



# BPS 250BC

## 2D SCANNER (BT+ CRADDLE)

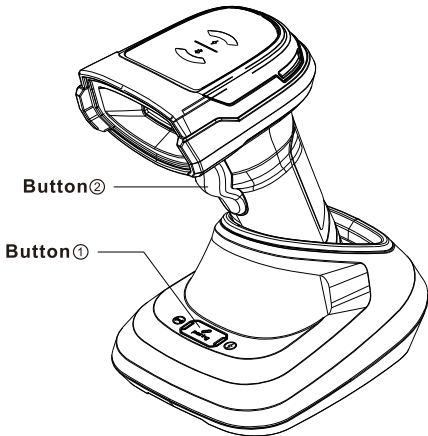
### User Manual



Version

#### Structure Description:

Button①: After the scanner is connected to the base, press this button to listen, after a beep, it is successfully paired with the base;  
Button②: Scan key.



#### Features

- 1) Can interpret various 1D/QR codes and directly transmit Chinese QR codes;
- 2) Base connection, simple and fast;
- 3) The wireless distance is about 100 meters in the open air.

#### Technical Parameters

Barcode Scanner	
Data Items	Parameters
Light Type	White lighting, green aiming light
Decoding Ability	1D:Codabar, Code39, Code32Pharmaceutical (PARAF), Interleaved 2 of 5, NEC 2 of 5, Code 93, Straight 2 of 5 Industrial, Straight 2 of 5 IATA, Matrix 2 of 5, Code 11, Code128, GS1-128, UPC-A, UPC-E, EAN/JAN-8, EAN/JAN-13, MSI, GS1 DataBar Omnidirectional, GS1 DataBarLimited, GS1 DataBar Expanded, China Post(Hong Kong 2 of 5), Korea Post. 2D:Codeblock A, Codeblock F, PDF417, Micro PDF417, GS1 Composite Codes, QR Code, Data Matrix, MaxiCode, Aztec, HANXIN.

Scan Principle	Imaging CMOS
Resolution	640*480
Error Rate	1/5 million
Scan angle	Rotate 360°, Tilt ±65°, Deflection ±65°
Contrast	≥20%
Scan Mode	Manual / Continuous / Automatic sensor scan
Scan Depth Of Field	Code 39(5mi)7-16cm; Code 39(13mil)7-32cm; QR code(15mil)3-18cm; Code 128(20mil)6-35cm
Interface	USB-HID, USB-COM
Wireless Communication	Dedicated pairing base: 2.4G communication Pair a Bluetooth device: Dual-mode Bluetooth
Storage Mode	Offline storage mode: When the scanner leaves the connection range, Automatically store data. Storage capacity is 200K characters. Inventory storage mode: The scanner can enter inventory mode. Storage capacity is 200K characters.
Wireless Distance	Open distance: 100 meters
Pairing Mode	One-on-one: One scanner paired with one base A scanner pairs with a Bluetooth mobile device
Receiving End	Dedicated base receiver, Android/iOS mobile devices
Voltage	DC5V±5%
Working Current	When working without scanning codes ≥35mA ≥300mA when scanning codes at work
Standby Current	0mA (standby is to cut off battery power)
lithium Battery	2200mA lithium battery
Continuous Working Time	The scanner gun continuously scans codes and can work for up to 8 hours.
Charging Time	3 hours
Charging Method	Base direct charging
Scanner size	174.8mm*65.7mm*83.5mm
Material	ABS+PC
Cable Standard	1 meter
Operating Temperature	-20℃~+50℃
Storage Temperature	-40℃~+70℃
Working Humidity	5%~95%(No condensation)
Ambient Lighting	0~100000LUX
Fall Resistance	Can withstand a free fall of 1.5 meters

#### Factory Default



#### Pairing instruction

Pair instruction  
Method 1:  
**A: Barcode Scanner pair with USB Base**  
Step 1, Scan Below Pairing barcode I, barcode II in sequence, and the scanner LED indicator become blue and flashing.  
Step 2, Connect the USB base to host device and wait a second, the LED indicator both become blue on barcode scanner and USB base after succeed pair.

I



II



Method 2: After the base is connected to a computer or other equipment, place the scanner on the base, and then press the button on the base. After hearing a beep, the blue light will stay on, indicating successful pairing.

**B: Barcode scanner pair with bluetooth device**  
Step 1, Scan Below Pairing barcode I, barcode II in sequence, and the scanner LED indicator become blue and flashing.

I



II



Step 2, Open mobile device bluetooth settings and search for "RB\_Scanner\_HID" then connect it. When the scanner LED indicator becomes blue, the pairing is complete.

#### Data Upload Instruction in Inventory Mode



Upload all data



Upload new data



Display all data



Display new data



Data delete

#### 3 Optional Wireless Mode



Instand upload



Inventory



Automatic storage(default)

**Note:**  
1) Instant upload mode: Scan the barcode to enter the instant upload mode. You will hear a "beep" sound normally. In this mode, the scanned results will be uploaded to the computer instantly.  
2) Internal storage mode (inventory mode): Scan the barcode to enter the inventory mode. The scanned data will be stored in the internal memory. A "beep" sound will be heard normally. All barcodes stored in this mode can be uploaded by scanning the setting code. data to computer.

3) Automatic storage mode (default mode): Scan the barcode to enter automatic storage mode, that is, no loss mode. In this mode, when there is a signal (the normal sound is a "beep"), the data will be uploaded to the computer immediately. When the signal is weak or there is no When there is a signal (the normal sound is a "tick"), the scanned data will be stored in the internal memory. When there is a signal, the data will be automatically uploaded to the computer.

#### Transmit Speed



No Delay(default)



Delay 10ms



Delay 20ms

#### End Character



CR(default)



CR&LF



Disable

#### Scan Mode



Manual(default)



Continuous



Auto-sensing

Buzzer



ON



OFF



High



Mid



Low

Image Reverse



Disable



Enable

Prefix Setting



Prefix

Eg , Add prefix "A"  
**Step 1**, Scan above code to add "Prefix";  
**Step 2**, Scan the numeric code "9" and "9" in sequence (Refer to Appendix 1);  
**Step 3**, Because ASCII value of A in Hexadecimal is "41", so scan "4" and "1" in sequence (Refer to Appendix 1 & Appendix 2);  
**Step 4**, Scan "Saved" code to save (Refer to Appendix 1).

Suffix Setting



Suffix

Eg , Add Suffix "A"  
**Step 1**, Scan above code to add" Suffix ";  
**Step 2**, Scan the numeric code "9" and "9" in sequence (Refer to Appendix 1);  
**Step 3**, Because ASCII value of A in Hexadecimal is "41", so scan "4" and "1" in sequence (Refer to Appendix 1 & Appendix 2);  
**Step 4**, Scan "Saved" code to save (Refer to Appendix 1).

URL Barcode Configuration



Disable



Enable

Turn on/off all symbologies



Enable all  
1D barcodes



Disable all  
1D barcodes



Enable all  
2D barcodes



Disable all  
2D barcodes

UPC-A to EAN13



Enable



Disable

Appendix 1:



0



1



2



3



4



5



6



7



8



9



A



B



C



D



E



F



Saved

Appendix 2:

Hex	Char
00	NUL (Null char.)
01	SOH (Start of Header)
02	STX (Start of Text)
03	ETX (End of Text)
04	EOT (End of Transmission)
05	ENQ (Enquiry)
06	ACK (Acknowledgment)
07	BEL (Bell)
08	BS (Backspace)
09	HT (Horizontal Tab)
0a	LF (Line Feed)
0b	VT (Vertical Tab)
0c	FF (Form Feed)
0d	CR (Carriage Return)
0e	SO (Shift Out)
0f	SI (Shift In)
10	DLE (Data Link Escape)
11	DC1 (XON) (Device Control 1)
12	DC2 (Device Control 2)
13	DC3 (XOFF) (Device Control 3)
14	DC4 (Device Control 4)
15	NAK (Negative Acknowledgment)
16	SYN (Synchronous Idle)
17	ETB (End of Trans. Block)
18	CAN (Cancel)
19	EM (End of Medium)
1a	SUB (Substitute)
1b	ESC (Escape)
1c	FS (File Separator)
1d	GS (Group Separator)
1e	RS (Request to Send)
1f	US (Unit Separator)
20	SP (Space)
21	! (Exclamation Mark)
22	" (Double Quote)
23	# (Number Sign)
24	\$ (Dollar Sign)
25	% (Percent)
26	& (Ampersand)
27	' (Single Quote)
28	( (Right / Closing Parenthesis)
29	) (Right / Closing Parenthesis)
2a	* (Asterisk)
2b	+ (Plus)
2c	, (Comma)
2d	- (Minus / Dash)
2e	. (Dot)
2f	/ (Forward Slash)
30	0
31	1
32	2
33	3
34	4
35	5
36	6
37	7
38	8
39	9
3a	: (Colon)
3b	; (Semi-colon)
3c	< (Less Than)
3d	= (Equal Sign)
3e	> (Greater Than)
3f	? (Question Mark)

	Char
40	@ (AT Symbol)
41	A
42	B
43	C
44	D
45	E
46	F
47	G
48	H
49	I
4a	J
4b	K
4c	L
4d	M
4e	N
4f	O
50	P
51	Q
52	R
53	S
54	T
55	U
56	V
57	W
58	X
59	Y
5a	Z
5b	[ (Left / Opening Bracket)
5c	\ (Back Slash)
5d	] (Right / Closing Bracket)
5e	^ (Caret / Circumflex)
5f	_ (Underscore)
60	` (Grave Accent)
61	a
62	b
63	c
64	d
65	e
66	f
67	g
68	h
69	i
6a	j
6b	k
6c	l
6d	m
6e	n
6f	o
70	p
71	q
72	r
73	s
74	t
75	u
76	v
77	w
78	x
79	y
7a	z
7b	{ (Left/ Opening Brace)
7c	(Vertical Bar)
7d	} (Right/Closing Brace)
7e	~ (Tilde)
7f	DEL (Delete)