Firmware Version:

Firmware version will be displayed by scanning "$SW#VER".

$SW#VER

Factory Defaults

Scanning the following barcode can restore the engine to the factory defaults

%#IFSNO$B

Barcode Programming:

Netum barcode scanners are factory programmed for the most common terminal and communications settings. If you need to change these settings, programming is accomplished by scanning the bar codes in this guide. An asterisk (*) next to an option indicates the default setting.

Important Notes :

Some command barcodes only work in a particular connection mode.

Pay attention to below symbols when you scanning command barcodes.

※ Command barcodes only apply to scanner work via Bluetooth.

📶 Command bacodes only apply to scanner work via 2.4G Wireless.

Connection Way

Scanner transmits data to your device via bluetooth or 2.4G Wireless. You can choose either way to start scanning.

📶 **How to transmit data via 2.4G Wireless Channel ?**

Get Started:

(1) Plug the USB dongle into your device.

(2)Power On the scanner

(3)Setup keyboard language: US keyboard was set by default. If you use other type of keyboard please refer to Keyboard language.

%#IFSN0$1
*Wireless Transmit

4)If you want to change bluetooth transmit to wireless transmit, you will have to scan "Wireless transmit" then follow step (1) and (2) to complete the configurations.

🛜 USB HID-KBW

When the dock connects with your device via USB cable, USB HID-KBW feature will be enabled by default. Scanner's transmission will be simulated as USB key-board input. It works on a Plug and Play basis and no driver is required.

$USB#KEY
*USB HID-KBW

🛜 USB COM Port Emulation

When the dock connects with your device via USB cable, by scanning "USB COM Port Emulation" will allow your device to receive data in the way as a serial port does.
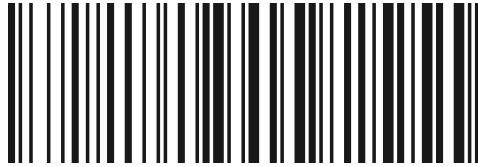
$USB#COM
USB COM Port Emulation

Note: A driver is required for this feature.

✳ How to transmit data via bluetooth ?

Get Started:

(1)Power on scanner.

(2)Scan "Bluetooth Transmit".

```
||||| |||| ||| |||| ||||| |||| |||
```

%#IFSNO$4
Bluetooth Transmit

(3) Make sure the device is in range with Bluetooth turned on.

(4) Pressing the scan button will initiate the attempts to connect.

(5) If a connection is made, the blue light will stop blinking and turn solid.

(6) If a connection is not made after several attempts, the scanner will emit a long beep (and the blue light will turn off).

(7) Bluetooth working channel is not set by default.If you want to connect via bluetooth, you will have to scan "Bluetooth Transmit" before pairing.
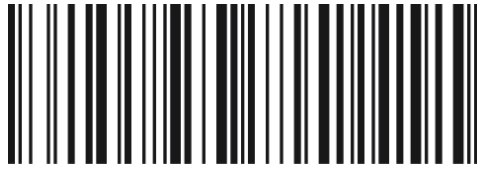
✳ Basic Mode (HID) (default)

• NO software installation needed

• Connects to most devices

• Scanner interacts with host device like a keyboard

```
||||| |||| ||| |||| ||||| |||| |||
```

AT+MODE=2

✳ Application Mode (Apple Specific Serial Profile)

• For iOS Devices

• If you have an iOS application that supports our Scanners this is the mode to use

AT+MODE=3

✳ Applicatin Mode (Serial Port Profile)

- For Android or Windows
- Software installation is required
- If you have an application that supports this is the mode recommended

AT+MODE=1

Important Notes:

Remove the pairing information both from devices-host PC/phone and the scanner when you change the data transmit mode.

✳ Bluetooth Transmit Speed

By scanning the appropriate barcode below will change the bluetooth transmit speed.

AT+HIDDLY=4
High Speed

AT+HIDDLY=10
*Medium Speed

||||||||||||||||||||||||||||||

AT+HIDDLY=25
Low Speed

Keyboard Language

For example If you use French Keyboard, scan command barcode of "French keyboard". If you use a US keyboard you can ignore this step.

||||||||||||||||||||||||||||||

$LAN#EN
*America EN keyboard

||||||||||||||||||||||||||||||

$LAN#FR
French keyboard

||||||||||||||||||||||||||||||

$LAN#GE
Germany keyboard

||||||||||||||||||||||||||||||

$LAN#IT
Italy keyboard

||||||||||||||||||||||||||||||

$LAN#PT
Portugal keyboard

||||||||||||||||||||||||||||||

$LAN#ES
Spain keyboard
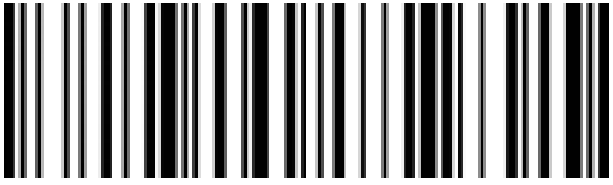
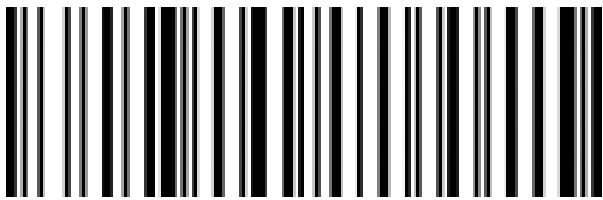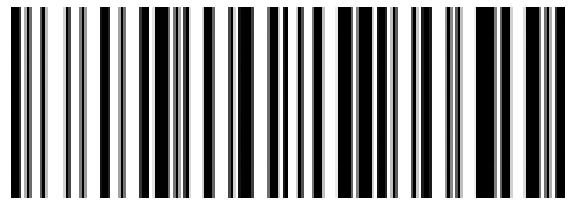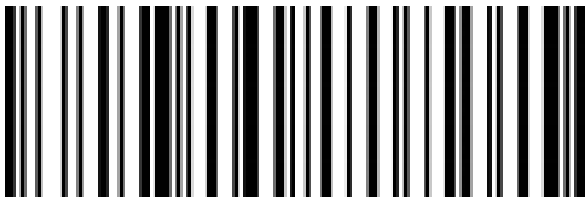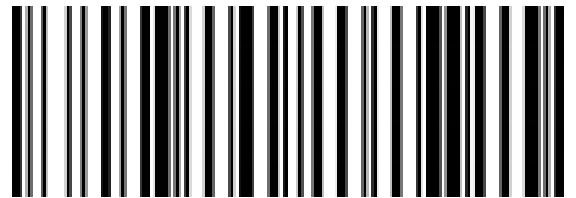Czech standard keyboard
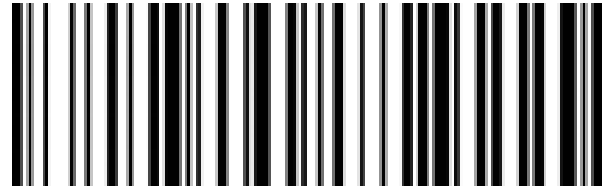
Czech Republickeyboard

Belgian French keyboard
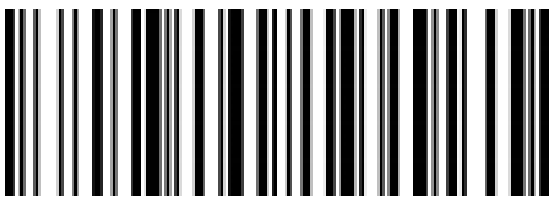

Brazil(Portuguese)keyboard

Canada (French)keyboard

Croatian keyboard

Slovak keyboard
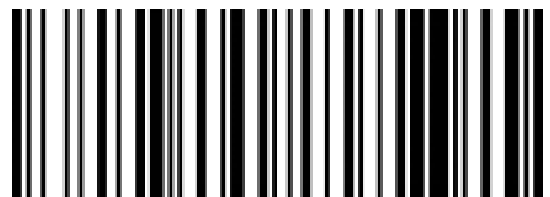
Latin America (Spanish) keyboard
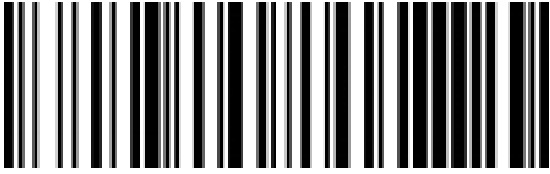
Dutch keyboard
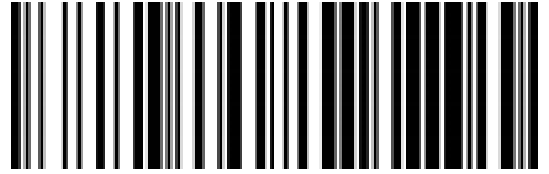
Polish keyboard
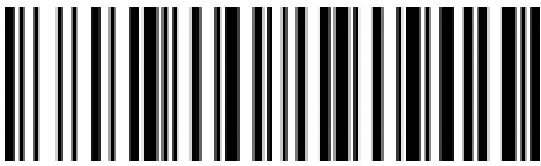
Serbia (Latin) keyboard
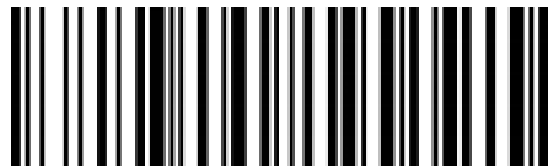
Swedish keyboard
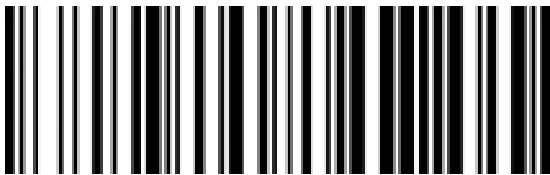
Japanese keyboard
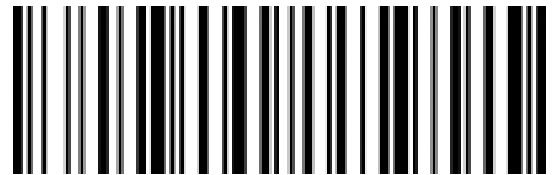
Switzerland (German) keyboard
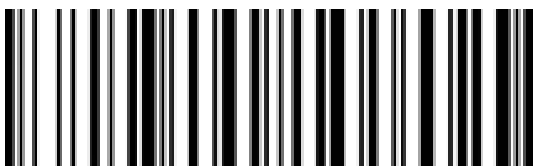
Thai keyboard

$LAN#RU

Russian keyboard

||||| ||| || ||||| ||| ||| |||||

$LAN#UK
UK keyboard

||||| ||| || ||||| ||| ||| |||||

$LAN#HU
Hungary keyboard

||||| ||| || ||||| ||| ||| |||||

$LAN#TK
Turkey Q keyboard

||||| ||| || ||||| ||| ||| |||||

$LAN#TF
Turkey F keyboard

Working Mode

If you are heading for a working area which lies outside the Bluetooth signal range, you may activate scanner's store mode, following steps described below. Under this mode, all scanned data will be stored directly into the buffer memory of the device. Furthermore, data entries will be permanently saved in the buffer memory prior to the manual upload into the working station, so that you may upload them when you are near your working device.

||||| ||| || ||||| ||| ||| |||||

*Normal Mode

||||| ||| || ||||| ||| ||| |||||

Store Mode

||||||||||||||||||||||||||

Output Stored Data

||||||||||||||||||||||||||

Output Total Entry

||||||||||||||||||||||||||

Clear Memory

Idle Time

Time period set for scanner from idle to sleep. Default Idle Time: 3mins.

||||||||||||||||||||||||||

$POWER#OFF
Power Off

||||||||||||||||||||||||||

$RF#ST00
0 Min

||||||||||||||||||||||||||

$RF#ST20
10Mins

||||||||||||||||||||||||||

$RF#ST60
30Mins

Beep Volume

By scanning the appropriate barcode below will change the beep volume.

$BUZZ#1
*High Volume

$BUZZ#3
Low Volume

$BUZZ#0
Mute

Type Beep Meaning

Prompt tone
1 beep 2 tones: Store mode scan data, Power off sound.
1 beep 3 tones: Power on sound, setting success, Upload finish prompt

1 Short beep
One short sound: barcode scan prompt.
Continue beeps: RF pairing until dongle insert.

Warning tone
Two beeps
Battery low volume warning.

Three beeps
Save barcode error at store mode.
Transmit failed beeps.

Five beeps: Power on failed when battery low.

Convert Case

You may scan the appropriate barcode below to convert all barcode data to your desired case.

* Disable Convert Case

Up Low Case Swap (A<->a)

All Upper Case (a->A)

All Lower Case (A->a)

Emulate Numeric Keypad

Do Not Emulate Numeric Keypad :
Sending a number (0-9) is emulated as keystroke(s) on main keyboard.

Emulate Numeric Keypad : Sending a number (0-9) is emulated as keystroke(s) on numeric keypad. The state of Num Lock on the simulated numeric keypad is determined by its equivalent on the host device. If Num Lock on the host device is turned off, the output of simulated numeric keypad is function key instead of number.

Do Not Emulate Numeric Keypad

IOS Keyboard POP UP/HIDE

During the scanning IOS keyboard can be popped up by double clicking the scanning button.

If not, please scan below command barcode , then double click the scanning button.

||| | ||| ||| ||| | || | ||| || | |||
%%OHH

Enable/Disable Popup IOS keyboard by double triggers.

Prefix/Suffix/Hide Set

At most 10 prefixes and/or 10 suffixes can be appended to scan data for use in data editing. To set these values, scan a double-digit hexadecimal number (i.e. two bar codes) that corresponds to ASCII values. See the *Table 1* or *Table 2* and *Numeric Bar Codes* in appendix. Detail Steps reference Appendix,To add a Prefix or Suffix.

The start/middle/end of barcode chars can be set to hide. After scan below hide set barcode, scan a double-digit hexadecimal number that you want to hide char length(00~FF e.g. hide length 4, scan 0, 4). Detail Steps reference To Hide chars of barcode Start/Middle/End.

Operation Code

$SCAN#2

Add Prefix

$SCAN#1

Add Suffix

$SCAN#4

Clear All Prefix

$SCAN#3

Clear All Suffix

$SCAN#5

Hide Barcode Start Chars

$SCAN#6

Hide Barcode Middle Char Start

$SCAN#7

Hide Barcode Middle Chars

$SCAN#8

Hide Barcode End Chars

Numeric Bar Codes 数据设置码

For parameters requiring specific numeric values, scan the appropriately numbered bar code(s).

$NO#0

$NO#1

$NO#2

$NO#3

$NO#4

$NO#5

$NO#6

$NO#7

$NO#8

$NO#9

$NO#A

$NO#B

$NO#C

$NO#D

$NO#E

$NO#F

Output Format

To change the Scan Data Transmission Format, scan one of the eight bar codes corresponding to the desired format.

‖‖ ‖‖ ‖‖‖ ‖ ‖ ‖ ‖‖ ‖ ‖‖‖ ‖ ‖‖
$DATA#0

*   Default output format

‖‖ ‖‖ ‖‖‖ ‖ ‖ ‖‖ ‖‖‖ ‖‖‖ ‖‖
$DATA#1

Enable Suffix output

‖‖ ‖‖ ‖‖‖ ‖ ‖ ‖‖ ‖ ‖‖ ‖‖‖ ‖‖
$DATA#2

Enable Prefix output

‖‖ ‖‖ ‖‖‖ ‖ ‖ ‖‖ ‖‖ ‖ ‖ ‖‖
$DATA#5

Enable Hide Barcode Start Char

‖‖ ‖‖ ‖‖‖ ‖ ‖ ‖ ‖ ‖ ‖‖‖ ‖‖
$DATA#4

Enable Hide Barcode Middle Char

‖‖ ‖‖ ‖‖‖ ‖ ‖ ‖‖ ‖ ‖‖ ‖ ‖‖
$DATA#3

Enable Hide Barcode End Char

Appendix A1

Table 1. ASCII Function Key table

HEX	CODE	*Ctrl OFF Config1	Ctrl OFF Config2	Ctrl ON Keyboard Windows	ALT-Keyboard Windows	HEX	CODE	*Ctrl OFF Config1/2	Ctrl ON Keyboard Windows	ALT-Keyboard Windows
00H	NUL	NUL	NUL	Ctrl+@	ALT+000	10H	DLE	NUL	Ctrl+P	ALT+016
01H	SOH	NUL	NUL	Ctrl+A	ALT+001	11H	DC1	NUL	Ctrl+Q	ALT+017
02H	STX	NUL	NUL	Ctrl+B	ALT+002	12H	DC2	NUL	Ctrl+R	ALT+018
03H	ETX	NUL	NUL	Ctrl+C	ALT+003	13H	DC3	NUL	Ctrl+S	ALT+019
04H	EOT	NUL	NUL	Ctrl+D	ALT+004	14H	DC4	NUL	Ctrl+T	ALT+020
05H	ENQ	NUL	NUL	Ctrl+E	ALT+005	15H	NAK	NUL	Ctrl+U	ALT+021
06H	ACK	NUL	NUL	Ctrl+F	ALT+006	16H	SYN	NUL	Ctrl+V	ALT+022
07H	BEL	NUL	NUL	Ctrl+G	ALT+007	17H	ETB	NUL	Ctrl+W	ALT+023
08H	BS	Backspace	Backspace	Ctrl+H	ALT+008	18H	CAN	NUL	Ctrl+X	ALT+024
09H	HT	TAB	TAB	TAB	ALT+009	19H	EM	NUL	Ctrl+Y	ALT+025
0AH	LF	NUL	Enter	Ctrl+J	ALT+010	1AH	SUB	NUL	Ctrl+Z	ALT+026
0BH	VT	TAB	TAB	Ctrl+K	ALT+011	1BH	ESC	ESC	Ctrl+[	ALT+027
0CH	FF	NUL	NUL	Ctrl+L	ALT+012	1CH	FS	NUL	Ctrl+\	ALT+028
0DH	CR	Enter	Enter	Enter	Enter	1DH	GS	NUL	Ctrl+]	ALT+029
0EH	SO	NUL	NUL	Ctrl+N	ALT+014	1EH	RS	NUL	Ctrl+^	ALT+030
0FH	SI	NUL	NUL	Ctrl+O	ALT+015	1FH	US	NUL	Ctrl+-	ALT+031

*Note: Ctrl key replaced by Command key in MAC system.

Table 2. ASCII Chars table

HEX	ASCII	HEX	ASCII	HEX	ASCII	HEX	ASCII	HEX	ASCII	HEX	ASCII	HEX	Fun Key	HEX	Fun Key
20H	Space	30H	0	40H	@	50H	P	60H	`	70H	p	80H	F1	90H	End
21H	!	31H	1	41H	A	51H	Q	61H	a	71H	q	81H	F2	91H	Page Down
22H	"	32H	2	42H	B	52H	R	62H	b	72H	r	82H	F3	92H	Right Arrow
23H	#	33H	3	43H	C	53H	S	63H	c	73H	s	83H	F4	93H	Left Arrow
24H	$	34H	4	44H	D	54H	T	64H	d	74H	t	84H	F5	94H	Down Arrow
25H	%	35H	5	45H	E	55H	U	65H	e	75H	u	85H	F6	95H	Up Arrow
26H	&	36H	6	46H	F	56H	V	66H	f	76H	v	86H	F7	96H	Print Screen
27H	'	37H	7	47H	G	57H	W	67H	g	77H	w	87H	F8	97H	*Ctrl
28H	(	38H	8	48H	H	58H	X	68H	h	78H	x	88H	F9	98H	*Shift
29H	)	39H	9	49H	I	59H	Y	69H	i	79H	y	89H	F10	99H	*Left Alt
2AH	*	3AH	:	4AH	J	5AH	Z	6AH	j	7AH	z	8AH	F11	9AH	*Right Alt
2BH	+	3BH	;	4BH	K	5BH	[	6BH	k	7BH	{	8BH	F12	9BH	1s Delay
2CH	,	3CH	<	4CH	L	5CH	\	6CH	l	7CH	|	8CH	Insert	9CH	*Win-GUI
2DH	-	3DH	=	4DH	M	5DH	]	6DH	m	7DH	}	8DH	Home		
2EH	.	3EH	>	4EH	N	5EH	^	6EH	n	7EH	~	8EH	Page Up		
2FH	/	3FH	?	4FH	O	5FH	_	6FH	o	7FH	DEL	8FH	Delete		

*Note: 1. When set Ctrl,Shift,Alt,GUI as prefix or suffix, it will combine with the next char as combination key

Function Key Mapping

When Function Key Mapping is enabled, function characters are sent over the keypad.

$KEY#MO
*Disable Function Key Mapping

$KEY#M1
Enable Function Key Mapping

FAQ

1. Some barcodes cannot be read, why ?

a. Dirty or unclear barcodes might not be read.

b. The possible reason is that setting for some barcode types not commonly used is off by default. You need to activate a specific barcode type to get it to work. Please contact us for help.

2. How to change terminator to TAB ?

Please refer to the section of "Terminator configuration" from the manual downloaded from our official website.

3. Are there any barcodes for applying or removing prefix & suffix ?

Yes, you may go to our official website" www.netum.net" to download the manual ,refer to the section of" prefix and suffix" or turn to customer service for help.

4. How to solve the messy code problem encountered while using other foreign languages?

The default language is English. Please refer to "Keyboard Language" to change the language.

5. Why scanner can not read Italy Pharmacy code?

Download the manual from our official website according to the scanner model number, refer to the section of Code 32 then scan "Enable Code32" to enable the scanner to read Italy pharmacy code.

6. Why scanner can not read add-on 2 or 5 codes?

Download the manual from our official website according to the scanner model nunber, refer to the section of ADD-On code and scan the appropriate command barcode to enable the scanner read it.

7. Why scanner can not read datamatrix GS1 in a correct format ?

Scan "Enable Funtion Key Mapping" from this manual will enable scanner to output group separator.

Note:

Please do not hesitate to contact us if you need any other configurations.

Contact Information

Email: support@netum.net
Website: www.netum.net
Addr.:Room 301, 6th Floor and full 3rd Floor, Building 1, No. 51 Xiangshan Avenue ,Ningxi Street, Zengcheng District, Guangzhou City, Guangdong Province, China Made in China

EU Name： Apex CE Specialists GmbH
Add: Habichtweg 1 41468 Neuss Germany
UK Name： APEX CE SPECIALISTS LIMITED
Add: 89 Princess Street,Manchester,M1 4HT,UK

Made in China