
SPACE

Contents

Contents **1**

Introduction **4**

1 Restore Factory Default **5**

2 User's Default Settings **5**

3 Version Info **6**

4 Battery Capacity **6**

5 Bluetooth **7**

5.1 Bluetooth HID Protocol 7

5.2 Bluetooth BLE Protocol 8

5.3 Bluetooth SPP Protocol 8

5.4 Set Bluetooth Name 9

5.5 Eject/hide Keyboard 10

5.6 Immediate Mode 11

5.7 Inventory Mode 11

5.8 Upload Speed 12

6 2.4G（Dongle） **13**

6.1 2.4G Receiver Mode 13

6.2 Virtual Serial Port Mode 14

6.3 Immediate Mode 14

6.4 Inventory Mode 15

7 Shortcut Functions of Button **17**

8 Sleep Time Setting **18**

9 Keyboard Language Settings **20**

10 Case Conversion **26**

11 Notice Settings **27**

12 Terminator Settings **29**

13 Data Edit **30**

13.1 Prefix/suffix Settings: 31
13.1.1 Time Display Setting 31
13.1.2 Add Prefix/suffix.....31
13.1.3 Hide Prefix/suffix.....32
13.2 GS Character Settings.....32
13.3 Escape Character Set Setting.....33
14 Control Character Table.....1
15 Displayable Character Table 5

Introduction

The transmission modes of this scanner include wireless 2.4G, wireless Bluetooth and USB transmission, these modes can be switched any time. When the scanner is on, it will automatically enter the interface detection status, if the USB cable is connected to your device and recognized, the scanner will enter the wired transmission mode, other wise it would enter wireless transmission mode.

This scanner supports bluetooth HID, SPP and BLE protocols. When using 2.4G mode for transmission， the scanner is available for real-time transmission,automatic storage and mixed mode.

The design of dual treble and vibrator provide a better feedback for users even under noisy industrial environment.

We provide bases and screens for users to collocate for scanners, all sorts of collocations can be made to satisfy user’s different application requirements.

1 Restore Factory Default

Restore factory default settings：the transmission method will be restored to HID-KBW，other parameters will be set to default.


%%SpecCode93
Factory Default

2 User’s Default Settings

Users can justify their settings based on the context, scan “Save as User’s Default Settings” will make your current settings as user’s default. If there is already a user’s default setting, this operation will replace your previous settings with the new one.


%%SpecCode92
Save as User’s Default Settings

3 Version Info.

Checking for software version info

%%SpecCode39
Version Info

4 Battery Capacity

Checking for battery capacity, the capacity displayed may be a tolerance of 10%.

%%SpecCode15
Battery Capacity


Pairing Setting

5 Bluetooth

5.1 Bluetooth HID Protocol

Manual Pairing

1、Set the “Shortcut Functions of Button” as “Search Bluetooth HID”, press the button and hold it for 10 seconds to enter Bluetooth searching.(Blue&green light will flash once the searching has begun);

2、Turn on Bluetooth in your device, search, select and pair “Barcode Scanner HID”, if the pairing is successful, you will hear a “beep” sound and green&flash light is always on. (The whole pairing process takes about 1min, if timeout and the pairing failed, it will automatically exit the pairing mode)

Barcode Scanning Pairing

1、First scan “Bluetooth HID”, then scan “Pairing Setting” to enter Bluetooth searching(Blue&green light will flash once the searching is begun);

2、Turn on Bluetooth in your device, search, select and pair “Barcode Scanner HID”, if the pairing is successful, you will hear a “beep” sound and green&flash light is always on. (The whole pairing process takes about 1min, if timeout and the pairing failed, it will automatically exit the pairing mode)


%%SpecCodeAA
Bluetooth HID


Factory Default



%%SpecCode99
Pairing Setting

5.2 Bluetooth BLE Protocol

1、Scan “Bluetooth BLE” to enter Bluetooth searching(Blue&green light will flash alternately once the searching has begun)；

2、Turn on Bluetooth in your device, search, select and pair “Barcode Scanner BLE”, if the pairing is successful, you will hear a “beep” sound and green&flash light is always on.



%%SpecCodeAC
Bluetooth BLE

5.3 Bluetooth SPP Protocol

1、Scan “Bluetooth SPP” to enter Bluetooth searching (blue light will flash once the searching has begun)；



Factory Default

2、Turn on the Bluetooth in the customized software, search and select “Barcode Scanner SPP”, you will hear a “beep” sound if the pairing is successful, and the blue light is always on.

%%SpecCodeAB
Bluetooth SPP

5.4 Set Bluetooth Name

How to set Bluetooth name for your scanner：

1、Create a self-made barcode,in which the content should be the name you desire, this barcode will be set as the Bluetooth name for your scanner. The format of setting Bluetooth name：Bluetooth name+Protocol type，you are only allowed to change Bluetooth name, protocol type remains as it was. E.g.：If you want set your scanner’s Bluetooth name as：Scanner, the format of Bluetooth HID name should be: Scanner HID.

（Be advised：The name can only be set up to 16 bytes. If the name of barcode exceeds 16 bytes, the scanner only takes the first 16 bytes as the Bluetooth name.)

2、Scan“Set Bluetooth Name”，then scan the barcode you create to complete the setting.

%%SpecCodeEC
Set Bluetooth Name

Factory Default

%%SpecCodeED
Read Bluetooth name

5.5 Eject/hide Keyboard

When Bluetooth HID is successfully connected and the keyboard language is English, double click the button can eject or hide the HID keyboard. (this function is for IOS only)

%%SpecCode1A
Eject/Hide HID Keyboard

%%SpecCode7B
Turn On Keyboard Double-click Function
（Default）

%%SpecCode7A
Turn Off Keyboard Double-tap Function

5.6 Immediate Mode

In immediate mode, data scanned will be directly transmitted to the receiver, there will be one short sound if the transmission is successful, meanwhile the green indicator light will flash once. If the transmission failed, there will be three short sounds and the green light will flash for three times. The data will be lost under immediate mode if the transmission failed.


%%SpecCode10
Immediate Mode
（Default）

5.7 Inventory Mode

Offline Inventory Mode

In offline inventory mode, scanning the barcode then its data will be automatically saved in the memory chip inside the scanner, later there will be one short sound. If the memory is full, there will be three short sounds as warning sign and the green light will flash three times.


%%SpecCode11
Offline Inventory

Inventory Setting

Show total amount of barcode scanned in storage：



%%SpecCode17
Upload Statistics

Upload all data in memory chip：



%%SpecCode16
Upload Data

Delete all data in memory chip（Warning：All data deleted cannot be restored，make sure you have uploaded all data and made a backup）



%%SpecCode18
Delete All Data

5.8 Upload Speed



%%SpecCodeB0
Fast



%%SpecCodeB1
Medium



Factory Default



%%SpecCodeB2

Low



%%SpecCodeB3

Ultra-low

6 2.4G（Dongle）

6.1 2.4G Receiver Mode

1、To enter the pairing status, first scan“2.4G Receiver Mode”, then scan “Pairing Setting”(the green light will flash).

2、Plug the USB dongle into the device, when hearing a“beep”sound, it means the pairing is successful and the blue&green light is always on. (The whole pairing process takes about 1min, if timeout and the pairing failed, it will automatically exit the pairing mode);





Pairing Setting



%%SpecCodeA8

2.4G Receiver Mode



%%SpecCode99

Pairing Setting

6.2 Virtual Serial Port Mode

Under the circumstances when application software requires ports, scan “USB Virtual COM” and recognize as USB Virtual COM.

（Be advised：An installed driver is require. The default settings of port is：9600 baud rate，8 data bits; no check bit; 1 stop bit）.



%%SpecCodeAE

USB Virtual Com

6.3 Immediate Mode

In immediate mode, data scanned will be directly transmitted to the receiver, there will be one short sound if the transmission is successful, meanwhile the green indicator light will flash once. If the transmission failed, there will be three



Factory Default

short sounds and the green light will flash for three times, meanwhile the data will be lost.



%%SpecCode10
Immediate Mode
（Default）

6.4 Inventory Mode

Offline Inventory Mode

In offline inventory mode, scan the barcode and its data will be automatically saved in the memory chip inside the scanner, later there will be one short sound from the scanner. If the memory is full, there will be three short sounds as warning sign and the green light will flash three times.



%%SpecCode11
Offline Inventory Mode

Mixed Mode

Mixed mode is the combination of immediate mode and data inventory. When the scanner is within the range of transmission, the data scanned will be immediately sent to the receiver; when the scanner is out of the range of real time transmission, the data scanned will be automatically saved in the memory chip inside the scanner.



%%SpecCode12
Mixed Mode



Factory Default

Data Inventory Setting

Show total amount of scans in storage

%%SpecCode17
Upload Statistics

Upload all data in memory chip

%%SpecCode16
Upload Data

Delete all data in memory chip（Warning：All data deleted cannot be restored，make sure you have uploaded all data and made a backup.）

%%SpecCode18
Delete All Data

7 Shortcut Functions of Button

To power off, hold the button for 10 seconds

%%SpecCodeBA1500
Hold to Power Off
（Default）

To enter Bluetooth HID searching, hold the button for 10 seconds

%%SpecCodeBA1501
Hold to Search for Bluetooth HID

%%SpecCode78
Hold to Turn Off Button Functions

%%SpecCode79
Hold to Turn On Button Functions

8 Sleep Time Setting

%%SpecCode30
30s

%%SpecCode31
1 min

%%SpecCode32
2mins
（Default）

%%SpecCode33
5mins



%%SpecCode34
10mins



%%SpecCode35
30mins



%%SpecCode36
Turn Off Sleep Mode





Factory Default

%%SpecCode38
Initiate Sleep Mode Immediately

9 Keyboard Language Settings

%%SpecCode40
America
（Default）

%%SpecCode41
Germany

%%SpecCode42
France

%%SpecCode43
Spain



%%SpecCode44
Italy



%%SpecCode45
Japan



%%SpecCode47
Belgian French



%%SpecCode48
Portugal



%%SpecCode49
The UK





%%SpecCode50
Turkey F

%%SpecCode4F
Turkey Q

%%SpecCode51
Sweden& Finland

%%SpecCode52
Mexican Spanish

%%SpecCode53
Danish

%%SpecCode54

Norwegian



%%SpecCode55
Croatian&Serbian



%%SpecCode56
Swiss German



%%SpecCode57
Swiss French



%%SpecCode58
Dutch



%%SpecCode59
Hungarian





%%SpecCode4B
Brazilian Portuguese



%%SpecCode4D
Czech



%%SpecCode4E
Italy 142



%%SpecCode5A
Polish



%%SpecCode5B
Canadian French





%%SpecCode5C
Argentine Latin American languages

%%SpecCode5D
Slovak

%%SpecCode5E
Thai

%%SpecCode4C
Russian

%%SpecCodeBA1400
Russian Code CP1251

%%SpecCodeBA1401
Russian Code KOI8-R



%%SpecCode46
International Universal Keyboard



%%SpecCode4A
German IOS Keyboard



%%SpecCodeB5
Enter GBK、Code Page Code



%%SpecCodeB4
Enter UTF Code

10 Case Conversion



%%SpecCodeA4
Upper case





%%SpecCodeA3

Lower case



%%SpecCodeA6

Upper&lower case conversion



%%SpecCodeA5

Upper&case lower case conversion OFF

11 Notice Settings

Voice Settings





Factory Default

%%SpecCode97
High Volume
（Default）

%%SpecCode96
Medium Volume

%%SpecCode95
Low Volume

%%SpecCode94
Mute

Vibration Settings

%%SpecCode76
Vibration off

%%SpecCode77
Vibration on
（Default）

12 Terminator Settings

%%SpecCode9C
Enter



%%SpecCode9D
Line Feed



%%SpecCode9E
Enter+LF



%%SpecCodeA2
TAB



%%SpecCode9F
No Terminator

13 Data Edit

In practical application, sometimes we may need to edit the data before outputting them, in order to sort out and deal with data.

Data edit includes： add prefix/suffix、intercept prefix/suffix



13.1 Prefix/suffix Settings:

13.1.1 Time Display Setting

%%SpecCodeC1
Display Time at the Front

%%SpecCodeC2
Display Time at the Back

%%SpecCodeC0
Turn Off Time Display(front&back)

13.1.2 Add Prefix/suffix

How to add prefix/suffix: First scan “Set prefix” or “Set suffix”, then scan the corresponding barcode (see character table below), you may add up to 32 bytes.

%%SpecCode9A
Set Prefix



%%SpecCode9B
Set Suffix

13.1.3 Hide Prefix/suffix

How to hide bar code：First scan “Hide the front character” or “Hide the back-end character”, then scan the barcode in the character table to decide how many bytes you want to hide, you may hide up to 4 bytes.



%%SpecCodeA0
Hide the Front Character



%%SpecCodeA1
Hide the Back-end Character

13.2 GS Character Settings

How to set GS character: First scan “Set GS character convert”, then scan the corresponding setting barcode. (see character table below)



%%SpecCodeEF

Set GS Character Convert

%%SpecCodeEE

Turn off GS Character Convert

13.3 Escape Character Set Setting

The prefix/suffix table includes the tables of control character and displayable character. Displayable characters are those ASCII characters whose key value are over 31. Generally speaking these characters could be output by HID keyboard without being transferred.

Control characters are those characters whose key value are below 32, most of these characters must be transferred first before being output by HID keyboard. This scanner contains 5 methods of transformation, which can be converted by scanning barcode. Users are allowed to set their own escape character set based on their needs.

%%SpecCodeBA0000

Set escape character set 0



%%SpecCodeBA0001

Set escape character set 1



%%SpecCodeBA0002

Set escape character set 2



%%SpecCodeBA0003

Set escape character set 3



%%SpecCodeBA0004

Set escape character set 4



14 Control Character Table

Decimal	ASCII	Character set 0	Character set 1	Character set 2	Character set 3	Character set4	Setting Barcode
1	SOH	NULL	Home	Ctrl+A	Alt+001	Enter(Keypade)	 %%01
2	STX	Ctrl+B	End	Ctrl+B	Alt+002	Cap Lock	 %%02
3	ETX	Ctrl+C	Up Arrow	Ctrl+C	Alt+003	Right Arrow	 %%03
4	EOT	NULL	Down Arrow	Ctrl+D	Alt+004	Up Arrow	 %%04
5	ENQ	NULL	Left Arrow	Ctrl+E	Alt+005	NULL	 %%05
6	ACK	NULL	Right Arrow	Ctrl+F	Alt+006	NULL	 %%06
7	BEL	NULL	Shift+Tab	Ctrl+G	Alt+007	Enter	 %%07

8	BS	Back Space	Back Space	Back Space	Alt+008	Left Arrow	%%08
9	HT	Tab	Tab	Tab	Alt+009	Tab	%%09
10	LF	Enter	Enter	Ctrl+P	Alt+010	Down Arrow	%%0A
11	VT	NULL	NULL	Ctrl+Q	Alt+011	Tab	%%0B
12	FF	NULL	NULL	Ctrl+R	Alt+012	delete	%%0C
13	CR	Enter	Enter	Enter	Alt+013	Enter	%%0D
14	S0	F1	Page Up	Ctrl+N	Alt+014	Insert	%%0E
15	S1	F2	Page Down	Ctrl+O	Alt+015	Esc	%%0F
16	DLE	F3	F11	Ctrl+P	Alt+016	F11	%%10
17	DC1	F4	NULL	Ctrl+Q	Alt+017	Home	%%11

18	DC2	F5	NULL	Ctrl+R	Alt+018	Print Screen	%%12
19	DC3	F6	NULL	Ctrl+S	Alt+019	Back Space	%%13
20	DC4	F7	NULL	Ctrl+T	Alt+020	Shift tab	%%14
21	NAK	F8	F12	Ctrl+U	Alt+021	F12	%%15
22	SYN	F9	F1	Ctrl+V	Alt+022	F1	%%16
23	TB	F10	F2	Ctrl+W	Alt+023	F2	%%17
24	CAN	F11	F3	Ctrl+X	Alt+024	F3	%%18
25	EM	F12	F4	Ctrl+Y	Alt+025	F4	%%19
26	SUB	NULL	F5	Ctrl+Z	Alt+026	F5	%%1A
27	Esc	Esc	F6	Ctrl+[	Alt+027	F6	%%1B
28	FS	ALT+028	F7	Ctrl+\	Alt+028	F7	%%1C

29	**GS**	**ALT+029**	**F8**	**Ctrl+]**	**Alt+029**	**F8**	%%1D
30	**RS**	**NULL**	**F9**	**Ctrl+^**	**Alt+030**	**F9**	%%1E
31	**US**	**NULL**	**F10**	**Ctrl+_**	**Alt+031**	**F10**	%%1F

15 Displayable Character Table

Decimal	ASCII	Corresponding Barcode
32	Space	%%20
33	!	%%21
34	"	%%22
35	#	%%23
36	$	%%24
37	%	%%25
38	&	%%26

39	'	%%27
40	(	%%28
41	)	%%29
42	*	%%2A
43	+	%%2B
44	,	%%2C
45	-	%%2D
46	.	%%2E

47	**/**	%%2F
48	**0**	%%30
49	**1**	%%31
50	**2**	%%32
51	**3**	%%33
52	**4**	%%34
53	**5**	%%35
54	**6**	%%36

55	**7**	%%37
56	**8**	%%38
57	**9**	%%39
58	**:**	%%3A
59	**;**	%%3B
60	**<**	%%3C
61	**=**	%%3D
62	**>**	%%3E

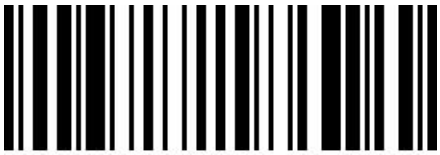
63	**?**	
64	**@**	
65	**A**	
66	**B**	
67	**C**	
68	**D**	
SFF69	**E**	
70	**F**	

71	**G**	
72	**H**	
73	**I**	
74	**J**	
75	**K**	
76	**L**	
77	**M**	
78	**N**	

79	**O**	%%4F
80	**P**	%%50
81	**Q**	%%51
82	**R**	%%52
83	**S**	%%53
84	**T**	%%54
85	**U**	%%55
86	**V**	%%56

87	**W**	%%57
88	**X**	%%58
89	**Y**	%%59
90	**Z**	%%5A
91	**[**	%%5B
92	****	%%5C
93	**]**	%%5D
94	**^**	%%5E

95	**_**	%%5F
96	**`**	%%60
97	**a**	%%61
98	**b**	%%62
99	**c**	%%63
100	**d**	%%64
101	**e**	%%65
102	**f**	%%66

103	**g**	
104	**h**	
105	**i**	
106	**j**	
107	**k**	
108	**l**	
109	**m**	
110	**n**	

111	**o**	
112	**p**	
113	**q**	
114	**r**	
115	**s**	
116	**t**	
117	**u**	
118	**v**	

119	**w**	%%77
120	**x**	%%78
121	**y**	%%79
122	**z**	%%7A
123	**{**	%%7B
124	**|**	%%7C
125	**}**	%%7D
126	**~**	%%7E

127	**DEL**	
164	**¤**	
199	**Ç**	
231	**ç**	