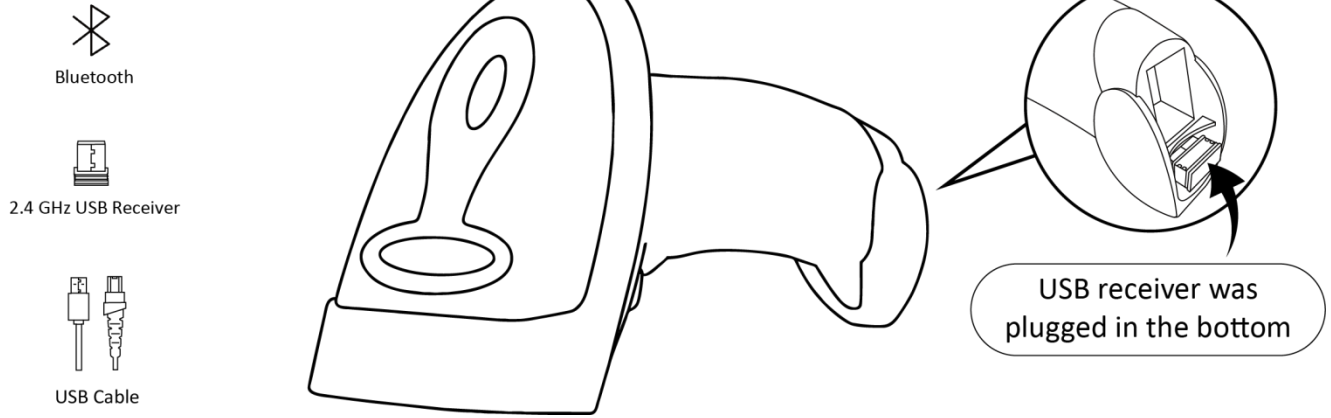


Contents

Firmware Version.....	3
Barcode Programming.....	3
Connection Modes:.....	3
Wired Connection.....	3
RF Wireless Connection.....	4
Bluetooth Connection.....	4
Keyboard Language.....	6
Scan Mode.....	8
Trigger Mode (Default).....	8
Continuous Mode.....	8
Auto Sense Mode.....	9
Data Uploading Mode.....	9
Quit Offline Mode.....	9
Offline Mode.....	9
Output Stored Data.....	9
Output Total Entry.....	10
Clear Memory.....	10
Get Battery Volume.....	10
Idle time.....	10
Convert Case.....	11
IOS System Popup Keyboard function.....	11
Beeper.....	12
Terminator.....	12
Idle Time.....	13
Restore factory default.....	13
Transmit Code ID Character.....	14
Common barcode Function.....	15
Enable/Disable EAN-8.....	15
Enable/Disable EAN-13.....	15
Enable/Disable Convert EAN-13 to ISBN.....	17
Enable/Disable Convert EAN-13 to ISSN.....	17
Enable/Disable Codabar.....	18
Enable/Disable Code 11.....	18
Enable/Disable Code 39.....	19
Enable/Disable Code 39 Full ASCII.....	19
Enable/Disable Code 93.....	19
Enable/Disable Code 128.....	20
Enable/Disable Code 32.....	20
Enable/Disable GS1 DataBar Limited (RSS Limited).....	20
GS1 DataBar Ominidirectional (RSS Ominidirectional).....	21
Enable/Disable UPC-A.....	21
Enable/Disable Convert UPC-A to EAN-13.....	22
Enable/Disable UPC-E.....	22
Enable/Disable Convert UPC-E to UPC-A.....	23
Enable/Disable Interleaved 2 of 5.....	23
Enable/Disable Industrial 2 of 5.....	24
Enable/Disable Standard 2 of 5.....	24
Enable/Disable Matrix 2 of 5.....	25
Enable/Diable MSI.....	25
Enable /Disable Plessey.....	25
Hide Prefix or suffix digits.....	26
To Hide chars of barcode Start/Middle/End:.....	27
Custom prefix and suffix.....	27
Numeric Bar Codes.....	27
Output Format.....	29

Table 1. ASCII Character Equivalents.....	32
Table 2. Code ID.....	33
Support.....	34

SCANNER SETUP GUIDE



Firmware Version

Read below command barcode to check scanner firmware version.



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: Many of the command barcodes only work with a scanner in a particular connection modes. Bluetooth or 2.4Ghz wireless mode as indicated by the header row of each table.

Connection Modes:

Wired Connection

USB HID-KBW

By default, the scanner is in HID mode as a Keyboard device. It works on a Plug and Play basis and no driver is required

USB COM Port Emulation

If you connect the scanner to the Host via a USB connection, the USB COM Port Emulation feature allows the host to receive data in the way as a serial port does.



USB Cable as Virtual COM

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

RF Wireless Connection.

*RF DONGLE HID-KBW

By default, the scanner is in HID mode as a Keyboard device. It works on a Plug and Play basis and no driver is required



*RF Dongle as Keyboard(HID)

RF DONGLE AS VIRTUAL COM

If you plug the RF Dongle to the host, the USB COM Port Emulation feature allows the host to receive data in the way as a serial port does.



RF Dongle as Virtual COM

Bluetooth Connection

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.



*Basic Mode(HID)

Basic Mode Features:

- NO software installation required
- Connects to most devices
- Scanner interacts with host device like a keyboard

How to pair bluetooth under Basic Mode (HID) ?

Android: Connect Android Device in Basic Mode (HID)

1. Power on the scanner. The LED light will be flashing.
2. Touch Home | Menu | Settings | Wireless & Networks | Bluetooth settings
3. Make sure the device has Bluetooth "On".
4. In the list of found devices, select "Netum Bluetooth". Tap Pair.
5. The scanner will make one long beep after bluetooth paired and LED light will turn to solid blue (no blinking).

Apple: Connect Apple iOS Device (HID)

1. Power on the scanner. Blue LED light will start to flash.
2. Start a Bluetooth device search.
IOS: Tap Settings | General | Bluetooth. Turn on. A Bluetooth device search will begin.
3. In the device list, tap on "Netum Bluetooth". Tap Pair.

4. The scanner will make one beep once it's connected and LED light will turn to solid blue (no blinking) and is ready to scan.

Windows: Connect Windows PC(HID)

1. Power on the scanner. Make sure the scanner is discoverable (unpaired).
2. Use your computer's Bluetooth Settings to connect to the scanner.
3. Open Devices and Printers and select "Add a device".
4. In the device list, select "Netum Bluetooth". Click Next.
5. Follow the remaining screens to complete the wizard.
6. The scanner will make one beep once it's connected and LED light will turn to solid blue (no blinking) and is ready to scan.

Bluetooth keyboard Upload Speed



AT+HIDDLY=4

High Speed



AT+HIDDLY=10

Medium Speed



AT+HIDDLY=25

Low Speed

Important Note:

Default Idle Time: Scanner will power off automatically if device is not connected within 1min.

Un-Pair Bluetooth :

Below two steps to unpair the bluetooth from previous device completely.

1. Scan Un-pair Bluetooth HID , Scanner disconnected from current device and waits for other device to be paired.
2. Remove or Ignore "Netum Bluetooth" from your previous device.



Un-Pair Bluetooth

BLE Mode

For Apple Devices (a software /APP was required to work under this mode)



AT+MODE=3

BLE Mode

SPP Mode

For Windows or Android (a software was required to work under this mode)



AT+MODE=1

SPP Mode

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.

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



SLAN#NL

Netherland keyboard



SLAN#NO

Norway keyboard



SLAN#PL

Poland keyboard



SLAN#SR

Serbia keyboard



SLAN#SL

Slovenia keyboard



SLAN#SV

Sweden keyboard



SLAN#DS

Swiss DE keyboard

Scan Mode

Trigger Mode (Default)

Scanning this bar code will enable the scanner to enter manual trigger mode.



013300

Trigger Mode

Continuous Mode

This mode enables the engine to scan/capture, decode and transmit over and over again.

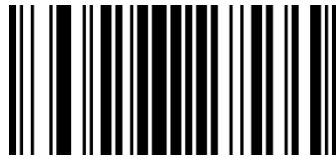


013304

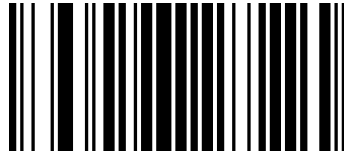
Continuous Mode

Auto Sense Mode

Scanning this bar code will enable the scanner to enter auto sense mode.



02311
Auto Sense On



02310
Auto Sense Off

Data Uploading 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.

Quit Offline Mode

By scanning the following barcode, the device leaves the offline mode, normal mode will be reinitialised.



*Quit Offline Mode

Offline Mode

By scanning the following barcode, the offline mode will be activated



Offline Mode

Output Stored Data

By scanning the following barcode, all data entries in the buffer memory can be manually uploaded after reconnecting to the working station.



Output Stored Data

Output Total Entry

By scanning the following barcode, the gross quantity of the uploaded data entries will be summarised .



Output Total Entry

Clear Memory

By scanning the following barcode, all data in the buffer memory will be deleted.



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.



\$POWER#OFF

Power Off



\$RF#ST00

Disable Sleep Mode



\$RF#ST06

*3Mins



\$RF#ST60

30Mins



\$RF#ST<0

1H



\$RF#STH0

2H

Convert Case



* Disable Convert Case



Up Low Case Swap (A<->a)



All Upper Case (a->A)



All Lower Case (A->a)

IOS System Popup Keyboard function



IOS Popup/Hide Keyboard

Note: Popup IOS keyboard by scanning above command barcode.



%%OH3

Enable/Disable

Note: Scan above command barcode then IOS keyboard will be popped up by holding trigger for 4 seconds.



%%OHH

Enable/Disable

Note: Scan above command barcode then IOS keyboard will be popped up by double clicking trigger.

Note: Two short beeps after scan means disable, one long sound with three tones means enable.

Beeper

Enable/Disable scanner to beep to indicate successful scan.



\$BUZZ#0
BEEP OFF



\$BUZZ#1
*High Volume



\$BUZZ#2
Middle Volume



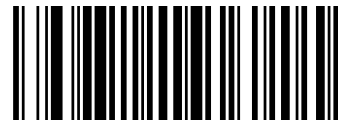
\$BUZZ#3
Low Volume

Terminator

The scanner provides a shortcut for setting the terminating character suffix to CR or CRLF and enabling it by scanning the appropriate barcode below.



0212@\r
CR*



0212@\n
LF*



0213@\r\n
CR+LF



0210@
NONE



0212@

TAB

Idle Time

Scanner will stay awake during the idle time that you configure for it and it will turn to sleep if you haven't used it during the whole idle time.



30 s



6 Mins



12 Mins



30 Mins



1Hour



2Hours

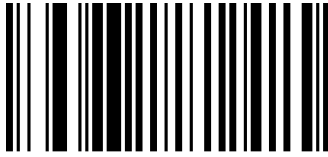
Restore factory default

Scanning the following barcodes one by one to restore the scanner to factory defaults. (Four steps included)

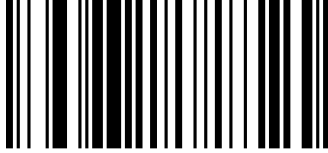
1. Factory Restore



2. Serial Port



3. Baud Rate 19200

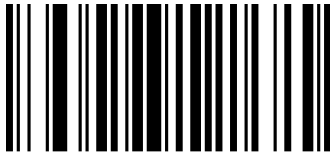


4. Enter+LF

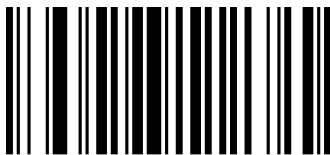


Transmit Code ID Character

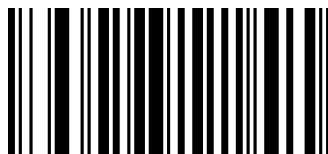
A code ID character identifies the code type of a scanned bar code. This can be useful when decoding more than one code type. The code ID character is inserted between the prefix character (if selected) and the decoded symbol. (Refer to Appendix A)



01400
Disable Code ID*



01401
Enabled Code ID Prefix

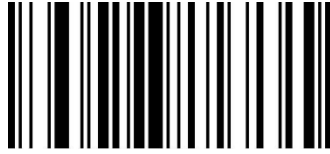


01402
Enabled Code ID Prefix

Common barcode Function

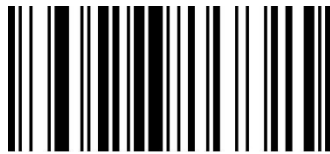
Enable/Disable EAN-8

To enable or disable EAN-8, scan the appropriate bar code below.



00371

Enable EAN-8*



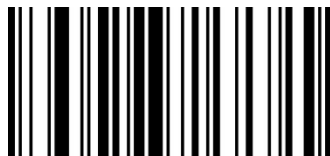
00370

Disable EAN-8



00571

EAN-8 Transit Check Digit*



00570

EAN-8 Do Not Transit Check Digit

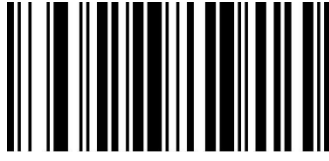
Enable/Disable EAN-13

To enable or disable EAN-13, scan the appropriate bar code below.



00361

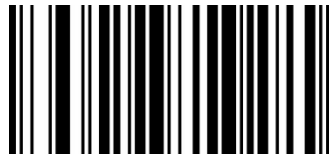
Enable EAN-13*



00360
Disable EAN-13



00461
EAN-13 Transit Check Digit *



00460
EAN-13 Do Not Transit Check Digit

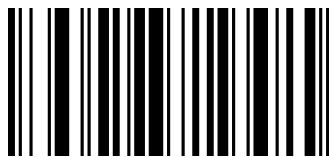
Add-On Code

And EAN-8/EAN-13 Barcode can be augmented with a two-digit or five-digit add-on code form a new one. In the example below, the part surrounded by blue line is an EAN-8 barcode while the part circled by red line is add-on code. “Disable Add-on Code” is configured by default.

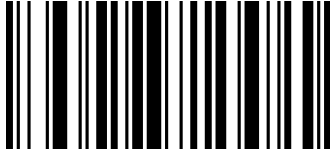


EAN /UPC Add-On 2 or 5

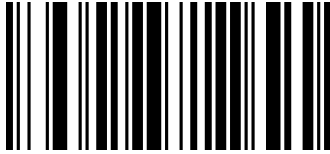
To enable or disable EAN/UPC add on 2 or 5 digits scan the appropriate barcode below.



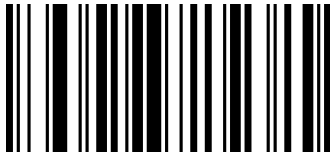
00551
Enable add-on 2 digits



00552
Enable add-on 5 digits



00553
Enable add -on 2 or 5 digits



00550
Disable add-on 2 or 5 digits

Enable/Disable Convert EAN-13 to ISBN

To enable or disable convert EAN-13 to ISBN, scan the appropriate barcode below.



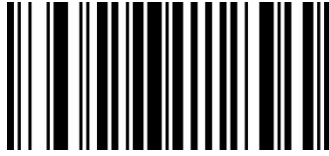
00481
Enable EAN-13 Transfer to ISBN



00480
Disable EAN-13 Transfer to ISBN*

Enable/Disable Convert EAN-13 to ISSN

To enable or disable convert EAN-13 to ISSN, scan the appropriate barcode below.



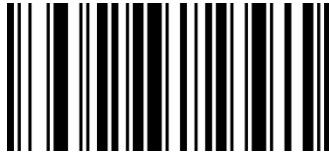
01501
Enable EAN-13 Transfer to ISSN



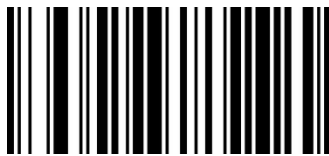
01500
Disable EAN-13 Transfer to ISSN*

Enable/Disable Codabar

To enable or disable codabar, scan the appropriate barcode below.



00851
EnableCodabar*



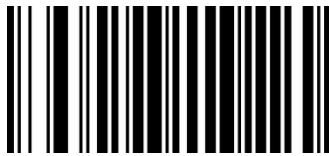
00850
DisableCodabar

Enable/Disable Code 11

To enable or disable Code 11, scan the appropriate bar code below.



01261
Enable Code 11*



01260
Disable Code 11

Enable/Disable Code 39

To enable or disable Code 39, scan the appropriate bar code below.



00221
Enable Code 39*



00220
Disable Code 39

Enable/Disable Code 39 Full ASCII

Code 39 Full ASCII is a variant of Code 39 which pairs characters to encode the full ASCII character set.



00231
Enable Full ASCII*



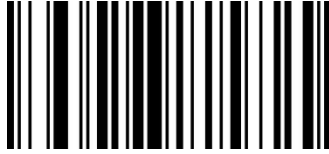
00230
Disable Full ASCII

Enable/Disable Code 93

To enable or disable Code 93, scan the appropriate bar code below.



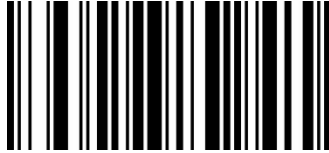
00621
Enable Code 93*



00620
Disable Code 93

Enable/Disable Code 128

To enable or disable Code 93, scan the appropriate bar code below.



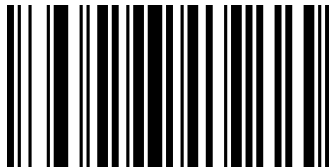
00691
Enable Code 128*



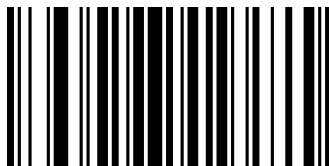
00690
Disable Code 128

Enable/Disable Code 32

To enable or disable Code 93, scan the appropriate bar code below.



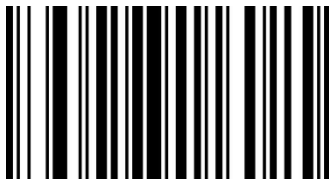
01950
Disable Code 32*



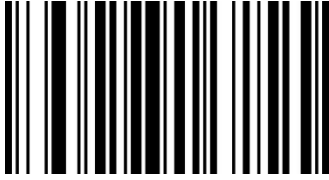
01951
Enable Code 32

Enable/Disable GS1 DataBar Limited (RSS Limited)

To enable or disable GS1 DataBar Limited, scan the appropriate bar code below.



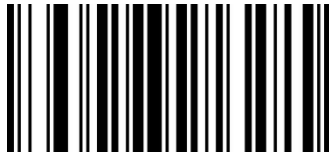
01771
Enable RSS Limited



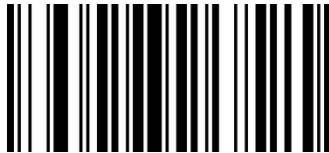
01770
Disable RSS Limited

GS1 DataBar Ominidirectional (RSS Ominidirectional)

To enable or disable GS1 DataBar Ominidirectional, scan the appropriate bar code below.



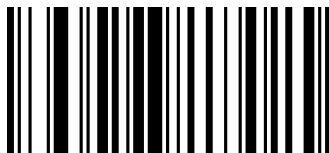
01761
Enable RSS Ominidirectional



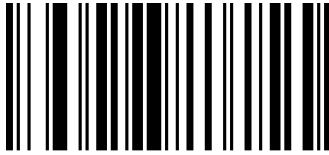
01760
Disable RSS Ominidirectional

Enable/Disable UPC-A

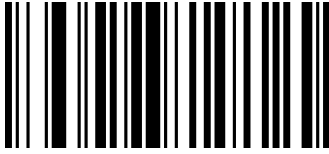
To enable or disable UPC-A, scan the appropriate bar code below.



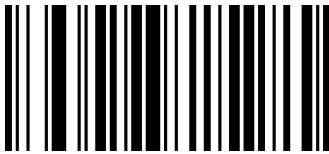
00341
Enable UPC-A*



00340
Disable UPC-A



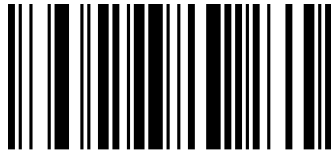
00241
Enable Transit Check Digit *



00240
Disable Transit Check Digit

Enable/Disable Convert UPC-A to EAN-13

To enable or disable Convert UPC-A to EAN-13, scan the appropriate bar code below.



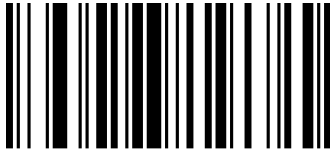
00391
Enabled UPC-A to EAN-13



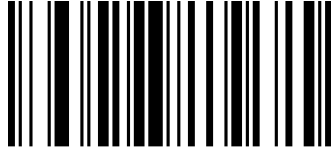
00390
Disable UPC-A to EAN-13

Enable/Disable UPC-E

To enable or disable UPC-E, scan the appropriate bar code below.



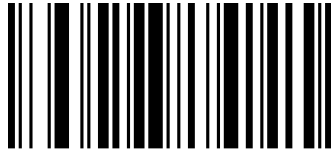
00351
Enable UPC-E



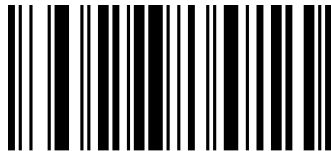
00350
Disable UPC-E

Enable/Disable Convert UPC-E to UPC-A

To enable or disable Convert UPC-E to UPC-A, scan the appropriate bar code below.



00381
Enable Convert UPC-E to UPC-A



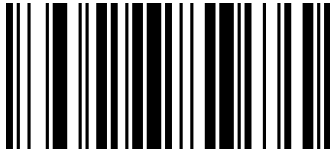
00380
Disable Convert UPC-E to UPC-A

Enable/Disable Interleaved 2 of 5

To enable or disable Interleaved 2 of 5, scan the appropriate bar code below.



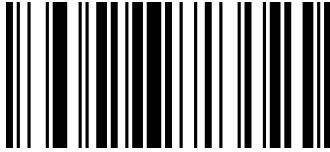
00961
Enabled Interleaved 2 of 5



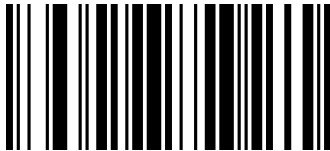
00960
Disabled Interleaved 2 of 5

Enable/Disable Industrial 2 of 5

To enable or disable Industrial 2 of 5, scan the appropriate bar code below.



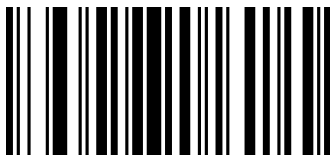
01061
Enable Industrial 2 of 5



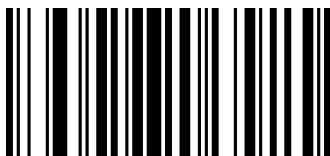
01060
Disable Industrial 2 of 5

Enable/Disable Standard 2 of 5

To enable or disable Standard 2 of 5, scan the appropriate bar code below.



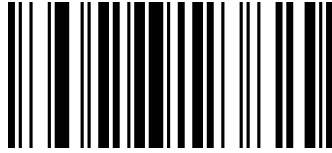
01871
Enable Standard 2 of 5



01870
Disable Standard 2 of 5

Enable/Disable Matrix 2 of 5

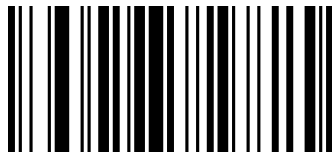
To enable or disable Matrix 2 of 5, scan the appropriate bar code below.



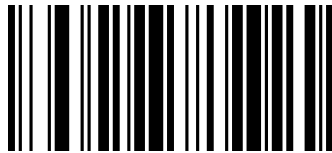
01461
Enable Matrix 2 of 5

Enable/Diable MSI

To enable or disable MSI, scan the appropriate bar code below.



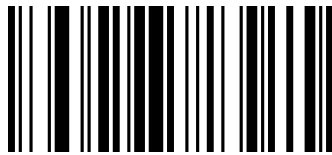
01151
Enable MSI



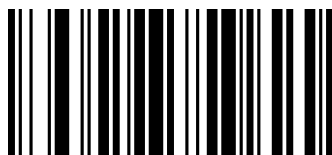
01150
Disable MSI

Enable /Disable Plessey

To enable or disable Plessey, scan the appropriate bar code below.



01161
Enable Plessey



01160
Disable Plessey

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).



Hide Barcode Start Chars



Hide Barcode Middle Char Start



Hide Barcode Middle Chars



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.



Enable Hide Barcode Start Char



Enable Hide Barcode Middle Char



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



Output Format

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



*Default output format



Enable Suffix output



Enable Prefix output

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



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

1. Scan command barcode of " Add Prefix"



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



4. Scan the output format to enable prefix output.



Enable Prefix output

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



Add Suffix

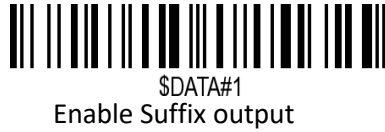
6. Check the suffix hex value from the ASCII Chart. !- "2" "1"

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





8. Scan the output format to enable suffix output.



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

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



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

1. Scan command barcode of " Add Suffix" to add "Ctrl+P" as 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#0

4. Scan the output format to enable suffix output.



\$DATA#1
Enable Suffix output

5. Scan " Keyboard Ctrl Combination Key"

6. 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	OAH	LF
6EH	n	7EH	~	8EH	Page Up	ODH	CR
6FH	o	7FH	DEL	8FH	Delete	1BH	ESC

Table 2. Code ID

No	Code ID	Code (Barcode Type)	Barcode Type
1	@	00	ALL TYPES
2	A	01	CODE 128
3	C	03	EAN 8
4	D	04	EAN 13
5	E	05	UPC-A
6	F	06	UPC-E
7	I	09	CODE 93
8	J	0A	GS1 Omnidirectional
9	K	0B	GS1 Limited
10	M	0D	CODE 39
11	N	0E	Interleaved 2 of 5
12	O	0F	Industrial 2 of 5
13	P	10	Standard 2 of 5
14	Q	11	Matrix 2 of 5
15	S	13	MSI
16	T	14	Plessey
17	U	15	CODE 11
18	V	16	Codebar

Support

For any inquiries concerning our products, please send an email to service@gzxlscan.com, and we will respond to you as soon as possible.

Contact Information

Tel.:+0086 20-33228813

Email:service@netum.net

Add:Room 301, 6th Floor and full 3rd Floor, Building 1, No. 51 Xiangshan Avenue, Ningxi Street, Zengcheng District, Guangzhou City, Guangdong Province, China