Supplement

Bookland EAN (ISBN)



Disable Bookland EAN*



Enable Bookland EAN

Supplement Required



Disable Supplement Required*



Enable Supplement Required

Code128



Enable Code128*



Disable Code128

GS1-128 (UCC/EAN-128)



Enable GS1-128*



Disable GS1-128

Interleaved 2/5

Enable/Disable Interleaved 2/5



Enable Interleaved 2/5*



Disable Interleaved 2/5

Min/Max Length

To configure specific length, please scan **Set Length**, and scan four numeric barcodes (see Chapter 5). 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

Verification



Enable Verification



Disable Verification*

Check Digit



Send Check Digit



Not Send Check Digit*

Matrix 2/5

Enable/Disable Matrix 2/5



Enable Matrix 2/5



Disable Matrix 2/5*

Length

To configure specific length, please scan **Set Length**, and scan four numeric barcodes (see Chapter 5). 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

Verification



Enable Verification



Disable Verification*

Check Digit



Send Check Digit



Not Send Check Digit*

Industrial 2/5

Enable/Disable Industrial 2/5



Enable Industrial 2/5



Disable Industrial 2/5*

Length

To configure specific length, please scan **Set Length**, and scan four numeric barcodes (see Chapter 5). 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

Standard 2/5

Enable/Disable Standard 2/5



Enable Standard 2/5



Disable Standard 2/5*

Length

To configure specific length, please scan **Set Length**, and scan four numeric barcodes (see Chapter 5). 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

Code39

Enable/Disable Code39



Enable Code39*



Disable Code39

Send Start & Stop



Send Start & Stop



Not Send Start & Stop*

Length



Any Length*

Verification



Enable Verification



Disable Verification*

Check Digit



Send Check Digit



Not Send Check Digit*

Full ASCII Code39

Enable/Disable Full ASCII Code39



Enable Full ASCII Code39



Disable Full ASCII Code39*

Code32

Enable/Disable Code32



Disable Code32*



Enable Code32

Code32 Preamble ('A')



Disable*



Enable

Code93

Enable/Disable Code93



Enable Code93



Disable Code93*

Length



Any Length*

Code11

Enable/Disable Code11



Enable Code11



Disable Code11*

Length



Any Length*

Verification



Enable Verification



1-Digit Verification



2-Digit Verification

Check Digit



Send Check Digit



Not Send Check Digit*

Codabar

Enable/Disable Codabar



Enable Codabar



Disable Codabar*

Length



Any Length*

Start & Stop Format



Start & Stop = ABCD/ABCD*



Start & Stop = ABCD/TN*E

Send Start & Stop



Send Start & Stop*



Not Send Start & Stop

MSI Plessey

Enable/Disable Plessey



Enable MSI Plessey



Disable MSI Plessey*

Length



Any Length*

GS1 Databar



Enable GS1 Databar



Disable GS1 Databar*

GS1 Composite



Enable GS1 Composite



Disable GS1 Composite*

QR Code (incl. Micro QR Code)



Enable QR Code*



Disable QR Code

Data Matrix



Enable Data Matrix*



Disable Data Matrix

PDF417



Enable PDF417*



Disable PDF417

Aztec



Enable Aztec



Disable Aztec*

MaxiCode



Enable MaxiCode



Disable MaxiCode*

Chinese Sensible Code (Han Xin)



Enable



Disable*

Chapter 5 Configuration Barcode

Numeric Barcode

Below configuration barcodes are only applicable for **Length** configuration.



0



1



2



3



4



5



6



7



8



9

Cancel


















To cancel the wrong data input during configuration process (e.g.), scan **Cancel**.













































Cancel






















Displayable Character




Below configuration barcodes are only applicable for **GS Replacement** and **Preamble / Postamble** configuration.

Character	Configuration barcode	Character	Configuration barcode	Character	Configuration barcode
-		SP Space		!	
“		#		\$	
%		&		,	
()		*	
+		,			
.		/		0	

1		2		3	
4		5		6	
7		8		9	
:		;		<	
=		>		?	
@		A		B	
C		D		E	

F		G		H	
I		J		K	
L		M		N	
O		P		Q	
R		S		T	
U		V		W	
X		Y		Z	

[	\	]	
^		_		‘	
a		b		c	
d		e		f	
g		h		i	
j		k		l	
m		n		o	

p		q		r	
s		t		u	
v		w		x	
y		z		{	
		}		~	
DEL		Ç		ç	

Control Character

Below configuration barcodes are only applicable for **GS Replacement** and **Preamble / Postamble** configuration.

Four types of Character Set are available. Each set has different definition for each configuration barcode. Default is Character Set 0.



Character Set 0*



Character Set 1





Character Set 2






Character Set 3







Character Set 4

Dec	ASCII	Char Set 0	Char Set 1	Char Set 2	Char Set 3	Char Set 4	Configuration Barcode
1	SOH	NULL	Home	Ctrl+A	Alt+001	Enter (Numeric Keypad)	
2	STX	Ctrl+B	End	Ctrl+B	Alt+002	Cap Lock	

3	ETX	Ctrl+C	Up Arrow	Ctrl+C	Alt+003	Right Arrow	
4	EOT	NULL	Down Arrow	Ctrl+D	Alt+004	Up Arrow	
5	ENQ	NULL	Left Arrow	Ctrl+E	Alt+005	NULL	
6	ACK	NULL	Right Arrow	Ctrl+F	Alt+006	NULL	
7	BEL	NULL	Shift+Tab	Ctrl+G	Alt+007	Enter	
8	BS	Back Space	Back Space	Back Space	Alt+008	Left Arrow	
9	HT	Tab	Tab	Tab	Alt+009	Tab	
10	LF	Enter	Enter	Ctrl+P	Alt+010	Down Arrow	
11	VT	NULL	NULL	Ctrl+Q	Alt+011	Tab	
12	FF	NULL	NULL	Ctrl+R	Alt+012	delete	

13	CR	Enter	Enter	Enter	Alt+013	Enter	
14	S0	F1	Page Up	Ctrl+N	Alt+014	Insert	
15	S1	F2	Page Down	Ctrl+O	Alt+015	Esc	
16	DLE	F3	F11	Ctrl+P	Alt+016	F11	
17	DC1	F4	NULL	Ctrl+Q	Alt+017	Home	
18	DC2	F5	NULL	Ctrl+R	Alt+018	Print Screen	
19	DC3	F6	NULL	Ctrl+S	Alt+019	Back Space	
20	DC4	F7	NULL	Ctrl+T	Alt+020	Shift tab	
21	NAK	F8	F12	Ctrl+U	Alt+021	F12	
22	SYN	F9	F1	Ctrl+V	Alt+022	F1	

23	TB	F10	F2	Ctrl+W	Alt+023	F2	
24	CAN	F11	F3	Ctrl+X	Alt+024	F3	
25	EM	F12	F4	Ctrl+Y	Alt+025	F4	
26	SUB	NULL	F5	Ctrl+Z	Alt+026	F5	
27	Esc	Esc	F6	Ctrl+[Alt+027	F6	
28	FS	ALT+0 28	F7	Ctrl+\	Alt+028	F7	
29	GS	ALT+0 29	F8	Ctrl+]	Alt+029	F8	
30	RS	NULL	F9	Ctrl+^	Alt+030	F9	
31	US	NULL	F10	Ctrl+_	Alt+031	F10	

Appendix

Appendix A – Default Table

Function	Default	Remark
Bluetooth Profile	USB HID Cradle Mode	
iOS Touch Keyboard	Enable	
Memory Mode	N/A	
Sleep Timeout	5 minutes	
Bluetooth Device ID	BarCode Scanner	
Good Read Indicator		
Buzzer	High Volume	
Vibrator	On	
Data Format		
Upper / Lower Case	As Is	
Keyboard Layout	English (US)	
Data Transmission Speed	Medium	
Encoding Format	Input Format = Auto Output Format 1 = GBK Output Format 2 = GBK	
Terminator	CR	
GS Replacement	N/A	
Preamble / Postamble	N/A	
Reading Mode		
Trigger Mode	Trigger Mode	
Toggle Mode		
Continuous Mode		
Auto-sensing Mode		
Continuous Mode – Scan Interval	500ms	
Auto-sensing Mode – Image Stabilization Timeout	500ms	
Auto-sensing Mode – Sensitivity	High	
LED Timeout	3s	
Identical Read Interval	500ms	
Illumination and Aimer		
Illumination	Normal	
Aimer	Normal	
Symbologies		
All 1D Inverse Barcode	Disable	
Inverse Data Matrix	Disable	

Inverse QR Code	Disable	
Mirrored Data Matrix	Disable	
Mirrored QR Code	Disable	
UPC-A		
Enable/Disable	Enable	
UPC-A to EAN13	Disable	
Check Digit	Send	
System Number	Send	
2-digit Supplement	Disable	
5-digit Supplement	Disable	
Supplement Required	Disable	
UPC-E		
Enable/Disable	Enable	
UPC-E to UPC-A	Disable	
Enable/Disable UPC-E1	Enable	
Check Digit	Send	
System Number	Send	
2-digit Supplement	Disable	
5-digit Supplement	Disable	
Supplement Required	Disable	
EAN-8		
Enable/Disable	Enable	
Check Digit	Send	
2-digit Supplement	Disable	
5-digit Supplement	Disable	
Supplement Required	Disable	
EAN-13		
Enable/Disable	Enable	
Check Digit	Send	
2-digit Supplement	Disable	
5-digit Supplement	Disable	
Bookland EAN (ISBN)	Disable	
Supplement Required	Disable	
Code128		
Enable/Disable	Enable	
GS1-128 (UCC/EAN-128)		
Enable/Disable	Enable	
Interleaved 2/5		
Enable/Disable	Enable	
Length	Any Length	
Verification	Disable	

Check Digit	Not Send	
Matrix 2/5		
Enable/Disable	Disable	
Length	Any Length	
Verification	Disable	
Check Digit	Not Send	
Industrial 2/5		
Enable/Disable	Disable	
Length	Any Length	
Standard 2/5		
Enable/Disable	Disable	
Length	Any Length	
Code39		
Enable/Disable	Enable	
Start & Stop	Not Send	
Length	Any Length	
Verification	Disable	
Check Digit	Not Send	
Full ASCII Code39		
Enable/Disable	Disable	
Code32		
Enable/Disable	Disable	
Code32 Preamble ('A')	Disable	
Code93		
Enable/Disable	Disable	
Length	Any Length	
Code11		
Enable/Disable	Disable	
Length	Any Length	
Verification	Enable	
Check Digit	Not Send	
Codabar		
Enable/Disable	Disable	
Length	Any Length	
Start & Stop Format	ABCD/ABCD	
Start & Stop	Not Send	
MSI Plessey		
Enable/Disable	Disable	
Length	Any Length	
GS1 Databar		
Enable/Disable	Disable	

GS1 Composite		
Enable/Disable	Disable	
QR Code		
Enable/Disable	Enable	
Data Matrix		
Enable/Disable	Enable	
PDF417		
Enable/Disable	Enable	
Aztec		
Enable/Disable	Disable	
MaxiCode		
Enable/Disable	Disable	
Chinese Sensible Code (Han Xin)		
Enable/Disable	Disable	

Version History

Rev	Date	Description	Issued
1.0	2021.09.27	Initial Release	Shaw
1.1	2021.10.21	Added Disconnect	Shaw
1.2	2021.11.03	Updated Scan Rate	Shaw
1.3	2021.11.17	Added USB VCP & RS232 Cradle Mode	Shaw
1.4	2021.12.16	Updated wireless description, Beeper Indication Removed Code ID	Shaw
1.5	2021.12.23	Updated Beeper Indication, Encoding Format Added GS Replacement, Preamble / Postamble	Shaw
1.6	2022.01.14	Updated BT HID, BT SPP	Shaw
1.7	2022.09.08	Removed Scan Rate	Shaw