

**NEXA**

**NC-1200  
BARCODE SCANNER**

**Configuration Guide**



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## Chapter 1 - System Information

### 1.1 About this manual

This User's Guide provides detailed programming instructions. Barcode scanners are factory programmed for the most common communication setting. If you need to change these settings, programming is accomplished by scanning the bar codes in this guide.

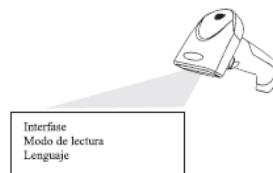
### 1.2 How to set up the parameter

Step 1: Scan the start configuration barcode



Start Configuration

Step 2: Scan necessary label for parameters that meet your application



Step 3: Scan end configuration to save the changes



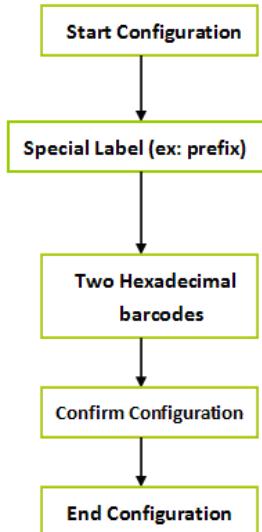
End Configuration

### 1.3 How to set up the parameter – II

Most of time the scanner only requests one read of parameters when changing to new values. You will hear two beeps when you successfully set to the new values. But for some special parameters, multiple reads are needed to complete the configuration. When use these special parameters. In some cases, you might need to read one or more barcodes, such as:

- ◆ Hexadecimal barcodes. For example: prefix, suffix, etc.
- ◆ Numeric barcodes. For example: inter-character delay, max/min length

To complete the change of setting you will need to read the “Confirm” barcode after you read the parameter. Below is the flow chart to explain two different configurations.



### 1.4 Resetting the standard product default

If you aren't sure what programming options are in your scanner, or you've changed some options and want the factory settings restored, scan the Standard Product Default Settings bar code below.



Standard Product Defaults Setting

## Chapter 2 - System setup

### 2.1 Interface selection

The scanner is designed to switch easily from interfaces.

Remember to reset the interface before changing to PS/2 or RS232 cable. No presetting is requested for USB interface. Scanning USB bar code after the cable is changed and activating the scanner by plugging the USB cable again. USB interface complies with HID keyboard which means the setting of USB scanner is exactly the same like the default setting from keyboard.



Start configuration



End configuration

ITEM	OPTION
Interface Selection	
	* KEYBOARD
	RS-232
	USB

### 2.1.1 Keyboard emulation parameters setting



Start configuration



End configuration

ITEM	OPTION
Device Selection for keyboard Interface	*IBM AT
	IBM XT
	IBM PS/2 30-80
	IBM 5550
	PS/2 25 + 30
	NEC 9801
	Reserved 1
	Reserved 2



Start configuration



End configuration

ITEM	OPTION
Language for Keyboard Interface	* USA
	ITALIAN
	SPANISH
	FRENCH
	GERMAN
	JAPANESE
	Multi-Language Support
	Reserved 1



Start configuration



End configuration

ITEM	OPTION
Function Key	 * Disable
	 Enable
Emulate External Keyboard	 * Disable
	 Enable
ALT Mode	 * Disable
	 Enable

## NOTE : Emulate External Keyboard

Scan the barcode below if you do not have an external keyboard.  
After scanning the Emulate External Keyboard bar code, you must  
power cycle your computer.



Start configuration



End configuration

ITEM	OPTION
Caps Lock	 * Disable
	 Enable
Num Lock	 * Disable
	 Enable
Inter Character Delay (Default : 00)	 Ref: Appendix ( 00—64H )



Start configuration



End configuration

ITEM	OPTION
Terminator	
	None
	* CR
	Tab
	ESC
	CR + LF
Block transmission delay (Default : 00)	
	Ref: Appendix ( 00—0AH )
Keyboard Speed (Default 00: high clock rate)	
	Ref: Appendix ( 00—08H )

### 2.1.2 RS-232 communication setting



Start configuration



End configuration

ITEM	OPTION
Baud Rate	1200bps
	2400bps
	4800bps
	* 9600bps
	19200bps
	38400bps
Data Bits	7 Bits
	* 8 Bits



Start configuration



End configuration

ITEM	OPTION
Stop Bits	 * 1 Stop Bits
	 2 Stop Bits
Parity	 * NONE
	 ODD
	 EVEN
	 Mark
	 Space



Start configuration



End configuration

ITEM	OPTION
Inter-character delay (Default : 00)	 Ref: Appendix ( 00—64H )
Block transmission delay (Default : 00)	 Ref: Appendix (00-0AH)
Response delay (Default : 00)	 Ref: Appendix (00-0AH)
HANDSHAKING	 * None
	 RTS/CTS
	 ACK/NAK
	 Xon/Xoff



Start configuration



End configuration

ITEM	OPTION
Terminator For RS-232	
	None
	* CR+LF
	CR
	LF
	Tab
	STX/ETX
	EOT



Start configuration



End configuration

ITEM	OPTION
Handshaking	
	* None
	RTS/CTS
	ACK/NAK
	Xon/Xoff

## 2.2 Scanning mode selection



Start configuration



End configuration

ITEM	OPTION
Reading Mode	
	* Trigger On/Good Read Off
	Trigger On/Off
	Continuous/Trigger Off
	Continuous/Testing
	Continuous/Trigger on
	Continuous /Auto power on
	Flash
	Flash / Auto Power On

### 2.3 Beeper tone selection



Start configuration



End configuration

ITEM	OPTION
Beep Tone (Default : 09H)	 Ref: Appendix (00-10H)
Beep Sound Duration (Default : 05H)	 Ref: Appendix (00-10H)
Power On Beeper	 * Enable
	 Disable
Beeper	 * ON
	 OFF

## 2.4 String Options (Prefix & Suffix)

This section describes the alterations which can be made to the format of the transmitted data string. A prefix and suffix of maximum 10 direct input may be included in front and at the end of scanned barcode.

### Format

{Prefix} {Code ID} {Bar Code} {Suffix}

#### How to set up a prefix?

To configure “##” as prefix

- (1) Scan Start Configuration barcode
- (2) Scan Preamble bar code
- (3) Scan ‘#’ twice from FULL ASCII table
- (4) Scan Confirm configuration barcode
- (5) Scan End Configuration barcode.

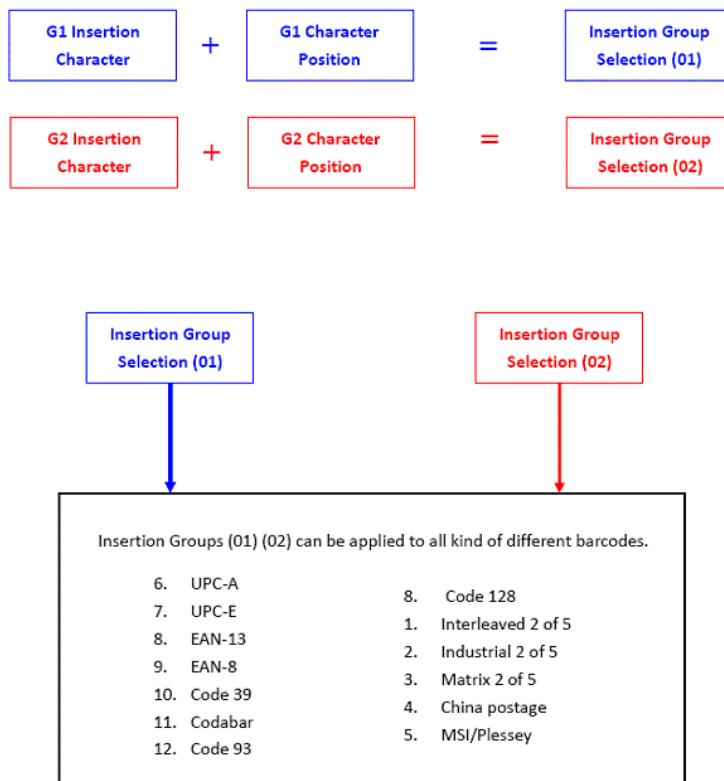
#### How to set up a suffix?

To configure “\$\$” as suffix

- (1) Start configuration barcode
- (2) Scan Postamble barcode
- (3) Scan ‘\$’ twice from FULL ASCII table
- (4) Scan Confirm configuration barcode
- (5) Scan End configuration barcode.

## 2.5 Setup Insertion

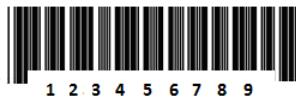
This section describes how to setup the insertion of output.



NOTE :

- ◆ Max. 10 characters can be inserted each time
- ◆ Max. Insertion group is only two.
- ◆ Insertion group (01) or (02) can be used in different kinds of barcodes at the same time

**Example:**



1 2 3 4 5 6 7 8 9

:

To insert character "A" before the third digit(3)  
Make the decoded data: 12A3456789

**How to set up a character you want to insert**

- (1) Scan Start Configuration barcode
- (2) Scan "G1 Insertion character"
- (3) Scan "4" and "1" from FULL ASCII Table
- (4) Scan Confirm configuration barcode
- (5) Scan End configuration barcode

**How to set up position you wish to place the character**

- (6) Scan Start Configuration barcode
- (7) Scan "G1 Character Position"
- (8) Scan "0" and "3" from FULL ASCII Table (which presents the position)
- (9) Scan Confirm configuration barcode
- (10) Scan End configuration barcode

**How to set up insertion for code 39**

- Go to chapter 3.5 (code 39)
- (11) Scan Start Configuration barcode
  - (12) Scan "Insert group selection" bar code
  - (13) scan "0" and "1" from FULL ASCII Table  
(which presents the group- 01 you just set up previously)
  - (14) Scan Confirm configuration bar code
  - (15) Scan End configuration barcode



Start configuration



End configuration



Confirm configuration

ITEM	OPTION
Preamble (Default : 00)	 Ref: Appendix
Postamble (Default : 00)	 Ref: Appendix
G1 Insertion character (Default : 00)	 Ref: Appendix
G2 Insertion character (Default : 00)	 Ref: Appendix
G1 Character Position to be inserted (Default : 00)	 Ref: Appendix
G2 Character Position to be inserted (Default : 00)	 Ref: Appendix



Start configuration



End configuration

ITEM	OPTION
Bar Code ID	 *Disable
	 Enable
Accuracy	 * Read 1 Time
	 Read 2 Times
Positive and negative bar code	 Bar equals high
	 * Bar equals low

## Chapter 3 - BarCode parameters setting

### How to set up a Code ID?

- (1) Scan Start configuration bar code
- (2) Go to the ASCII Table and scan label that represent the desired characters to be inserted.
- (3) Scan Confirm configuration bar code
- (4) Scan End configuration bar code.



Start configuration



End configuration



Confirm configuration

### 3.1 UPC-A

ITEM	OPTION
Read	
Code ID Setting (Default : F )	 Ref: Appendix (20-7EH)



Start configuration



End configuration

ITEM	OPTION
UPC-A Expand to EAN-13	
	* Disable
Check Digit Send	
	Enable
Truncate Leading Zero	
	* Disable
Truncate Leading (Default:00)	 Ref: Appendix (00-0DH)
Truncate Ending (Default:00)	
Insert group selection	



Start configuration



End configuration

ITEM	OPTION
Supplement digits	
	* NONE
	2 digits
	5 digits
	2 or 5digits
	Auto-discriminate Supplement

3.2 UPC-E



Start configuration



End configuration

ITEM	OPTION
Read	 Disable
	 * Enable
Code ID setting (Default : G)	 Ref: Appendix (20-7EH)



Start configuration



End configuration

ITEM	OPTION
UPC-E Expand to UPC-A	 * Disable
	 Enable
Check Digit Send	 Disable
	 * Enable
Truncate Leading (Default:00)	 Ref: Appendix (00-08H)
Truncate Ending (Default:00)	 Ref: Appendix (00-08H)
Insert group selection (Default:00)	 Ref: Appendix (00-02H)



Start configuration



End configuration

ITEM	OPTION
Truncate Leading Zero	 Disable
	 * Enable
Supplement digits	 * None
	 2 digits
	 5 digits
	 2 or 5 digits
	 Auto-discriminate Supplement



Start configuration



End configuration

ITEM	OPTION
Read	 Disable
	 * Enable
Code ID setting (Default : H)	 Ref: Appendix (20-7EH)
Check Digit Send	 Disable
	 * Enable
Truncate Leading (Default : 00 )	 Ref: Appendix (00-0DH)
Truncate Ending (Default : 00 )	 Ref: Appendix (00-0DH)



Start configuration



End configuration

ITEM	OPTION
Supplement digits	
	* None
	2 digits
ISBN/ISSN Conversion	
	2 or 5 digits
Insert group selection (Default : 00 )	
	* Disable
Insert group selection (Default : 00 )	
	Enable
Insert group selection (Default : 00 )	
	Ref: Appendix (00-02H)



Start configuration



End configuration

ITEM	OPTION
Read	 Disable
	 * Enable
Code ID setting (Default : I)	 Ref: Appendix (20-7EH)
Check Digit Send	 Disable
	 * Enable
Truncate Leading (Default : 00)	 Ref: Appendix (00-08H)



Start configuration



End configuration

ITEM	OPTION
Truncate Ending (Default : 00)	 Ref: Appendix (00-08H)
Supplement digits	 * None
	 2 digits
	 5 digits
	 2 or 5 digits
	 Auto-discriminate Supplement
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)

### 3.5 Code39



Start configuration



End configuration

ITEM	OPTION
Read	 Disable
	 * Enable
Code ID setting (Default : J)	 Ref: Appendix (20-7EH)
Check-sum verification	 * Disable
	 Enable
Check-sum transmission	 Disable
	 * Enable



Start configuration



End configuration

ITEM	OPTION
Append	 * Disable
	 Enable
Min. code length (Default: 00)	 Ref: Appendix (00-32H)
Max. code length (Default: 32H)	 Ref: Appendix (00-32H)
Format	 * Standard Code39
	 Code 39 Full ASCII



Start configuration



End configuration

ITEM	OPTION
Transmit Start/End Character	
	* Disable
Truncate Leading (Default: 00)	 Ref: Appendix (00-32H)
Truncate Ending (Default: 00)	 Ref: Appendix (00-32H)
Insert group selection (Default: 00)	 Ref: Appendix (00-02H)

### 3.6 Codabar



Start configuration



End configuration

ITEM	OPTION
Read	Disable
	* Enable
Code ID setting (Default : K)	Ref: Appendix (20-7EH)



Start configuration



End configuration

ITEM	OPTION
Check-sum verification	 Disable
	 * Enable
Check-sum transmission	 * Disable
	 Enable
Append	 * Disable
	 Enable
Truncate Leading (Default:00)	 Ref: Appendix (00-7EH)



Start configuration



End configuration

ITEM	OPTION
Truncate Ending (Default:00)	 Ref: Appendix (00-7EH)
Start/End type	 * ABCD/ABCD
	 abcd/abcd
	 abcd/tn*e
Start/End transmission	 * Disable
	 Enable
Min. code length (Default: 05)	 Ref: Appendix (00-3CH)



Start configuration



End configuration

ITEM	OPTION
Max. code length (Default: 3CH)	 Ref: Appendix (00-3CH)
Insert group selection (Default: 00)	 Ref: Appendix (00-02H)

### 3.7 Code93



Start configuration



End configuration

ITEM	OPTION
Read	 Disable
	 * Enable
Code ID setting (Default : L)	 Ref: Appendix (20-7EH)
Check-sum verification	 Disable
	 * Enable



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	 * Disable
	 Enable
Min. code length (Default: 00)	 Ref: Appendix (0-50H)
Max. code length (Default: 50H)	 Ref: Appendix (0-50H)
Truncate Leading (Default: 00)	 Ref: Appendix (00-7EH)
Truncate Ending (Default: 00)	 Ref: Appendix (00-7EH)
Insert group selection	 Ref: Appendix (00-02H)

3.8 Code 128



Start configuration



End configuration

ITEM	OPTION
Read	 Disable
	 * Enable
Code ID setting (Default : M)	 Ref: Appendix (20-7EH)
Check-sum verification	 Disable
	 * Enable



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	 * Disable
	 Enable
FNC2 Append	 * Disable
	 Enable
UCC/EAN128	 * Disable
	 Enable
FNC1 transmission	 * Disable
	 Enable



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default: 00)	 Ref: Appendix (00-7FH)
Truncate Ending (Default: 00)	 Ref: Appendix (00-7FH)
Min. code length (Default: 00)	 Ref: Appendix (00-7FH)
Max. code length (Default: 7FH)	 Ref: Appendix (00-7FH)
Insert group selection (Default: 00)	 Ref: Appendix (00-02H)



Start configuration



End configuration

ITEM	OPTION
Read	 * Disable
	 Enable
Code ID setting (Default : N)	 Ref: Appendix (20-7EH)
Check-sum verification	 * Disable
	 Enable
Check-sum transmission	 Disable
	 * Enable



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default : 00)	 Ref: Appendix (00-7EH)
Truncate Ending (Default : 00)	 Ref: Appendix (00-7EH)
Min. code length (Default : 00)	 Ref: Appendix (00-7FH)
Max. code length (Default : 7FH)	 Ref: Appendix (00-7FH)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



Start configuration



End configuration

ITEM	OPTICON
Read	 * Disable
	 Enable
Code ID setting (Default : 0)	 Ref: Appendix (20-7EH)
Min. code length (Default : 00)	 Ref: Appendix (00-32H)
Max. code length (Default : 32H)	 Ref: Appendix (00-32H)



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default : 00)	 Ref: Appendix (00-32H)
Truncate Ending (Default : 00)	 Ref: Appendix (00-32H)
Check-sum verification	 * Disable
	 Enable
Check-sum transmission	 * Disable
	 Enable
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)

3.11 Matrix 2 of 5



Start configuration



End configuration

ITEM	OPTION
Read	 * Disable
	 Enable
Code ID setting (Default : P)	 Ref: Appendix (20-7EH)
Check-sum verification	 * Disable
	 Enable



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	 Disable
	 * Enable
Truncate Leading (Default : 00)	 Ref: Appendix (00-50H)
Truncate Ending (Default : 00)	 Ref: Appendix (00-50H)
Min. code length (Default : 0B)	 Ref: Appendix (00-50H)
Max. code length (Default : 50H)	 Ref: Appendix (00-50H)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)

### 3.12 CHINA POSTAL CODE



Start configuration



End configuration

ITEM	OPTION
Read	 * Disable
	 Enable
Code ID setting (Default : Q)	 Ref: Appendix (20-7EH)
Check-sum verification	 * Disable
	 Enable
Check-sum transmission	 Disable
	 * Enable



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default : 00)	 Ref: Appendix (00-50H)
Truncate Ending (Default : 00)	 Ref: Appendix (00-50H)
Min.code length (Default : 00)	 Ref: Appendix (00-50H)
Max.code length (Default : 50H)	 Ref: Appendix (00-50H)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



Start configuration



End configuration

ITEM	OPTION
Read	 * Disable
	 Enable
Code ID setting (Default : R)	 Ref: Appendix (20-7EH)
Check-sum verification	 * Disable
	 MOD 10
	 MOD 10/10
	 MOD 11/10



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	 Disable
	 * Enable
Truncate Leading (Default : 00)	 Ref: Appendix (00-3CH)
Truncate Ending (Default : 00)	 Ref: Appendix (00-3CH)
Min. code length (Default : 00)	 Ref: Appendix (00-3CH)
Max. code length (Default : 3CH)	 Ref: Appendix (00-3CH)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



Start configuration



End configuration

ITEM	OPTION
Read	 * Disable
	 Enable
Code ID Setting (Default:S)	 Ref: Appendix (20-7EH)
Check-sum verification	 Disable
	 * Enable
Check-sum transmission	 Disable
	 * Enable



Start configuration



End configuration

ITEM	OPTION
Truncate Leading (Default : 00)	 Ref: Appendix (00-0AH)
Truncate Ending (Default : 00)	 Ref: Appendix (00-0AH)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



Start configuration



End configuration

ITEM	OPTION
Read	 * Disable
	 Enable
Code ID setting (Default:T)	 Ref: Appendix (20-7EH)
Check-sum verification	 Disable
	 * Enable



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	 * Disable
	 Enable
Truncate Leading (Default : 00)	 Ref: Appendix (00-50H)
Truncate Ending (Default : 00)	 Ref: Appendix (00-50H)
Min. code length (Default : 00)	 Ref: Appendix (00-50H)
Max. code length (Default : 50H)	 Ref: Appendix (00-50H)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



Start configuration



End configuration

ITEM	OPTION
Read	 * Disable
	 Enable
Code ID setting (Default: V )	 Ref: Appendix (20-7EH)
Check-sum verification	 Disable
	 * Enable
Data Format	 Only Numnic (ALPHA)
	 * Full ASCII



Start configuration



End configuration

ITEM	OPTION
Check-sum transmission	 * Disable
	 Enable
Truncate Leading (Default : 00)	 Ref: Appendix (00-40H)
	 Ref: Appendix (00-40H)
Min. code length (Default : 00)	 Ref: Appendix (00-40H)
	 Ref: Appendix (00-40H)
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)



Start configuration



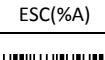
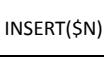
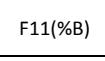
End configuration

ITEM	OPTION
Function Key	
	* Disable
Code 39 format	
	Full ASCII Code 39

To scan a function key barcode label, Full ASCII Code 39 must be enabling.  
Please refer to Full ASCII Code 39 Table to produce the function key barcode label.

#### Function Code

UP(\$A)	F1(\$Q)
DOWN(\$B)	F2(\$R)
LEFT(\$C)	F3(\$S)
RIGHT(\$D)	F4(\$T)

## **Appendix A –**

Dec	Hex	Char.	Dec	Hex	Char.
0	00	NUL	32	20	SP
1	01	SOH	33	21	!
2	02	STX	34	22	"
3	03	ETX	35	23	#
4	04	EOT	36	24	\$
5	05	ENQ	37	25	%
6	06	ACK	38	26	&
7	07	BEL	39	27	'
8	08	BS	40	28	(
9	09	HT	41	29	)
10	0A	LF	42	2A	*
11	0B	VT	43	2B	+
12	0C	FF	44	2C	,
13	0D	CR	45	2D	-
14	0E	SO	46	2E	.
15	0F	SI	47	2F	/
16	10	DLE	48	30	0
17	11	DC1	49	31	1
18	12	DC2	50	32	2
19	13	DC3	51	33	3
20	14	DC4	52	34	4
21	15	NAK	53	35	5
22	16	SYN	54	36	6
23	17	ETB	55	37	7
24	18	CAN	56	38	8
25	19	EM	57	39	9
26	1A	SUB	58	3A	:
27	1B	ESC	59	3B	;
28	1C	FS	60	3C	<
29	1D	GS	61	3D	=
30	1E	RS	62	3E	>
31	1F	US	63	3F	?

Dec	Hex	Char.	Dec	Hex	Char.
64	40	@	96	60	'
65	41	A	97	61	a
66	42	B	98	62	b
67	43	C	99	63	c
68	44	D	100	64	d
69	45	E	101	65	e
70	46	F	102	66	f
71	47	G	103	67	g
72	48	H	104	68	h
73	49	I	105	69	i
74	4A	J	106	6A	j
75	4B	K	107	6B	k
76	4C	L	108	6C	l
77	4D	M	109	6D	m
78	4E	N	110	6E	n
79	4F	O	111	6F	o
80	50	P	112	70	p
81	51	Q	113	71	q
82	52	R	114	72	r
83	53	S	115	73	s
84	54	T	116	74	t
85	55	U	117	75	u
86	56	V	118	76	v
87	57	W	119	77	w
88	58	X	120	78	x
89	59	Y	121	79	y
90	5A	Z	122	7A	z
91	5B	[	123	7B	{
92	5C	\	124	7C	
93	5D	}	125	7D	}
94	5E	^	126	7E	~
95	5F	-	127	7F	DEL

## Table-Hex HEXADCIMAL



1



A



2



B



3



C



4



D



5



E



6



F



7



8



Confirm configuration



9



End Configuration



0

## Function Key Table

	0	1
0	NULL	
1	UP	F1
2	DOWN	F2
3	LEFT	F3
4	RIGHT	F4
5	PAGE UP	F5
6	PAGE DOWN	F6
7		F7
8	BS	F8
9	TAB	F9
A		F10
B	HOME	ESC
C	END	F11
D	ENTER	F12
E	INSERT	
F	DELETE	

**NEXA**



**DEFAULT**



**CHECK VERSION**

Version: 2.0



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