C990 Manual

Firmware Version:

Read below command barcode to check scanner firmware version.

$SW#VER

Below programming barcodes are applied for version not lower than B009NT_RFBTWCDE9220_W

Factory Restore:

Important note: it only restores configurations done from this setup manual.

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.

⚠ Many of the command barcodes only work with a scanner in a particular Bluetooth or 2.4G mode as indicated by the header row of each table

Connection Way:

Working via USB Cable

Get Started: Connect scanner with your device via USB cable. If you use US keyboard, it's plug and play. If you use other type of keyboard , please refer to "keyboard language" to configure the keyboard language before you use it.

Working via 2.4G receiver

Get Started: Plug the USB receiver on your computer. If you use US keyboard, it's plug and play. If you use other type of keyboard , please refer to "keyboard language" to configure the keyboard language before use it.

%#IFSNO$1

*RF 2.4G Transmit

Working via Bluetooth

Get Started: Please refer to the "bluetooth pairing". Once you've paired the bluetooth, locate the cursor on the place where you want to upload the codes than you can start to work.US Keyboard by default if you use other types of keyboard please configure keyboard language before you use it.

%#IFSNO$4

Working via Bluetooth

Command barcodes apply for all working mode.

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

$LAN#TK

Turkey Q keyboard

$LAN#TF

Turkey F keyboard

$LAN#UK

UK keyboard

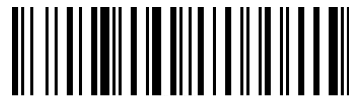$LAN#CS

Czech keyboard

$LAN#HU

Hungary keyboard
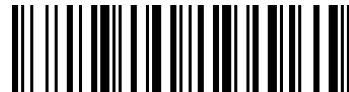
$LAN#FB

Belgium FR keyboard

$LAN#PB

Brazil PT keyboard

$LAN#FC

Canadian FR keyboard

$LAN#HR

Croatia keyboard

$LAN#SK

Slovak keyboard

$LAN#DA

Denmark keyboard
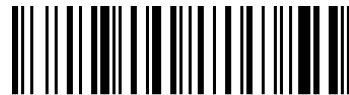
$LAN#FI

Finland keyboard

```
$LAN#EL
```

Latin-America ES keyboard

```
$LAN#NL
```

Netherland keyboard

```
$LAN#NO
```

Norway keyboard

```
$LAN#PL
```

Poland keyboard

```
$LAN#SR
```

Serbia keyboard

```
$LAN#SL
```

Slovenia keyboard

```
$LAN#SV
```

Sweden keyboard

```
$LAN#DS
```

Swiss DE 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, the 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

Get Battery Volume

Scan below command barcode to get battery rough volume

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

%BAT_VOL#

Battery Rough Volume

Idle time

Scanner will turn to sleep after idle/inactive for 1min

Scan "Disable module Idle time" before you doing any other setup from this section.

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

%#IFSNO$:

Disable Module idle time

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

$POWER#OFF

Power Off

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

$RF#ST00

Disable Sleep Mode

||||||||||||||||||||||
$RF#ST01

30S

||||||||||||||||||||||
$RF#ST06

3Mins

||||||||||||||||||||||
$RF#ST20

10Mins

||||||||||||||||||||||
$RF#ST60

30Mins

Convert Case

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

* Disable Convert Case

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

Up Low Case Swap (A<->a)

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

All Upper Case (a->A)

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

All Lower Case (A->a)

Bluetooth Connection Mode

Basic Mode (HID) (default)

Configures the scanner to Human Interface Device (HID) mode. The scanner will be discoverable as a Keyboard to other Bluetooth devices.

```
||| || || |||| ||| || || |||
```
AT+MODE=2

BLE for for Apple Devices (a software was required to work under this mode)

```
||| || || |||| ||| || || |||
```
AT+MODE=3

SPP Mode for for Windows or Android (a software was required to work under this mode)

```
||| || || |||| ||| || || |||
```
AT+MODE=1

Important Note:

If you want to shift from HID to SPP or BLE just scan the Corresponding command barcode.
If you want to shift from SPP or BLE to HID mode, please ignore (or delete) "Netum Bluetooth"→
turn off bluetooth→ scan command barcode of HID→ Open the bluetooth → repair it.

Bluetooth keyboard Upload Speed

```
||| || ||| |||| ||| ||| |||
```
AT+HIDDLY=4

High Speed

```
||| || ||| |||| ||| ||| |||
```
AT+HIDDLY=10

Medium Speed

```
||| || ||| |||| ||| ||| |||
```
AT+HIDDLY=25

Low Speed

Wired Connection Mode

USB Keyboard and Virtual COM Set

```
%#IFSNO$2
```

*USB Cable as Keyboard

```
%#IFSNO$3
```

USB Cable as Virtual COM

Note: Wire and Wireless connect way selected automatically, the Wire way has high priority.

Hide Prefix or suffix digits

The start/middle/end of barcode chars can be hidden. 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).

```
$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

Output Format

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

```
||| || |||| | ||| || ||| ||| ||||| ||| |||
```
$DATA#5

Enable Hide Barcode Start Char

```
||| || |||| | ||| || ||| ||| || ||||| |||
```
$DATA#4

Enable Hide Barcode Middle Char

```
||| || |||| | ||| || ||| || ||||| |||
```
$DATA#3

Enable Hide Barcode End Char

To Hide chars of barcode Start/Middle/End:

Procedures

1. Scan the Hide Barcode Start / Middle Start / Middle length / End Chars symbol.

2. Determine the hex value for the length you wish to enter(hide 4 chars, scan 0,4;   hide 12 chars, scan 0,C).

3. Scan the 2 digit hex value from the **Numeric Bar Codes**

4. Scan the output format to enable or cancel hide char function.

Custom prefix and suffix

Maximum 20 prefixes and 20 suffixes can be added 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* and *Numeric Bar Codes* in appendix.

To Add a Prefix or Suffix:

1. Scan command barcode of " Add Prefix" or" Add Suffix ".

2. Check the prefix or suffix hex value from the ASCII Chart.

3. Scan the 2 digit hex value from   the Numeric Bar Codes

4. Repeat Steps 2 and 3 for all the prefix or suffix that you want to add.

5. Scan the output format to enable or disable prefix/suffix output.

$SCAN#2

Add Prefix

$SCAN#1

Add Suffix

$SCAN#4

Clear All Prefix

$SCAN#3

Clear All Suffix

Numeric Bar Codes

$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

Example on how to add normal prefix or suffix   on barcode   "123456789"

|||||| || || ||| | || ||||| ||| ||
123456789

Add   " A" and "B" as prefixes and "!" as suffix

1.   Scan command barcode of " Add Prefix"

||| || ||| | ||| | ||| | ||| | ||| ||| |||
$SCAN#2

2.   Check the prefix   hex value from the ASCII Chart.   **A- "4","1"; B-"4" "2";**

3. Scan the 2 digit hex value from   the Numeric Bar Codes

||| || ||| || ||||| | ||| ||| | || |||
$NO#4

||| || ||| || ||||| | ||| ||| ||| |||
$NO#1

||| || ||| || ||||| | ||| | || |||
$NO#4

||| || ||| || ||||| | ||| | ||| || |||
$NO#2

4. Scan the output format to enable prefix   output.

```
$DATA#2
```
Enable Prefix output

5. Scan command barcode of " Add Suffix" to add "!" as suffix.

```
$SCAN#1
```
Add Suffix

6.   Check the suffix hex value from the ASCII Chart. **!- "2" "1"**

7. Scan the 2 digit hex value from   the Numeric Bar Codes.

```
$NO#2
```

```
$NO#1
```

8. Scan the output format to enable suffix output.

```
$DATA#1
```
Enable Suffix output

9. Scan the barcode then you will get **AB123456789!**

Example on how to add Combination Key   suffix   for barcode   "123456789"

123456789

Add "Ctrl+P" on "123456789" as suffix

1.Scan command barcode of " Add Suffix" to add "Ctrl+P" as suffix.

$SCAN#1

Add Suffix

2. Check the suffix hex value from the ASCII Chart.   **Ctrl+P - "9" "7" "5" "0"**

3. Scan the 4   digits hex value from   the Numeric Bar Codes.

$NO#9

$NO#7

$NO#5

$NO#0

4. Scan the output format to enable suffix output.

$DATA#1

Enable Suffix output

5. Scan the barcode **123456789. (test it on Excel)**

Table 1. ASCII Character Equivalents

HEX	ASCII	HEX	ASCII	HEX	ASCII	HEX	ASCII
20H	Space	30H	0	40H	@	50H	P
21H	!	31H	1	41H	A	51H	Q
22H	"	32H	2	42H	B	52H	R
23H	#	33H	3	43H	C	53H	S
24H	$	34H	4	44H	D	54H	T
25H	%	35H	5	45H	E	55H	U
26H	&	36H	6	46H	F	56H	V
27H	'	37H	7	47H	G	57H	W
28H	(	38H	8	48H	H	58H	X
29H	)	39H	9	49H	I	59H	Y
2AH	*	3AH	:	4AH	J	5AH	Z
2BH	+	3BH	;	4BH	K	5BH	[
2CH	,	3CH	<	4CH	L	5CH	\
2DH	-	3DH	=	4DH	M	5DH	]
2EH	.	3EH	>	4EH	N	5EH	^
2FH	/	3FH	?	4FH	O	5FH	_
60H	`	70H	p	80H	F1	90H	End
61H	a	71H	q	81H	F2	91H	Page Down
62H	b	72H	r	82H	F3	92H	Right Arrow
63H	c	73H	s	83H	F4	93H	Left Arrow
64H	d	74H	t	84H	F5	94H	Down Arrow
65H	e	75H	u	85H	F6	95H	Up Arrow

66H	f	76H	v	86H	F7	96H	Print Screen
67H	g	77H	w	87H	F8	97H	*Ctrl
68H	h	78H	x	88H	F9	98H	*Shirt
69H	i	79H	y	89H	F10	99H	*Left Alt
6AH	J	7AH	z	8AH	F11	9AH	*Right Alt
6BH	k	7BH	{	8BH	F12	08H	BS
6CH	l	7CH	|	8CH	Insert	09H	HT
6DH	m	7DH	}	8DH	Home	0AH	LF
6EH	n	7EH	~	8EH	Page Up	0DH	CR
6FH	o	7FH	DEL	8FH	Delete	1BH	ESC

Contact Information