



Product Reference Guide

2D Cordless Series

Table of Contents

I. Basic Settings.....	6
1. Version Display	6
2. Default Settings	6
2.1 Restore default settings	6
2.2 Set to default mode	6
3. Language Settings	6
International keyboard	6
4. Encoding Settings	9
4.1 Enter GBK code	9
4.2 Enter UTF encoding	9
4.3 Compulsory pairing with Dongle.....	9
5. Sound Related Settings	9
5.1 Mute	9
5.2 Low volume	10
5.3 Medium volume	10
5.4 High volume	10
6. Buzzer Setting.....	10
6.1 Buzzer frequency 2K	10
6.2 Buzzer frequency 2.7K	10
7. Transmission Mode	10
7.1 Enter normal mode.....	10
7.2 Enter inventory mode.....	10
7.3 Data upload	10
7.4 Display total storage entries	10
7.5 Clear inventory data	11
8. Sleep Time Setting.....	11
9. Display Battery.....	11
10. Sound Settings	12
10.1 Scanning head sound.....	12

10.2 MCU sound	12
11. Vibration Setting (customized)	12
11.1 Turn on	12
11.2 Turn off	12
12. Transfer Settings	12
12.1 Fast	12
12.2 Medium	12
12.3 Low	12
12.4 Ultra-low	12
13. Transmission Mode Settings	12
13.1 2.4G mode	12
13.2 Virtual Bluetooth mode	13
13.3 Bluetooth HID mode	13
13.4 Bluetooth SPP mode	13
13.5 Bluetooth BLE mode	13
13.6 Android input mode	13
13.7 Virtual serial port mode	13
14. Bluetooth Name Setting	13
15. HID Setting	14
15.1 Allow long press button to enter HID search	14
15.2 Prohibit long press button to enter HID search	14
15.3 HID Keyboard pop up/hide	14
15.4 Disable double-click to pop up/hide HID keyboard	14
15.5 Enable double click to pop up/hide HID keyboard	14
16. GS Conversion Character Settings	14
16.1 Set GS conversion character	14
16.2 Turn off GS character conversion	14
17. Prefix and Suffix Settings	14
18. Hide Barcode	15
18.1 Hide the front of the barcode	15
18.2 Hide the back of the barcode	15
19. Add Function Keys	15

19.1 Add a carriage return at the end	15
19.2 Add a newline at the end	15
19.3 Add carriage return and line feed at the end.....	16
19.4 Add Tab at the end.....	16
19.5 Disable add at the end	16
20. Conversion to Uppercase or Lowercase	16
20.1 Cast to lowercase	16
20.2 Cast to uppercase	16
20.3 Convert between uppercase and lowercase	16
20.4 Disable convert case	16
II. Function Mode Settings	16
1. Working mode	16
2. Same bar code interval	17
3. Bar code Enable/Disable	17
4. Lighting settings.....	18
III. Output Configuration	19
1. Enter/Newline settings	19
2. Additional code settings.....	19
IV. Bar code Configuration.....	21
1. Airline 2of 5.....	21
2. Aztec Code	21
3. Coda bar.....	21
4. Coda block A.....	21
5. Coda block F	21
6. Code 128.....	22
7. Code 11	22
8. Code 32.....	22
9. Code 39	22
10. Code 93.....	22
11. Composite	22
12. Data Matrix Code	23
13. EAN/UPC	23
14. EAN-8	24

15. EAN-13.....	24
16. Full ASCII Code39	25
17. GS1 DataBar Expanded.....	25
18. GS1 Data Bar Limited.....	25
19. GS1 DataBar Omnidirectional.....	25
20. HAN XIN.....	26
21. Hong Kong 2 of 5(China Post).....	26
22. Interleaved 2 of 5	26
23. Matrix 2 of 5	26
24. Maxicode.....	26
25. Micro PDF417.....	26
26. Micro QR Code.....	27
27. MSI	27
28. PDF 417	27
29. Pharm code	27
30. QR Code	27
31. Straight 2 of 5 Industrial	28
32. Telepen	28
33. Trioptic Code.....	28
34. UPC-A	28
35. UPC-E	29
36. Code ID	31
Annex: Code ID Table	31
V . Prefix and Suffix Settings	32
1. The Control Character Table.....	33
2. The Visible Character Table	36

I. Basic Settings

1. Version Display

Display version information



2. Default Settings

2.1 Restore default settings



2.2 Set to default mode



3. Language Settings

International keyboard



American English (Chinese)



German



French



Spanish



Italian



Japanese



Belgian French



Portuguese



British English



German IOS keyboard: (Apple system German keyboard)



Brazilian Portuguese



Russian



Czech



Italian 142



Turkey Q



Turkey F



Sweden/Finland



Mexican Spanish



Danish



Norwegian (written Norwegian):



Croatian



Swiss German



Swiss-French



Dutch



Hungarian



Polish



Canadian French



Argentina (Latin American)



Slovak



4. Encoding Settings

4.1 Enter GBK code



4.2 Enter UTF encoding



4.3 Compulsory pairing with Dongle



5. Sound Related Settings

5.1 Mute



5.2 Low volume



5.3 Medium volume



5.4 High volume



6. Buzzer Setting

6.1 Buzzer frequency 2K



6.2 Buzzer frequency 2.7K



7. Transmission Mode

7.1 Enter normal mode



7.2 Enter inventory mode



7.3 Data upload



entries

7.4 Display total storage



7.5 Clear inventory data



8. Sleep Time Setting

30 seconds



1 minute



2 minutes



5 minutes



10 minutes



30 minutes



Never



Sleep now



9. Display Battery

Display battery



10. Sound Settings

10.1 Scanning head sound



10.2 MCU sound



11. Vibration Setting (customized)

11.1 Turn on



11.2 Turn off



12. Transfer Settings

12.1 Fast



12.2 Medium



12.3 Low



12.4 Ultra-low



13. Transmission Mode Settings

13.1 2.4G mode



13.2 Virtual Bluetooth mode



13.3 Bluetooth HID mode



13.4 Bluetooth SPP mode



13.5 Bluetooth BLE mode



13.6 Android input mode



13.7 Virtual serial port mode



14. Bluetooth Name Setting

Set Bluetooth name



Read Bluetooth name



The method of setting the Bluetooth name:

Scan the Bluetooth name barcode first, and then scan a barcode, this barcode will be set as the Bluetooth name.

※Note

- a) The name can only be set up to 16 bytes. If the name bar code exceeds 16 bytes, the scanner will only take the first 16 bytes as the Bluetooth name.
- b) The complete Bluetooth name includes Bluetooth name + protocol type, which only supports modifying the Bluetooth name. After modifying the Bluetooth name, the names of all Bluetooth protocols

have been changed. For example: if the Bluetooth name is set as Scanner, the name of Bluetooth HID is Scanner HID, the name of SPP is: Scanner SPP, and the name of BLE is Scanner BLE.

15. HID Setting

15.1 Allow long press button to enter HID search



15.2 Prohibit long press button to enter HID search



15.3 HID Keyboard pop up/hide



15.4 Disable double-click to pop up/hide HID keyboard



15.5 Enable double click to pop up/hide HID keyboard



16. GS Conversion Character Settings

16.1 Set GS conversion character



16.2 Turn off GS character conversion



17. Prefix and Suffix Settings

To add the prefix and suffix, scan to set the prefix or suffix first, and then scan the corresponding bar code (for the bar code see appendix), the maximum number is 32 bytes.

To cancel the prefix and suffix, scan to set the prefix or suffix first, and then scan to exit the setting mode.

Set prefix



Set suffix



18. Hide Barcode

To hide the barcode, scan the front part of the hidden barcode or the back part of the hidden barcode first, then scan the hidden digits, and hide the number up to 4 bytes.

18.1 Hide the front of the barcode



18.2 Hide the back of the barcode



Hide 1 bit:



%%01

Hide 2 bit:



%%02

Hide 3 bit:



%%03

Hide 4 bit:



%%04

19. Add Function Keys

19.1 Add a carriage return at the end



%%SpecCode9C

19.2 Add a newline at the end



19.3 Add carriage return and line feed at the end



19.4 Add Tab at the end



19.5 Disable add at the end



20. Conversion to Uppercase or Lowercase

20.1 Cast to lowercase



20.2 Cast to uppercase



20.3 Convert between uppercase and lowercase



20.4 Disable convert case



II. Function Mode Settings

This chapter can configure the function mode of the equipment, including working mode (such as image anti-white), Aiming Light setting, lighting configuration, LED indicator setting and beeper setting, etc. Kindly scan the corresponding configuration code according to the requirements in turn.

1. Working mode



***Manual trigger mode**



7E9AA0

Automatic scan mode

2. Same bar code interval

Interval setting about automatic scan mode on same bar code



7EFD61

50 ms



7EFD62

100 ms



7EFD63

150 ms



7EFD64

200 ms



7EFD65

250 ms



7EFD66

300 ms



7EFD68

400 ms



7EFD610

500 ms



7EFD616

800 ms

3. Bar code Enable/Disable



FFFEFD

Enable all 1D/2D codes



FFFEFC

Disable all 1D/2D codes



FFFEFB

Enable all 1D codes



FFFEFA

Disable all 1D codes



FFFEF9

Enable all 2D codes



FFFEF8

Disable all 2D codes

4. Lighting settings



B66771

***Aiming Light on**



B66770

Aiming Light off



B66781

***Light on**



B66780

Light off

III. Output Configuration

This chapter can configure the output of the device, including entering/newline, add prefix/ suffix, fixed bar code length decoding, remove bar code number (start/end removal) and multi-country keyboard switching settings, etc. You only need to scan the corresponding configuration code as required.

1. Enter/Newline settings



7CC791

Add enter



7CC790

Cancel enter



7CC781

Add newline



7CC780

Cancel newline

2. Additional code settings



6787D1

Enable 2-bit additional code



6787D0

***Disable 2-bit additional codes**



6787C1

Enable 5-bit additional code



6787C0

***Disable 5-bit additional digits**



678791

All UPC/EAN codes must have additional codes



678790

***No additional codes are required**

IV. Bar code Configuration

This chapter can be used for bar code configuration, UPC/EAN, included Code bar code, Code39, Full ASCII Code39, Interleaved 2of 5, Code93, UPC-A, GS1 Data Bar Omnidirectional, GS1 Data Bar Expanded, PDF417, QR Code, Hong Kong 2of 5(China Post) and Airline 2 of 5 support bar code configuration, you just need to scan the configuration code as required. (default *)

1. Airline 2of 5



6667A1
Enable



6667A0
***Disable**

2. Aztec Code



66C761
Enable



66C760
***Disable**

3. Coda bar



6677A1
***Enable**



6677A0
Disable

4. Coda block A



8CA761
Enable



8CA760
***Disable**

5. Coda block F



8CA771
Enable



8CA770
***Disable**

6. Code 128



667791
***Enable**



667790
Disable

7. Code 11



666791
Enable



666790
***Disable**

8. Code 32



6687B1
Enable



6687B0
***Disable**

9. Code 39



667771
***Enable**



667770
Disable

10. Code 93



667781
Enable



667780
***Disable**

11. Composite



A66761
Enable



A66760
***Disable**

12. Data Matrix Code



66B791
***Enable**



A7F7D1
Enable DM mirror



66B780
***Disable DM anti-color**



66B790
Disable



A7F7D0
***Disable DM mirror**



66B883
Enable DM positive and negative color

13. EAN/UPC



6677C1
***Enable**



6787D1
Enable Two-digits Additional Code



6787C1
Enable Five-digits Additional Code



7C8A60
Enable EAN/UPC must have additional code



6677C0
Disable



6787D0
***Disable Two-digits Additional Code**



6787C0
***Disable Five-digits Additional Code**



678790

***Disable EAN/UPC must have additional code**



678761

Add Space before Additional Code



678760

Disable Space before Additional Code



A87860

***Enable EAN/UPC with Direct Color**



A87861

Enable EAN/UPC with Direct and Reverse Color

14. EAN-8



6687A1

***Enable**



6687A0

Disable



6DF761

***Enable EAN-8 Check Digit transmission**



6DF760

Disable EAN-8 Check Digit transmission



6DB781

Enable EAN-8 converted to EAN-13



6DB780

***Disable EAN-8 conversion to EAN-13**

15. EAN-13



668771

***Enable**



668770
Disable



6DF781

***Enable EAN-13 Check Digit transmission**



6DF780

Disable EAN-13 calibration bits transmission



A87781

Enable Remove check code spaces



A87780

***Disable Remove check code spaces**

16. Full ASCII Code39



6687D1

Enable



6687D0

Disable

17. GS1 DataBar Expanded



66A7B1

Enable



66A7B0

***Disable**

18. GS1 Data Bar Limited



66A7A1

Enable



66A7A0

***Disable**

19. GS1 DataBar Omnidirectional



66A791

Enable

20. HAN XIN



8D9771
Enable



66A790
***Disable**

21. Hong Kong 2 of 5(China Post)



6697C1
Enable



8D9770
***Disable**

Notice: When reading a postal, all other postal need close.

22. Interleaved 2 of 5



6677B1
***Enable**



6697C0
***Disable**

23. Matrix 2 of 5



6667B1
Enable



6677B0
Disable

24. Maxicode



66C7A1
Enable



6667B0
***Disable**

25. Micro PDF417



66A7D1
Enable



66C7A0
***Disable**

26. Micro QR Code



66C7B1
Enable

27. MSI



668781
Enable

28. PDF 417



666761
***Enable**

29. Pharm code



ACF7B1
Enable

30. QR Code



66C781
***Enable**



A6E760

***Enable Access to web site QR codes**



66A7D0
***Disable**



66C7B0
***Disable**



668780
***Disable**



666760
Disable



ACF7B0
***Disable**



66C780
Disable



A6E761

Disable Close URL QR code



A86761

Enable QR mirror



A86760

***Disable QR mirror**



66C791

Enable QR anti-color



66C790

***QR anti-color off**

31. Straight 2 of 5 Industrial



667761

Enable



667760

***Disable**

32. Telepen



6667D1

Enable



6667D0

***Disable**

33. Trioptic Code



669781

Enable



669780

***Disable**

34. UPC-A



6687C1

***Enable**



6687C0

Disable



6DB7D1

***Enable UPC-A output Check Digit**



6DB7D0

Disable UPC-A output Check Digit



6DB771

***Enable Output UPC-A digital system characters**



6DB770

Disable output UPC-A digital system characters



6DB7A1

Enable UPC-A converted to EAN-13



6DB7A0

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

35. UPC-E



668761

***Enable**



668760

Disable



6DB7C0

***Disable UPC-E output Check Digit**



6DB7C1

Enable UPC-E output Check Digit



6DB790

***Disable UPC-E send the first characters**



6DB791

Enable UPC-E to send the first character



6DB7B1

Enable UPC-E extended to 12 bits



6DB7B0

***Disable UPC-E extended to 12 bits**

36. Code ID



Enable Output Code ID



Disable Code ID output

Annex: Code ID Table

Bar code	Code ID	Bar code	Code ID
Code128	j	Plessey	n
GS1-128	j	matrix 2of 5	m
CODE39	b	industrial 2of5	F
EAN8	D	IATA 2OF 5	f
EAN13	d	CHINESE POST 2OF 5	Q
UPC-E	E	code 11	h
UPC-A	c	MSI	g
interleaved 2of 5	e	Code93	i
ITF-14		RSS-14	y
Coda bar	a	RSS-Limited	{
RSS-Expanded	}	GM Code	X
QR Code	s	Micro PDF 417	R
PDF417	r	Micro QR	-
Data Matrix	w	USPS Post net	P
Aztec Code	z	USPS Intelligent Mail	
Maxi code	x	Royal Mail	
HMS Code	H	USPS Planet	L
KIX Post	K	Australian Postal	A

V . Prefix and Suffix Settings

Step:

1. Scan the setting code of Set Prefix or Suffix
2. Scan the corresponding setting code of “The Control Character Table”
3. Scan the corresponding “Escape Character Set”

Set Prefix



Set Suffix



PS: Read the “Set Prefix” or “Set Suffix” setting code and then read common barcode can clear all prefixes or suffixes.

Explanation:

The prefix and suffix table is divided into two parts, the control character table part and the visible character table part. The visible character table is mainly ASCII characters whose key value is greater than 31. These characters can generally be output directly through the HID keyboard without escaping.

The control character table is mainly the characters whose key value is less than 32. Most of these characters cannot be output directly through the HID keyboard. They need to be escaped to be output from the HID keyboard. This barcode scanner defines 5 escape methods, which can be switched by scanning the setting code to change different escaping methods. Customers can set the appropriate escape character set according to the needs.

Set Escape Character Set 0:



%%SpecCodeBA0000

Set Escape Character Set 1:



%%SpecCodeBA0001

Set Escape Character Set 2:



%%SpecCodeBA0002

Set Escape Character Set 3:



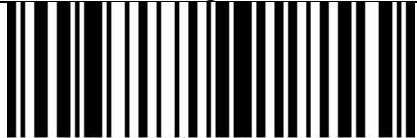
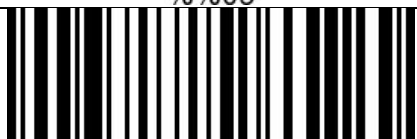
%%SpecCodeBA0003

Set Escape Character Set 4:



%%SpecCodeBA0004

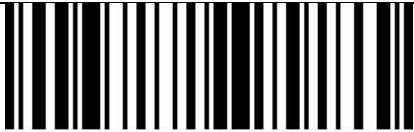
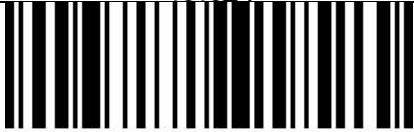
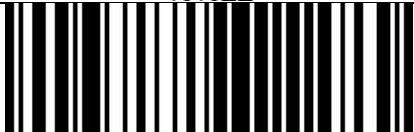
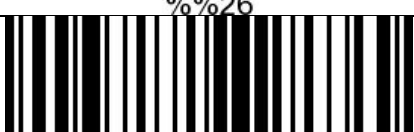
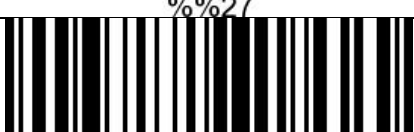
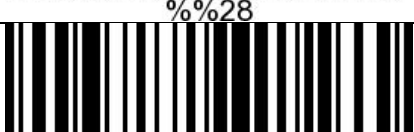
1. The Control Character Table

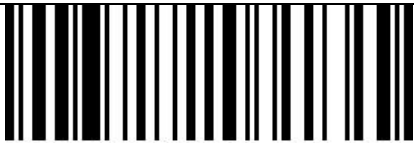
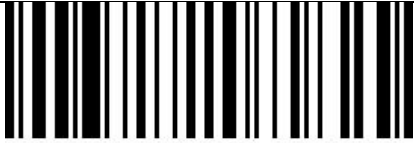
10 HEX	ASCII	Char 0	Char 1	Char 2	Char 3	Char 4	Setting Code
1	SOH	NULL	Home	Ctrl+A	Alt+001	Numeric Keypad Enter	 %%01
2	STX	Ctrl+B	End	Ctrl+B	Alt+002	Cap Lock	 %%02
3	ETX	Ctrl+C	Up Arrow	Ctrl+C	Alt+003	Right Arrow	 %%03
4	EOT	*Customized Key 1	Down Arrow	Ctrl+D	Alt+004	Up Arrow	 %%04
5	ENQ	*Customized Key 2	Left Arrow	Ctrl+E	Alt+005	NULL	 %%05
6	ACK	*Customized Key 3	Right Arrow	Ctrl+F	Alt+006	NULL	 %%06
7	BEL	*Customized Key 4	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+J	Alt+010	Down Arrow	 %%0A

10 HEX	ASCII	Char 0	Char 1	Char 2	Char 3	Char 4	Setting Code
11	VT	NULL	NULL	Ctrl+K	Alt+011	Tab	%%0B
12	FF	NULL	NULL	Ctrl+L	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

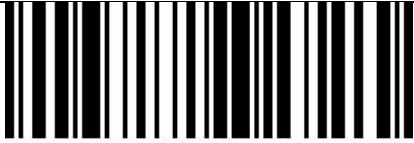
10 HEX	ASCII	Char 0	Char 1	Char 2	Char 3	Char 4	Setting Code
22	SYN	F9	F1	Ctrl+V	Alt+022	F1	%%16
23	TB	F10	F2	Ctrl+W	Alt+023	F2	%%17
24	CAN	F11	F3	Ctrl+X	Alt+024	F3	%%18
25	EM	F12	F4	Ctrl+Y	Alt+025	F4	%%19
26	SUB	NULL	F5	Ctrl+Z	Alt+026	F5	%%1A
27	Esc	Esc	F6	Ctrl+[	Alt+027	F6	%%1B
28	FS	ALT+028	F7	Ctrl+\	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

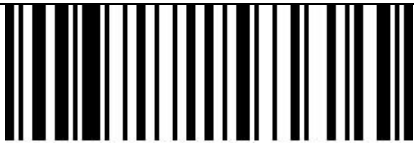
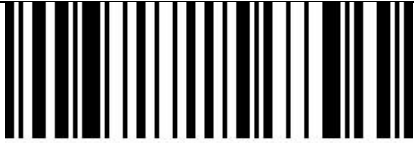
2. The Visible Character Table

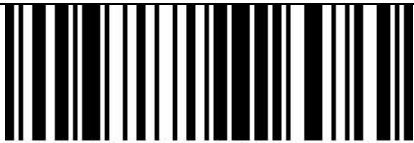
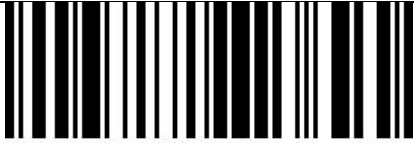
10 HEX	ASCII	Setting Code
32	Space	 %%20
33	!	 %%21
34	"	 %%22
35	#	 %%23
36	\$	 %%24
37	%	 %%25
38	&	 %%26
39	'	 %%27
40	(	 %%28
41	)	 %%29
42	*	 %%2A

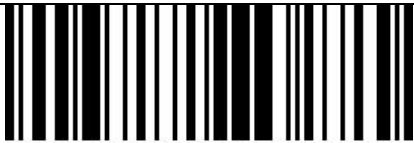
10 HEX	ASCII	Setting Code
43	+	 %%2B
44	,	 %%2C
45	-	 %%2D
46	.	 %%2E
47	/	 %%2F
48	0	 %%30
49	1	 %%31
50	2	 %%32
51	3	 %%33
52	4	 %%34
53	5	 %%35

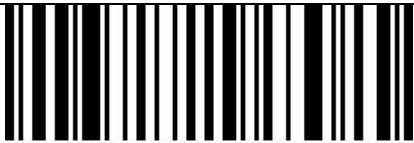
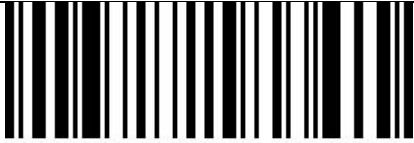
10 HEX	ASCII	Setting Code
54	6	 %%36
55	7	 %%37
56	8	 %%38
57	9	 %%39
58	:	 %%3A
59	;	 %%3B
60	<	 %%3C
61	=	 %%3D
62	>	 %%3E
63	?	 %%3F
64	@	 %%40

10 HEX	ASCII	Setting Code
65	A	 %%41
66	B	 %%42
67	C	 %%43
68	D	 %%44
69	E	 %%45
70	F	 %%46
71	G	 %%47
72	H	 %%48
73	I	 %%49
74	J	 %%4A
75	K	 %%4B

10 HEX	ASCII	Setting Code
76	L	 %%4C
77	M	 %%4D
78	N	 %%4E
79	O	 %%4F
80	P	 %%50
81	Q	 %%51
82	R	 %%52
83	S	 %%53
84	T	 %%54
85	U	 %%55
86	V	 %%56

10 HEX	ASCII	Setting Code
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

10 HEX	ASCII	Setting Code
98	b	 %%62
99	c	 %%63
100	d	 %%64
101	e	 %%65
102	f	 %%66
103	g	 %%67
104	h	 %%68
105	i	 %%69
106	j	 %%6A
107	k	 %%6B
108	l	 %%6C

10 HEX	ASCII	Setting Code
109	m	 %%6D
110	n	 %%6E
111	o	 %%6F
112	p	 %%70
113	q	 %%71
114	r	 %%72
115	s	 %%73
116	t	 %%74
117	u	 %%75
118	v	 %%76
119	w	 %%77

10 HEX	ASCII	Setting Code
120	x	 %%78
121	y	 %%79
122	z	 %%7A
123	{	 %%7B
124		 %%7C
125	}	 %%7D
126	~	 %%7E
127	DEL	 %%7F
199	Ç	 %%C7
231	ç	 %%E7