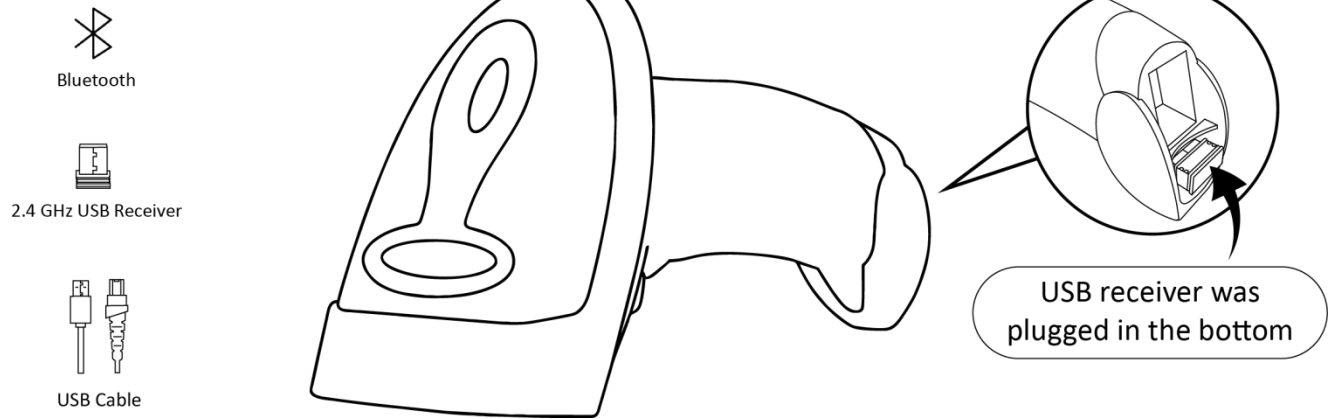


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## SCANNER SETUP GUIDE



### Firmware Version

Read below command barcode to check scanner firmware version.



\$SW#VER  
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.

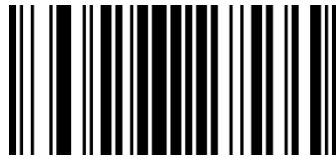


013304  
Continuous Mode

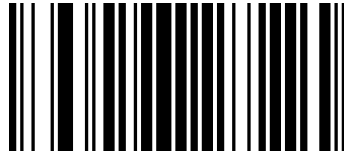


### Auto Sense Mode

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

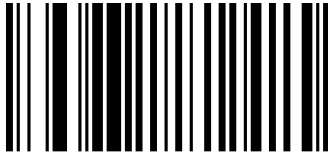
### Restore factory default

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

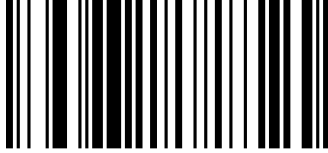
1. Factory Restore



2. Serial Port



3. Baud Rate 19200

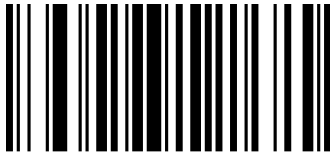


4. Enter+LF

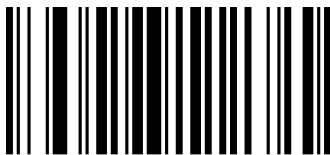


### Transmit Code ID Character

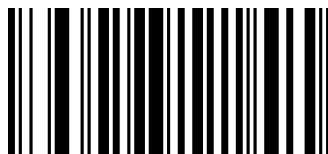
A code ID character identifies the code type of a scanned bar code. This can be useful when decoding more than one code type. The code ID character is inserted between the prefix character (if selected) and the decoded symbol. (Refer to Appendix A)



01400  
Disable Code ID\*



01401  
Enabled Code ID Prefix

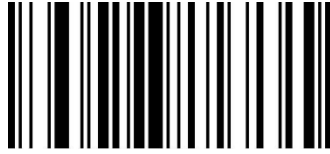


01402  
Enabled Code ID Prefix

## Common barcode Function

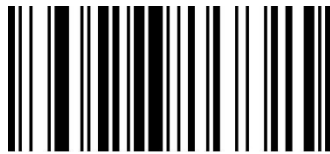
### Enable/Disable EAN-8

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



00371

Enable EAN-8\*



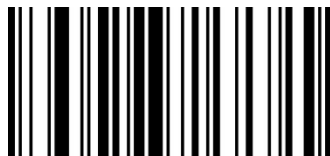
00370

Disable EAN-8



00571

EAN-8 Transit Check Digit\*



00570

EAN-8 Do Not Transit Check Digit

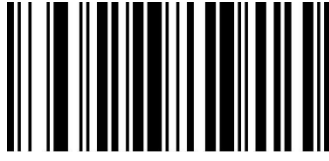
### Enable/Disable EAN-13

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



00361

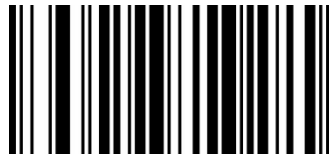
Enable EAN-13\*



00360  
Disable EAN-13



00461  
EAN-13 Transit Check Digit \*



00460  
EAN-13 Do Not Transit Check Digit

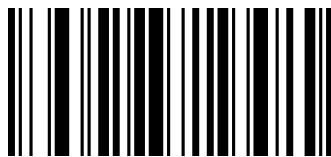
### Add-On Code

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.



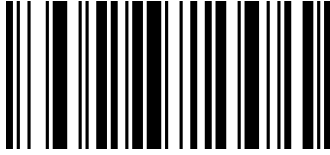
### EAN /UPC Add-On 2 or 5

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

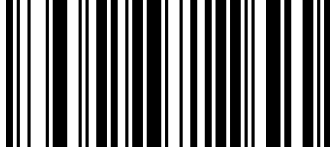


00551  
Enable add-on 2 digits

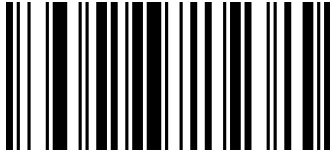




00552  
Enable add-on 5 digits



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.



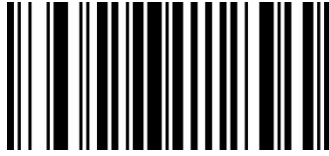
00481  
Enable EAN-13 Transfer to ISBN



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.



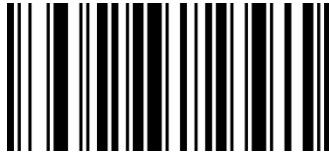
01501  
Enable EAN-13 Transfer to ISSN



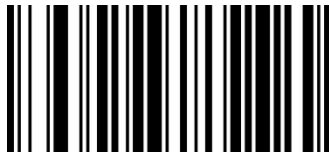
01500  
Disable EAN-13 Transfer to ISSN\*

### **Enable/Disable Codabar**

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



00851  
EnableCodabar\*



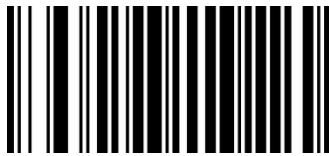
00850  
DisableCodabar

### **Enable/Disable Code 11**

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



01261  
Enable Code 11\*



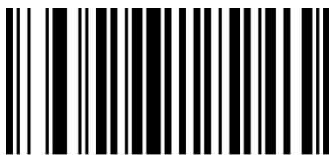
01260  
Disable Code 11

### 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\*



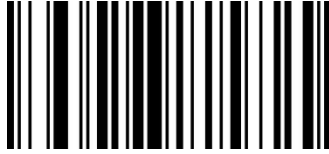
00230  
Disable Full ASCII

### Enable/Disable Code 93

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



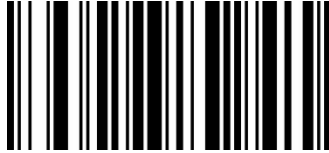
00621  
Enable Code 93\*



00620  
Disable Code 93

**Enable/Disable Code 128**

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



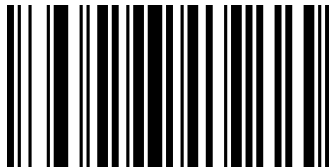
00691  
Enable Code 128\*



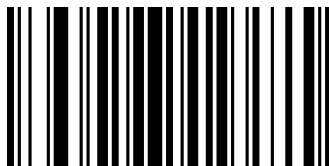
00690  
Disable Code 128

**Enable/Disable Code 32**

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



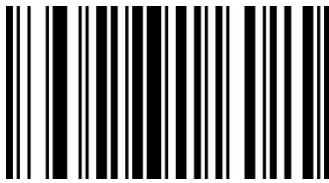
01950  
Disable Code 32\*



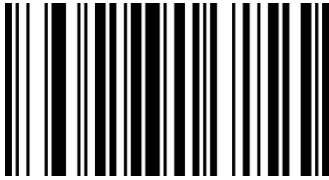
01951  
Enable Code 32

**Enable/Disable GS1 DataBar Limited (RSS Limited)**

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



01771  
Enable RSS Limited



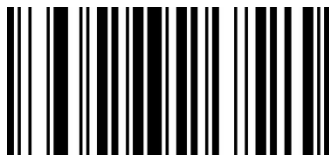
01770  
Disable RSS Limited

**GS1 DataBar Ominidirectional ( RSS Ominidirectional )**

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



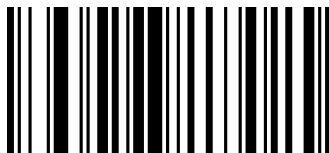
01761  
Enable RSS Ominidirectional



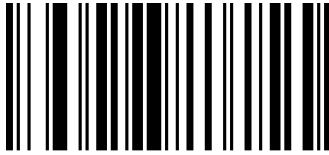
01760  
Disable RSS Ominidirectional

**Enable/Disable UPC-A**

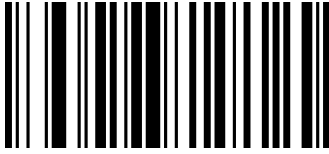
To enable or disable UPC-A, scan the appropriate bar code below.



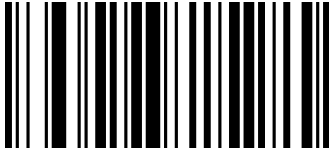
00341  
Enable UPC-A\*



00340  
Disable UPC-A



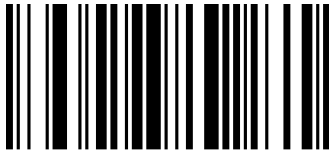
00241  
Enable Transit Check Digit \*



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.



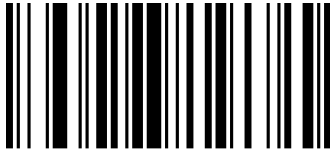
00391  
Enabled UPC-A to EAN-13



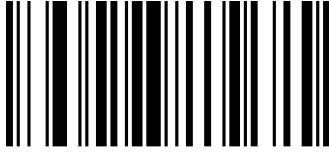
00390  
Disable UPC-A to EAN-13

**Enable/Disable UPC-E**

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



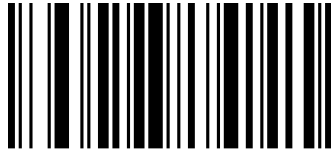
00351  
Enable UPC-E



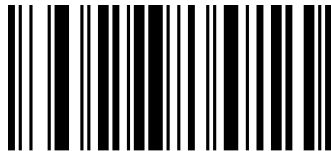
00350  
Disable UPC-E

**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



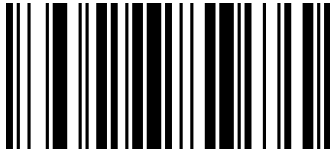
00380  
Disable Convert UPC-E to UPC-A

**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

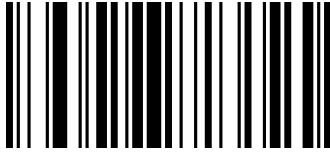


00960

Disabled Interleaved 2 of 5

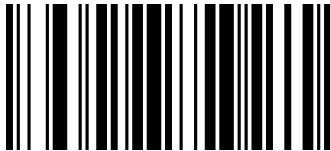
**Enable/Disable Industrial 2 of 5**

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



01061

Enable Industrial 2 of 5

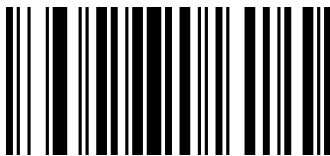


01060

Disable Industrial 2 of 5

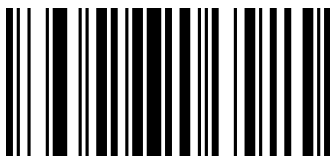
**Enable/Disable Standard 2 of 5**

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



01871

Enable Standard 2 of 5



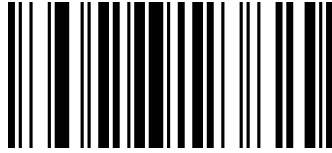
01870

Disable Standard 2 of 5



**Enable/Disable Matrix 2 of 5**

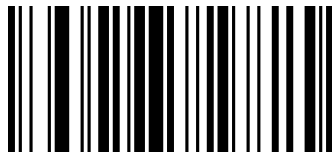
To enable or disable Matrix 2 of 5, scan the appropriate bar code below.



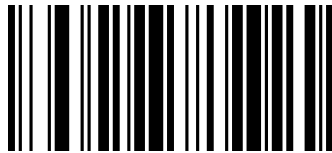
01461  
Enable Matrix 2 of 5

**Enable/Diable MSI**

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



01151  
Enable MSI



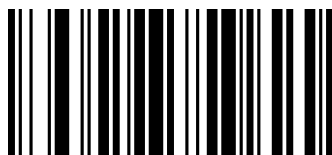
01150  
Disable MSI

**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.



Add Prefix



Add Suffix



Clear All Prefix



Clear All Suffix

### Numeric Bar Codes





\$NO#1



\$NO#2



\$NO#3



\$NO#4



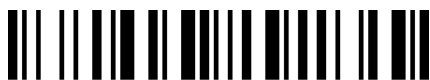
\$NO#5



\$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

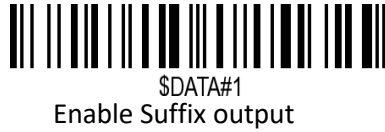
6. Check the suffix hex value from the ASCII Chart. !- "2" "1"

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](mailto:service@gzxlscan.com), and we will respond to you as soon as possible.

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