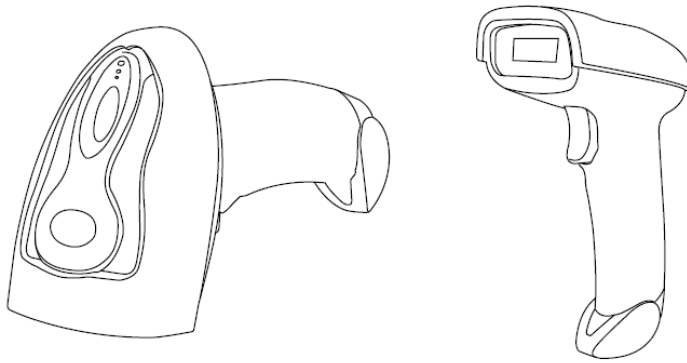


Quick Setup Guide

This model can work both via USB cable or via bluetooth.



Connection Mode

Working via USB cable

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

Working via Bluetooth

Get Started: After you connect the bluetooth with your device (please refer to the section of "bluetooth connection" from this manual) then you can start to use it. (US keyboard by default) If you use other type of keyboard, please refer to below "keyboard language type" to set the keyboard language before use it.

Low voltage Alarm: Scanner will make 2x beeps to remind you that it's under low voltage. Plug the USB cable to charge power for it.

If you want to have other configurations please refer to below programming barcodes.

Firmware Version:

Read below command barcode to check scanner firmware version.



Check Scanner Version

Below programming barcodes are applied for version $\geq$ NT_ZNCWBSDk8815

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.

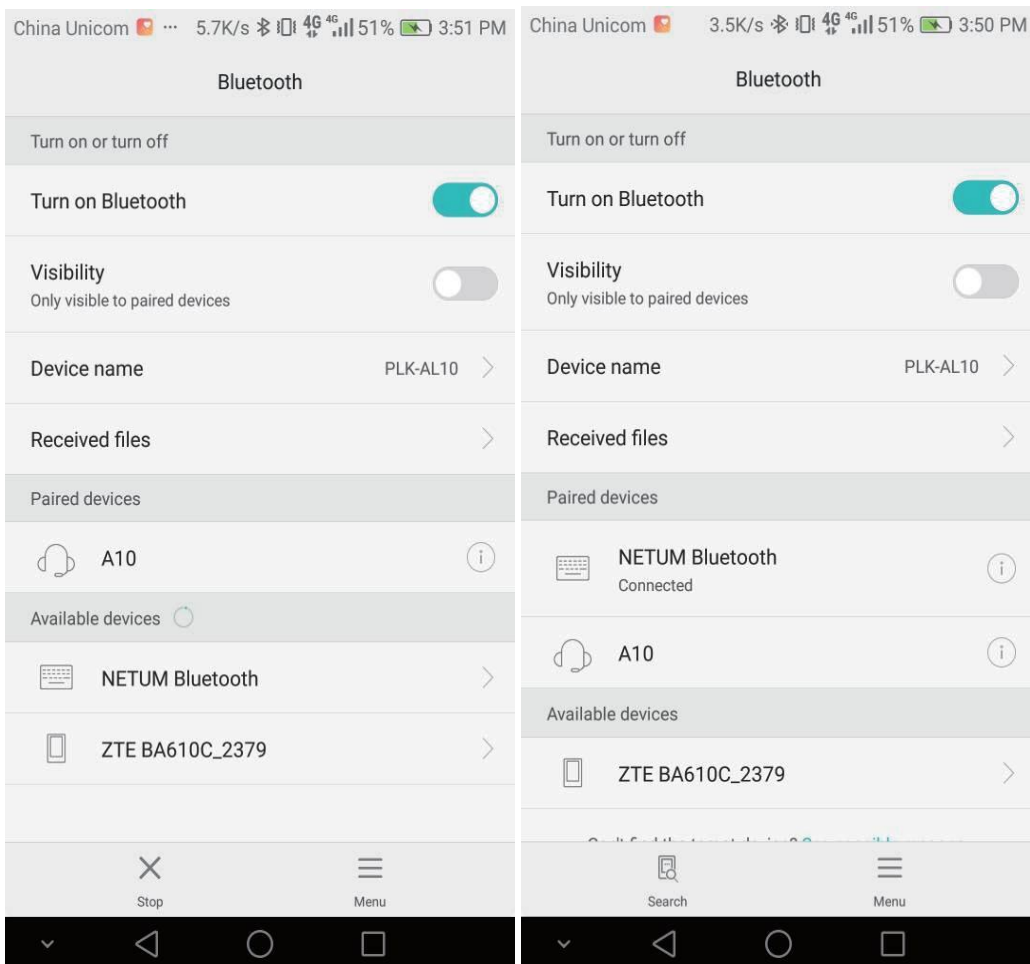
Bluetooth Connection

1. Pairing with windows XP or Windows 7/8/10

- 1) Power on the scanner , a few seconds later the blue indicator will keep flashing.
- 2) Enter the 'Control Panel' - 'Devices and Printers' - 'Add a device' – select, 'Bluetooth' to add the device to your computer
- 3) Click 'Next', the scanner will beep to indicate a successful pairing, and the light will turn to solid blue.

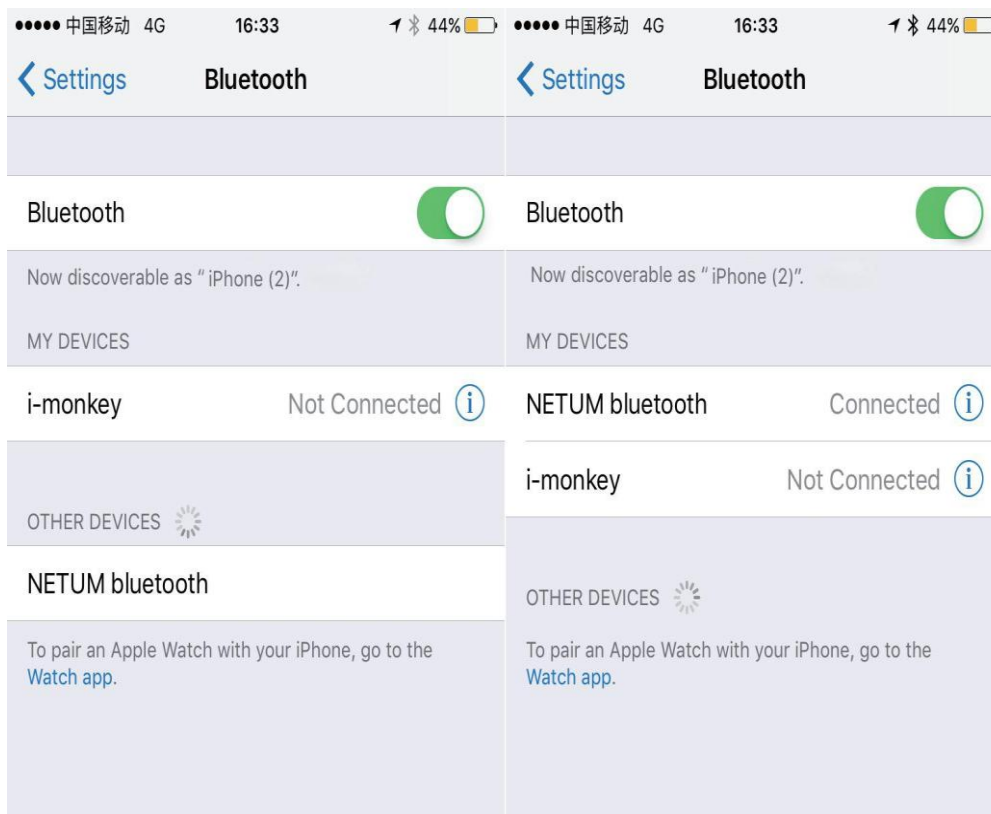
2. Android: Connect Android Device in Basic Mode

- 1) Power on the scanner. Make sure the scanner is discoverable (unpaired). a few seconds later the blue indicator will keep flashing.
- 2) Touch Home | Menu | Settings | Wireless & Networks | Bluetooth settings
- 3) Make sure the device has Bluetooth "On". Scan for devices.
- 4) In the list of found devices, select "Netum Bluetooth". Tap Pair.
- 5) The scanner will connect to the Android device.
- 6) The scanner will beep once after it has connected and is ready to scan barcodes



3. Pairing with your IOS device

- 1) Power on the scanner. Make sure the scanner is discoverable (unpaired). a few seconds later the blue indicator will keep flashing.
- 2) Click on “Bluetooth” in the left column. Your IOS device will automatically start searching for any Bluetooth Devices in the area.
- 3) Once you have identified the “Netum Bluetooth” on the screen, tap on it and you will automatically be connected. The scanner’s LED light will turn to solid blue.



Operation mode

A) BT HID Mode (Default)*

No Software installation needed, connects to most devices with bluetooth or USB interface. In this mode, the scanner interacts with the device like a keyboard. Therefore, the scanner will work with Safari, Notes, and any other applications that supports an active cursor.



BT HID Mode

Note: this command barcode is only apply for Bluetooth Wireless Mode

Keyboard Language

In order to let scanner upload the codes in a correct way, you have to set the keyboard language before you use it.

For example

If you use French Keyboard, just scan barcode of "French Keyboard", after that scanner will upload barcodes according to French keyboard layout. American Keyboard is set by default, if you use a US keyboard you can just skip this part.



American Keyboard *



Portugal Keyboard



French Keyboard



Spanish Keyboard



Germany Keyboard



Turkey Q Keyboard



Italy Keyboard



Turkey F Keyboard

B) Application Mode (SPP)

For Android or Windows only

Software installation is required, If you have an application that supports mobile scanners this is the mode recommended.



BT SPP Mode

Note: this command is only apply for Bluetooth Wireless Mode

Scan Mode

Trigger Mode (Default)

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



Continuous Mode

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



Auto Sense Mode

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



Working Mode

If you are heading for a working area which lies outside the signal range, you may activate the offline mode of the scanner, following the steps described below. Under this enhanced offline 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 time and again to your liking.

1). By scanning the following barcode, the offline mode will be activated



Offline Mode

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



Clear Memory

3).By scanning the following barcode, all data entries in the buffer memory can be manually uploaded after reconnecting to the working station (only in offline mode).



Uploading the Data

4). By scanning the following barcode, the gross quantity of the uploaded data entries will be summarised (only in offline mode).



Summarising of uploaded data entry quantity

5). By scanning the following barcode, the device leaves the offline mode, instant uploading mode will be activated. (By default)



Instant uploading mode

Notes: Command barcodes from Working mode section are only applied for Bluetooth wireless mode,

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.



3030050

None



3030051

CR&LF *



3030052

CR



3030053

TAB

Idle Time

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



30 s



6 Mins



12 Mins



30 Mins



1Hour



2Hours

IOS Keyboard POP UP/HIDE

During the scanning IOS keyboard can be hided or popped up by scanning below command barcode.



IOS Keyboard POP UP/HIDE

Beeper

Enable/Disable scanner to beep to indicate successful scan.



BEEP ON



BEEP OFF

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.



Symbol Code ID Character Code ID



Aim Code ID Character AIM ID



*None

Symbol Code ID Identifiers

A=	UPC-A, UPC-E, EAN-8, EAN-13	J=	MSI, MSI/Plessey
B=	Code 39, Code 32	K=	GS1-DataBar, /UCC/EAN-128
C=	Codabar	L=	Bookland EAN, Bookland EAN/ISBN
D=	Code 128, ISBT 128	M=	Trioptic Code 39
E=	Code 93	N=	Coupon Code
F=	Interleaved 2 of 5	R=	GS1 DataBar-14, GS1 DataBar Limited, GS1 DataBar Expanded, RSS
G=	Discrete 2 of 5	S=	SETUP128
H=	CODE11		

r=	PDF417	x=	Maxi Code
u=	DataMatrix(DM)	v=	Veri Code
q=	QR	c=	HanXin
a=	Aztec Code		

AIM Code Identifiers

Each AIM Code Identifier contains the three-character string **]cm** where:

] = Flag Character

c =Code Character (see *Table 4-4*)

m= Modifier Character

Table 4-4

A	Code 39, Code 39 Full ASCII, Code 32	S	Discrete 2 of 5, IATA 2 of 5
C	Code 128, ISBT 128, GS1-128, Coupon (Code 128 portion), Setup128	X	Code 39 Trioptic, Bookland EAN, Han Xin
E	UPC/EAN, Coupon (UPC portion)	e	GS1 DataBar
F	Codabar	L	PDF417
G	Code 93	d	Data Matrix(DM)
H	Code 11	Q	QR
I	Interleaved 2 of 5	z	Aztec Code

Read 1D Normal barcode/ Reversal barcode



* Disable to read 1D reversal barcode



Enabled to read 1D reversal barcode

UPC/EAN

Enable/Disable UPC-A

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



*Enable UPC-A



Disable UPC-A

Enable/Disable UPC-E

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



*Enable UPC-E



Disable UPC-E

Enable/Disable EAN-8

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



*Enable EAN-8



Disable EAN-8

Enable/Disable EAN-13

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



*Enable EAN-13



Disable EAN-13

Enable/Disable Bookland EAN(ISBN)

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



Enable Bookland EAN



*Disable Bookland EAN

Decode UPC/EAN Supplementals UPC/EAN

Supplementals are bar codes appended according to specific format conventions (e.g. UPC A+2, UPC E+2, EAN 13+2, EAN 13+5). The following options are available:



*Ignore UPC/EAN with Supplementals



Decode UPC/EAN with Supplementals



Auto discriminate UPC/EAN Supplementals

Transmit UPC-A Check Digit

Scan the appropriate bar code below to transmit the symbol with or without the UPC-A check digit.



*Transmit UPC-A Check Digit



*Transmit UPC-A Check Digit

Transmit UPC-E Check Digit

Scan the appropriate bar code below to transmit the symbol with or without the UPC-E check digit.



*Transmit UPC-E Check Digit



Do Not Transmit UPC-E Check Digit

Convert UPC-E to UPC-A

Enable this parameter to convert UPC-E (zero suppressed) decoded data to UPC-A format before transmission. After conversion, data follows UPC-A format and is affected by UPC-A programming selections



Convert UPC-E to UPC-A



*Do Not Convert UPC-E to UPC-A

EAN-8 Zero Extend

When enabled, this parameter adds five leading zeros to decoded EAN-8 symbols to make them compatible in format to EAN-13 symbols.



Enable EAN-8 Zero Extend



*Disable EAN-8 Zero Extend

Code 128

Enable/Disable Code 128

To enable or disable Code 128, scan the appropriate bar code below.



*Enable Code 128



Disable Code 128

Enable/Disable GS1-128

To enable or disable GS1-128, scan the appropriate bar code below.



*Enable GS1-128



Disable GS1-128

Enable/Disable ISBT 128

To enable or disable ISBT 128, scan the appropriate bar code below.



*Enable ISBT 128



Disable ISBT 128

Code39

Enable/Disable Code 39

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



*Enable Code 39



Disable Code 39

Code 39 Check Digit Verification

When this feature is enabled, the scan engine checks the integrity of all Code 39 symbols to verify that the data complies with specified check digit algorithm. Only those Code 39 symbols which include a modulo 43 check digit are decoded. Only enable this feature if your Code 39 symbols contain a modulo 43 check digit.



Verify Code 39 Check Digit



*Do Not Verify Code 39 Check Digit

Transmit Code 39 Check Digit

Scan this symbol to transmit the check digit with the data.



Transmit Code 39 Check Digit (Enable)

Scan this symbol to transmit data without the check digit.



*Do Not Transmit Code 39 Check Digit

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.



Enable Code 39 Full ASCII



*Disable Code 39 Full ASCII

NOTE Trioptic Code 39 and Code 39 Full ASCII cannot be enabled simultaneously. If you get an error beep when enabling Code 39 Full ASCII, disable Trioptic Code 39 and try again.

Code 93

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



Enable Code 93



*Disable Code 93

Set Lengths for Code 93

The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Lengths for Code 93 may be set for any length, one or two discrete lengths, or lengths within a specific range.

Any Length - Scan this option to decode Code 93 symbols containing any number of characters



Code 93 - Any Length

Code 11

Enable/Disable Code 11

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



Enable Code 11



*Disable Code 11

Set Lengths for Code 11

The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. Set lengths for Code 11 to any length, one or two discrete lengths, or lengths within a specific range.

Any Length - Scan this option to decode Code 11 symbols containing any number of characters within the scan engine capability.



Code 11 - Any Length

Code 11 Check Digit Verification

This feature allows the scan engine to check the integrity of all Code 11 symbols to verify that the data complies with the specified check digit algorithm. This selects the check digit mechanism for the decoded Code 11 bar code. The options are to check for one check digit, check for two check digits, or disable the feature.



* Disable



One Check



Two Check Digit

Transmit Code 11 Check Digits



Transmit Code 11 Check Digit(s) (Enable)



*Do Not Transmit Code 11 Check Digit(s) (Disable)

Interleaved 2 of 5/ITF

Enable/Disable Interleaved 2 of 5

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



*Enable Interleaved 2 of 5



Disable Interleaved 2 of 5

Set Lengths for Interleaved 2 of 5 Interleaved 2 of 5

Any Length - Scan this option to decode I 2 of 5 symbols containing any number of characters



I 2 of 5 - Any Length

Convert I 2 of 5 to EAN-13

This parameter converts a 14 character I 2 of 5 code into EAN-13, and transmits to the host as EAN-13. To accomplish this, I 2 of 5 must be enabled, one length must be set to 14, and the code must have a leading zero and a valid EAN-13 check digit.



Convert I 2 of 5 to EAN-13



*Do Not Convert I 2 of 5 to EAN-13

Discrete 2 of 5/Industrial 2 of 5/IND25

Enable/Disable Discrete 2 of 5

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



Enable Discrete 2 of 5



*Disable Discrete 2 of 5

Matrix 25

Enable/Disable Matrix 25

To enable or disable Matrix 25, scan the appropriate bar code below.



Enable Matrix 25



*Disable Matrix 25

Standard 25/IATA 25

Enable/Disable Standard 25

To enable or disable Standard 25, scan the appropriate bar code below.



*Disable Standard 25



Enable Standard 25

Standard 25 Check Digit Verification



Disable Standard 25 Check Digit Verification



Enable Standard 25 Check Digit Verification

Transmit Check Character



Disable Standard 25 Transmit Check Character



Enable Standard 25 Transmit Check Character

Codabar

Enable/Disable Codabar

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



Enable Codabar



*Disable Codabar

MSI/MSI PLESSEY

Enable/Disable MSI

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



Enable MSI



*Disable MSI

GS1 DataBar/RSS

Enable/Disable GS1 DataBar-14

To enable or disable GS1 DataBar-14, scan the appropriate bar code below.



Enable GS1 DataBar-14



*Disable GS1 DataBar-14

Enable/Disable GS1 DataBar Limited

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



Enable GS1 DataBar Limited



*Disable GS1 DataBar Limited

Enable/Disable GS1 DataBar Expanded

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



Enable GS1 DataBar Expanded



*Disable GS1 DataBar Expanded

PDF417

Scan normal or mirror image picture.

Enable/Disable PDF417

To enable or disable PDF417, scan the appropriate bar code below.



Disable PDF417



*Enable PDF417

Read Normal Phase/ Phase Reversal



*Read Normal Phase



Read Phase Reversal



Read Normal Phase/ Phase Reversal

QR

Read normal phase/ phase reversal/ mirror image picture

Enable/Disable QR

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



1003250

Disable QRCode



1003251

*Enable QRCode

Data Matrix(DM)

Scan normal or mirror image picture.

Enable/Disable Data Matrix(DM)

To enable or disable Data Matrix(DM), scan the appropriate bar code below.



1003240

Disable Data Matrix



1003241

*Enable Data Matrix

Read Normal Phase/ Phase Reversal



30306B0

*Read Normal Phase



30306B1

Read Phase Reversal



Read Normal Phase/ Phase Reversal

Maxi Code

Enable/Disable Maxi Code

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



*Disable MaxiCode



Enable MaxiCode

Aztec Code

Enable/Disable Aztec Code

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



*Disable Aztec Code



Enable Aztec Code

Han Xin Code

Enable/Disable Han Xin Code

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



*Disable Han Xin Code



Enable Han Xin Code

Read Normal Phase/ Phase Reversal



*Read Normal Phase



Read Phase Reversal



Read Normal Phase/ Phase Reversal

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





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.





\$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 " 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	0AH	LF
6EH	n	7EH	~	8EH	Page Up	0DH	CR
6FH	o	7FH	DEL	8FH	Delete	1BH	ESC