CONTENTS

一、 User settings manual

二、Basic Information

(1) Factory Default

(2) way of communication：USB KBW

(3) Trigger mode：Button hold

Terminator：Enter(\r)。

Factory Default

(4) Save current configuration as default configuration

(5) Users can set the configuration as required according to the usage environment.Then scan saves the current configuration as the default configuration, and the settings become the default settings (customer configuration)

1. Save current configuration as factory default

(6) Default configuration(customer configuration)

(7) When the user sets the default settings (customer configuration),scan the default configuration (customer configuration), all can be restored to the original customer configuration

Default configuration(customer configuration)

(8) Setting code switch

*** ON**

OFF

(9) Product information

三、 Wireless part setting

(1) Bluetooth pairing setting code

R&B4.0 wireless scanning gun is compatible with 2.4g, bluetooth BLE4.0 communication, the engine and host through TTL/RS232 communication docking, the engine head communication mode needs to be set to serial communication (wireless setting), baud rate is 15200bps (bluetooth setting).

TTL/RS232（Wireless Setting）

115200bps (Bluetooth Setting)

(2) 2.4g communication was used when R&B4.0 wireless scanning gun was connected with the supporting u-disk receiver; It can also be paired with any bluetooth mobile device. The pairing is as follows:

①When the R&B scanner gun is connected to the matching u-disk receiver, plug in the receiver, and when the blue light is flashing: scan the pairing code I and II for pairing:

The pairing code I

X=0100

disconnect

The pairing code II

X=0101

connect

②When R&B scanner gun is connected to bluetooth device: scan the pairing code I and II for pairing:
(after scanning the pairing code, open the bluetooth device for bluetooth search and connection)

The pairing code I

X=0100

disconnect

The pairing code II

X=0101

connect

2. Show and hide keyboard (for apple devices only)

X=0104

Show or hide the keyboard

3. Mode selection

X=0010

Instant upload mode

X=0011

Inventorymode

X=0012

Hyperspace storage mode

①Operation in stocktaking mode

X=0013

Upload all data

X=0014

Upload new data

X=0015

Show saved data

X=0016

Show upload data

X=0017

Clear all the data

4. Singlechip restore factory setup

X=0020

Set upload data delay (valid when connecting to cell phone)

X=0018

No delay

X=0019

delayed

2. Query software version

X=0021

Query scanner sofeware version

X=0636

Query the receiving end version number

3. Set the sleep time

X=1yyy (xxx1000 is non-dormant, sleep time formula: yyy*10=z seconds)

X=1000

non-dormant

X=1006

60 seconds

X=1012

120 seconds

X=1030

5 minutes

X=1060

10 minutes

Set bluetooth broadcast time

X=2yyy(Broadcast formula: yyy*5=z s)

Note: the minimum broadcast time is 30 seconds

X=2006

30s

X=2012

60s

X=2024

120s

9.USB KBW

When the reading mode is connected to the host using the USB cable, the reading mode can be configured as a standard keyboard by scanning the USB KBW setting code.

。

USB KBW keyboard

10.USB COM keyboard

When the reading mode is connected to the host using the USB cable, the reading mode can be configured as a virtual serial port output mode by scanning the USB COM setting code

USB COM

11. Chinese Settings

X=0630

Chinese is not supported

X=0631

Support Chinese

12. Transmission speed selection

X=0650

Don't delay

X=0651

Delay 5 ms

Delay 10 ms

Delay 15 ms

Delay 20 ms

Delay 25 ms

X=0656

Delay 30 ms

X=0657

Delay 35 ms

X=0658

Delay 40 ms

X=0659

Delay 45 ms

四、 Reading mode

1. Manual mode

(1) Button hold mode

Set to the button hold mode, press the button to trigger the reading, release the button to end the reading. The reading is successful if the reading is successful or the reading time exceeds the single reading time

*** Manual mode-button hold mode**

(2) Button trigger mode

Set to the button trigger mode, press the button to start reading, release the button to read will not stop, read successfully or read more than a single reading time to stop reading

*** Manual mode-button trigger**

2. Continuous mode

3. Set to continuous mode, no triggering is required, the reading mode immediately starts reading the code, the reading is successful or the reading time exceeds the single reading time to end the reading, and the next reading is automatically triggered

Continuous mode

(1) Reading interval length

The interval between two readings in continuous mode. Regardless of the success or failure of the last reading, it will automatically enter the next reading after that time.

Default：500ms，unit：100ms，range：0-9900ms

Set the reading interval by scanning the barcode,for example：

Setting 0.5ms,scan the barcode below first, then scan the barcode “0” and “5” of the digital setting code.

Reading interval length

4. Auto-sensing Mode

5. In the auto-sensing mode, the recognition engine detects the brightness of the surrounding environment. When the brightness changes, it triggers the reading, the read success or the recognition time exceeds the single reading time to finish the reading. Whether successful or failed in the last reading, re-enter the detection of the brightness of the surrounding environment

Auto-sensing Mode

（1）Stable Induction Time

Stable time before entering the test environment, default: 500ms, unit: 100ms, range: 0-9900ms

You can set a stable induction time by scanning a bar code, example:

for 200ms，to scan following code, then scan numeric code “0”and”2”

for 1500ms，to scan following code, then scan numeric code “1”and”5”

Stable Induction Time

（2）Sensitivity rating setting

There are three levels of sensitivity to choose, default: high sensitivity

*** High**

Middle

low

6. Host Mode

Through instruction trigger reading engine read, you can finish reading by instruction, or you can finish reading if you read successfully or more than one read.。

Host mode

7. Single Scanning Duration

8. This parameter is the duration of a single decode, with a setting range of 0.5 to 25.5 seconds and a step of 0.1 seconds. The default duration is 3 seconds. If you want to set it to a different length, you can scan the bar code below. Scan the 3 digit settings code in the appendix to set the required time, less than 3 bits are offset with 0.
9. ou can set a stable induction time by scanning a bar code, example:
10. For 0.5s，to scan following code,then scan numeric code “0” and “5”.
11. For 10.5s，to scan following code,then scan numeric code “1”,”0” and “5”.

Single Scanning Time

12. Same Read Time Interval

The same reading time interval refers to read a bar code, within a set period of time, refuse to read the same bar code. Only after more than the length of time, you can read and output. Default: 500ms, step: 100ms, range: 0-9900ms, mainly for continuous mode and automatic induction mode.

You can set the same read time interval by scanning the bar code. Example:

For 0.5s，to scan following code,then scan numeric code “0” and “5”。

Same Read Time Interval

13. Same code read shortcut setting

No delay

delay 1s

delay 3s

delay 5s

delay 7s

Infinite delay

五、 Lighting and aiming

1. Lighting

Lighting could provide supplementary lighting for shooting to read, when light beam illuminate reading aim,to improve reading ability and adaptability in weak ligh. The user could set it to one of the following states according to the application.

Normal（Factory Default）：The light is on when shooting to read, off in other time.

Always light：The lights keep glowing after reading module is on.

No Light：The lights don’t light up in any cases。

*** Normal**

Always light

No Light

2. aiming

Aiming beam could help users to find the best reading distance when shooting to read. The user could choose one of the following states according to the application.

Normal（Factory Default）：Reading module project aiming beam when shooting to read

Always Light：After reading module power on, always project aiming beam

No Light：Aiming beam is off in any case

Flicker： Aiming beam flicker when projecting aiming beam

No Flicker： The aiming beam does not flicker when projecting the aiming beam

Note: Flicker and no Flicker functions only work when aiming LED is set to Normal or always light. After LED is set to no light, if you need to set LED Flicker function, please first set aiming LED to normal or always light.

*** Normal**

Always light

NO light

Flicker

No Flicker

五、Output Instruction

1. Keyboard

(1) Multinational keyboard

When the engine is recognized as a keyboard input device, some of the input characters vary from country to country, and different languages are required. The keyboard defaults to USA English.

*** USA**

Belgium

Finland

France

X=0609

Germany

X=0611

Italy

X=0621

Sweden

X=0626

UK

X=0606

Denmark

X=0614

Norway

X=0620

Spanish

X=0616

Portugal

Turkey F

Turkey Q

Japan

Brazil

X=0605

Czech

X=0603

Canada

X=0610

Hungary

X=0613

Netherlands

X=0615

Poland

X=0618

Slovakia

X=0619

Slovenia

X=0622

Switzerland-French

Switzerland-German

(2) Keyboard type

When the virtual keyboard is enabled, the correct data can be output in any keyboard language mode. When using a virtual keyboard, you must ensure that the keypad number keys are enabled.

*Standard keyboard

virtual keyboard

(3) Keyboard output character time interval

Keyboard output character interval, range 0-1000ms, unit: 5ms, default: 5ms

0ms

10ms

(4) Keyboard Ctrl key combination

When this function is enabled, the ASCII control character between 0x00~0x1F becomes the output Ctrl combination control key. The combination key details reference attachment

***Disable**

(0x00)

Enable

(0x01)

2. Beeper Sound Settings

(1) Silent mode

Turn off or disable all beeps, scan the corresponding bar code below

Turn off

***disable turn off**

(2) Volume level

There are three levels of volume level to choose from, default: high

***High**

Middle

Low

(3) Decoding successful tone

***turn on**

Turn off

(5) Boot Prompt Tone

***On**

Off

(4) Setting code prompt tone

***On**

Off

3. Decoding status prompt

Before the trigger button is released, if the barcode cannot be decoded within the timeout period, a message of "no read" is allowed to be sent. Any feasible prefix or suffix can be attached to this message

When this feature is disabled, no message can be sent to the host even if the barcode cannot be decoded.

*disable send NR

Enable send

NR

4. Output forced letter case conversion

Keyboard alphabetic conversion. When you output a bar code with letter content, you can configure the output to be all uppercase or lowercase. For example, if the bar code is: ab123de, if "converted to uppercase" bar code, output result is: AB123DE; if sweep "convert to lowercase" bar code, output result is: abc123de; default keyboard is case-insensitive.

X=0632

*Disable

Uppercase

Lowercase

Case Reverse

5. 3.Data Coding Format

In order to enable the host to print Chinese data in the specified encoding format, it can be set by reading the data encoding format.

0:Primitive Type,

1:GBK(GB2312),suitable for notepad excel and other software display.

2:UNICODE,,suitable for WORD,QQa and othe software display.

Primititive Type

*GBK Data Coding Format

Unicode

6. Value added tax invoice automatic identification output function

On

*Off

六、Data Edition

1. Code ID

Users can use code id to identify different barcode types, each barcode type corresponding to the code id using a character for identification, see appendix 3.

***No-permitted Transmitting ID**

Permit Transmitting ID

2. Ending Character

The terminated character is to add the character format after decoding data: Decoding Data+Character Terminated。

***No Ending Character**

 # &CR LF

%CR

TAB

CR CR

CR LF CR LF

3. Prefix&Suffix

（1）Setting Code

Peffix

Suffix 一

Suffix 二

（2）Define Preffix and Suffix Content

A prefix or two suffixes can be attached to the scanned data for data editing. Set these values to scan a four-digit number (ie four barcodes) corresponding to the ASCII value.

Example: The letter A corresponds to a value of 1065, which scans the digital code 1 0 6 5 in sequence. See Appendix 4: Character Comparison Table and Appendix 1: Digital Setting Code.

（1） Scan the following settings code to set the expected data transfer cell

***Initial Data**

Prefix+data

Data+Suffix1

Prefix+data+Suffix

1

Data+Suffix 1+Suffix 2

Prefix+Data+Suffix 1+Suffix 2

4. Add Multiple Suffix

- **Prefix**

(1) To scan this code below

Continunous Setting of Multiple Suffix

(2) Scan the numeric settings code in turn, with one successful tone for every four

(3) Scan " Finish Setting multiple Prefix&suffix" setting code, ending the settings

Finish Setting multiple Prefix&suffix

- **Suffix(similar to a prefix, if you need LF, you can add it on the suffix)**

(1) to scan"Multiple Suffix Setting Code"

Multiple Suffix Setting Code

(2) setting Prefix&suffi

(3) Scan " Finish Setting multiple Prefix&suffix" setting code, ending the settings

Finish Setting multiple Prefix&suffix

- **Prefix&suffix Effective**

***Only output decoded data**

Output multiple suffix

Output multiple prefix

Output multiple prefix&suffix

5. Hidden characters

(1) Hidden head data

The decoded data can be used to hide the head data, which can be configured to hide any length. If the configured length exceeds the length of the barcode data, all the content of the current barcode can be hidden

***Prohibit**

Enable

Setting head data hiding bits

Setting head data hiding bits, range 1-255. Scan the current bar code and then scan the numeric setup code. For example, if you need to hide 16 characters, then scan the sequence number setting code: 0 1 6.

Head data hidden bits

(2) Middle data hiding

The decoded output data is hidden in the middle part, and can be configured at any starting position and length. If the configuration start position exceeds the bar code data length, then the current bar code is not hidden. The length of the configuration exceeds the length of the remaining bar code data, then all bar code data after the start position is hidden

***Prohibit**

Enable

Set the beginning position of hidden middle data.

Set the beginning position of hidden middle data, range 1-255。scan the current bar code and then scan the digital setup code， For example, to hide data after the third character (the fourth character begins to hide), scan sequentially the number setup code: 0 0 3

Middle data hiding starting bit

Setting hidden the middle data length

Configure the length of hidden middle part data, ranging 1 -255. Scan the current bar code and then scan the numeric setup code. For example, if you need to hide 16 characters, then scan the sequence number setting code: 0 1 6.

Middle data hiding length

(3) hiding tail data

The data output from decoding is tail data hiding, which can be configured to hide any length of data. If the length of data is longer than the bar code, the current bar code content can be hidden.

***Prohibit**

Enable

Setting tail data hiding bits

Set tail data hidden bits, range 1-255. Scan the current bar code and then scan the numeric setup code. For example, if you need to hide 16 characters, then scan the sequence number setting code: 0 1 6.

Tail data hidden bits

6. STX and EXT setting

Prohibit

STX Prefix

ETX Suffix1

STX(Prefix)+ETX(Suffix1)

七、Bar code type enable / disable configuration

1. **One-dimensional code global enable switch**

Enable

Prohibit

2. **Two-dimensional code global enable switch**

Enable

Prohibit

3.One dimensional code forward and backward reading

Enable

Prohibit

4.**One dimensional code and multi-code identification**

Enable

Prohibit

5.UPC-A

***Enable**

Prohibit

Do not transmit UPC-A check bits

***Transmission UPC-A check bit**

6.UPC-A additional code

(1) UPC-A 2-bit additional code

Enable

***Prohibit**

(2) UPC-A 5-bit additional code

Enable

*Prohibit

(3) UPC-A Additional code must be identified

Enable

*Prohibit

7.UPC-E

*Enable

Prohibit

Do not transmit UPC-e check bits

***Transmission UPC-e check bit**

8.UPC-E Additional code

(1) UPC-E Two-bit additional code

Enable

***Prohibit**

(2) UPC-E 5-bit additional code

Enable

***Prohibit**

(3) UPC-E 必 Additional code must be identified.

Enable

***Prohibit**

9.UPC-E to UPC-A

Enable

*** Prohibit**

10.UPC-A to EAN-13

Enable

***Prohibit**

11.EAN-8

***Enable**

***Prohibit**

12.EAN-8 Additional code

(4) EAN-8 2 bit additional code

Enable

*** Prohibit**

(5) EAN-8 5 bit additional code

Enable

*** Prohibit**

(6) EAN-8 Additional codes must be identified

Enable

*** Prohibit**

12.EAN-13

***Enable**

Prohibit

13.EAN-13 additional code

(1) EAN-13 2 bit additional code

Enable

***Prohibit**

(2) EAN-13 5bit additional code

Enable

***Prohibit**

(3) EAN-13 Additional codes must be identified

Enable

*Prohibit

14.CODE 128

*Enable

Prohibit

15.GS1-128

* Enable

Prohbit

16.ISBT-128

* Enable

Prohibit

17.Interleaved 2 of

(1) I 2 of 5 enable

*Enable

Prohibit

(2) Interleaved 2 of 5Recognition length

The user can set up decoding Interleaved 2 of 5 in a specific length range，Example: setup can only be decoded by Interleaved 2 of 5 in the 4-20 bit length range. First scan the following code，Then scan the 0 / 4 / 2 / 0 bar code of the digital setting code in turn，Change the selection or cancel an incorrect input setting and scan the cancel bar code in the appendix.

Interleaved 2 of 5 with specific length range

Interleaved 2 of 5 of arbitrary length

(3) Transfer Interleaved 2 of 5 check bit

Enable

*Prohibit

18.Matrix 2 of 5

(1) Matrix 2 of 5 Enable/ Prohibit

Enable

***Prohibit**

(2) Matrix 2 of 5recognition length

The user can set up decoding the Matrix 2 of 5 in a specific length range. Example: the Matrix 2 of 5 in the 4-20 bit length range can only be decoded to scan the following code first, and then scan the 0,4,2,0 bar code of the digital setting code in turn. Change the selection or cancel an incorrect input setting and scan the cancel bar code in the appendix

Matrix 2 of 5 in a specific length range

Matrix 2 of 5 in arbitrary length range

(3) Matrix 2 of 5 parity check transmission

Enable

*Prohibit

19.Industrial 2 of 5

(1) Industrial 2 of 5 Enable/Prohibit

Enable

***Prohibit**

(2) Industrial 2 of 5 Recognition length

The user can set up decoding Interleaved 2 of 5 in a specific length range,

Example: setup can only be decoded by Interleaved 2 of 5 in the 4-20 bit length range. First scan the following code，Then scan the 0 / 4 / 2 / 0 bar code of the digital setting code in turn，Change the selection or cancel an incorrect input setting and scan the cancel bar code in the appendix.

Interleaved 2 of 5 with specific length range

Interleaved 2 of 5 of arbitrary length

3. Standard 2 of 5

(1) Standard 2 of 5 Enable/Disable

Enable

***Disable**

(2) Standard 2 of 5 Recognition length

The user can set up decoding the Standard 2 of 5 in a specific length range. Example: the Standard 2 of 5 in the 4-20 bit length range can only be decoded to scan the following code first, and then scan the 0 / 4/2 / 0

bar code of the digital setting code in turn. Change the selection or cancel an incorrect input setting, scan the cancel bar code in the appendix。

Standard 2 of 5 with specific length range

Standard 2 of 5 with arbitrary length

(3) Standard 2 of 5 check bit transmission

Enable

*Disable

4. Code 39

(1) code39 Enable/Disable

***Enable**

Disable

(2) Code39 length

(3) Solvable arbitrary length code39

(4) Code39 check bit

Transmission check bit

*Non-transmission check bit

(5) Code 39 transfer initiator and Terminator

*Disable

Enable

5. Code 39 Full ASCII

Enable

***Disable**

6. Code 32

(1) code32 Enable/Disable

Enable

*** Disable**

(2) code32 Prefix A

Enable

*** Disable**

7. Code 93

Enable

* Disable

8. Code 11

(1) code11 Enable/Disable

Enable

* Disable

(2) Check Bit Transmission

Enable

* Disable

9. Codabar

Enable

* Disable

Remove start and stop characters

*** Allow start and stop characters**

10. PLESSEY

Enable

*Disable

11. MSI

(1) MSI Enable/Disable

Enable

*** Disable**

(2) Length Setting

Readable to any length

12. GS1-Databar

Enable

*** Disable**

13. ITF14

Enable

*** Disable**

Transmission Check Bit

*** No-transmission Check Bit**

14. GS1 composite code

Enable

*** Disable**

15. QR Code

(1) QR code Enable/Disable

*** Enable**

Disable

(2) QR code Multi-code reading

Read only a single code

Read only double code

Recognizable single and double code

(3) QR code Normal and Reverse Reading

*Only-read normal

Normal and Reverse Reading

16. Data Matrix

(4) Data Matrix Enable/Disable

*** Enable**

Disable

(5) Data Matrix multi-code reading

Read only a single code

Read only double code

Recognizable single and double code

(6) Data Matrix Normal and Reversing Reading

Only-read normal

Only-read reverse

Normal and Reverse Reading

17. PDF 417

(1) PDF417 Enable/Disable

*** Enable**

Disable

(2) PDF417 Multi-code reading

Read only a single code

Read only double code

Recognizable single and double code

(3) PDF417 Normal and Reversing Reading

Only-read normal

Only-read reverse

Normal and Reverse Reading

18. Aztec code

Enable

***Disable**

19. Maxi code

Enable

***Disable**

20. Han xin code

Enable

***Disable**

21. Brazilian bank code

Enable

*Disable

Appendix1: Digital setting code

The parameter requires the exact value. Scan the appropriate digital setting code.

0

1

2

3

4

5

6

7

8

9

Appendix 2：Cancel barcode

To change the selection or cancel an incorrect input, scan the barcode below.

Cancel

Appendix 3：Code ID

Code character	Type of the barcode
A	UPC-A, UPC-E, EAN-8, EAN-13
B	Code 39, Code 32
C	Codabar
D	Code 128, ISBT 128

E	Code 93
F	Interleaved 2 of 5/ITF, ITF14
G	Industrial 2 of 5, Standard 2 of 5
H	CODE11
J	MSI, MSI/Plessey
K	UCC/EAN-128/GS1-128
L	Bookland EAN/ISBN，ISSN
R	GS1 DataBar-14, GS1 DataBar Limited, GS1 DataBar Expanded, RSS
V	Matrix 25
r	PDF417
u	DataMatrix(DM)
q	QR
a	Aztec Code
x	Maxi Code
c	HanXin

Appendix 4: Character comparison table

ScanValue	**hexadecimal value**	**Keyboard function key operation**	**Keyboard ctrl key combination operation**
1000	00h	Null	CTRL 2
1001	01h	Keypad Enter	CTRL A

1002	02h	Caps lock	CTRL B
1003	03h	Right Arrow	CTRL C
1004	04h	Up Arrow	CTRL D
1005	05h	Null	CTRL E
1006	06h	Null	CTRL F
1007	07h	Enter	CTRL G
1008	08h	Left Arrow	CTRL H
1009	09h	Horizontal Tab	CTRL I
1010	0Ah	Down Arrow	CTRL J
1011	0Bh	Vertical Tab	CTRL K
1012	0Ch	Backspace	CTRL L
1013	0Dh	Enter	CTRL M
1014	0Eh	Insert	CTRL N
1015	0Fh	Esc	CTRL O
1016	10h	F11	CTRL P
1017	11h	Home	CTRL Q
1018	12h	Print Screen	CTRL R
1019	13h	Delete	CTRL S
1020	14h	tab+shift	CTRL T
1021	15h	F12	CTRL U
1022	16h	F1	CTRL V
1023	17h	F2	CTRL W
1024	18h	F3	CTRL X
1025	19h	F4	CTRL Y
1026	1Ah	F5	CTRL Z
1027	1Bh	F6	CTRL [
1028	1Ch	F7	CTRL \
1029	1Dh	F8	CTRL]
1030	1Eh	F9	CTRL 6
1031	1Fh	F10	CTRL -
1032	20h	Space	Space
1033	21h	/A	!
1034	22h	/B	‘

1035	23h	/C	#
1036	24h	/D	$
1037	25h	/E	%
1038	26h	/F	&
1039	27h	/G	‘
1040	28h	/H	(
1041	29h	/I	)
1042	2Ah	/J	*
1043	2Bh	/K	+
1044	2Ch	/L	,
1045	2Dh	-	-
1046	2Eh	.	.
1047	2Fh	/	/
1048	30h	0	0
1049	31h	1	1
1050	32h	2	2
1051	33h	3	3
1052	34h	4	4
1053	35h	5	5
1054	36h	6	6
1055	37h	7	7
1056	38h	8	8
1057	39h	9	9
1058	3Ah	/Z	:
1059	3Bh	%F	;
1060	3Ch	%G	<
1061	3Dh	%H	=
1062	3Eh	%I	>
1063	3Fh	%J	?
1064	40h	%V	@
1065	41h	A	A
1066	42h	B	B
1067	43h	C	C

1068	44h	D	D
1069	45h	E	E
1070	46h	F	F
1071	47h	G	G
1072	48h	H	H
1073	49h	I	I
1074	4Ah	J	J
1075	4Bh	K	K
1076	4Ch	L	L
1077	4Dh	M	M
1078	4Eh	N	N
1079	4Fh	O	O
1080	50h	P	P
1081	51h	Q	Q
1082	52h	R	R
1083	53h	S	S
1084	54h	T	T
1085	55h	U	U
1086	56h	V	V
1087	57h	W	W
1088	58h	X	X
1089	59h	Y	Y
1090	5Ah	Z	Z
1091	5Bh	%K	[
1092	5Ch	%L	\
1093	5Dh	%M	]
1094	5Eh	%N	^
1095	5Fh	%O	_
1096	60h	%W	‘
1097	61h	+A	a
1098	62h	+B	b
1099	63h	+C	c
1100	64h	+D	d

1101	65h	+E	e
1102	66h	+F	f
1103	67h	+G	g
1104	68h	+H	h
1105	69h	+I	i
1106	6Ah	+J	j
1107	6Bh	+K	k
1108	6Ch	+L	l
1109	6Dh	+M	m
1110	6Eh	+N	n
1111	6Fh	+O	o
1112	70h	+P	p
1113	71h	+Q	q
1114	72h	+R	r
1115	73h	+S	s
1116	74h	+T	t
1117	75h	+U	u
1118	76h	+V	v
1119	77h	+W	w
1120	78h	+X	x
1121	79h	+Y	y
1122	7Ah	+Z	z
1123	7Bh	%P	{
1124	7Ch	%Q	|
1125	7Dh	%R	}
1126	7Eh	%S	~
1127	7Fh		Undefined