

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

- (1) Scan Start Configuration
- (2) Scan all necessary labels for parameters that meet your applications.
- (3) Scan End Configuration to end the programming.



Start configuration



End configuration



Standard Product Defaults Setting



Check Version

An asterisk (*) next to an option indicate the default 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 _i 64H)



Start configuration



End configuration

ITEM	OPTION
Terminator	 None
	 * CR
	 Tab
	 ESC
	 CR + LF
Block transmission delay (Default : 00)	 Ref: Appendix (00j 0AH)
Keyboard Speed (Default 00: high clock rate)	 Ref: Appendix (00j 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
<p>Inter-character delay (Default : 00)</p>	 Ref: Appendix (00j 64H)
<p>Block transmission delay (Default : 00)</p>	 Ref: Appendix (00-0AH)
<p>Response delay (Default : 00)</p>	 Ref: Appendix (00-0AH)
<p>HANSHAKING</p>	 * 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/LED Always On
	 Continuous /No Trigger
	 Flash
	 Reserved 1







2.3 Beeper tone selection



Start configuration



End configuration

ITEM	OPTION
<p>Beep Tone (Default : 0AH)</p>	 Ref: Appendix (00-10H)
<p>Beep Sound Duration (Default : 05H)</p>	 Ref: Appendix (00-10H)
<p>Power On Beeper</p>	 * Enable
	 Disable
<p>Beeper</p>	 * 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 $i##i$ as prefix

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

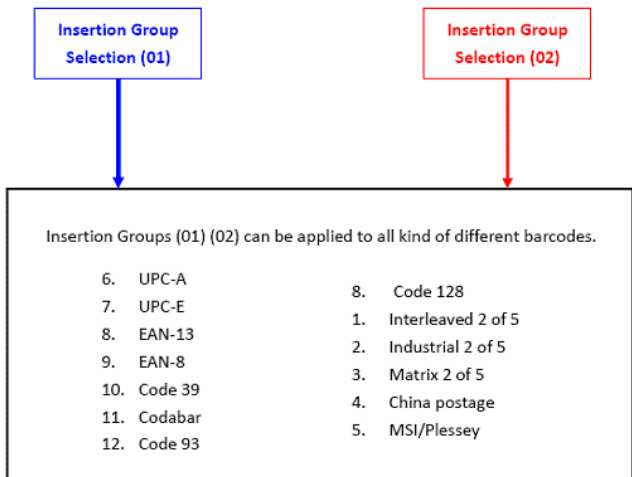
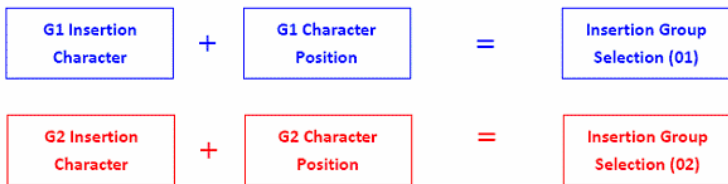
How to set up a suffix?

To configure $i\$\i as suffix

- (1) Start configuration barcode
- (2) Scan Postamble barcode
- (3) Scan $i\$i$ 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:



:

To insert character iA_i 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 $iG1$ Insertion character i
- (3) Scan $i4_i$ and $i1_i$ 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 $iG1$ Character Position i
- (8) Scan $i0_i$ and $i3_i$ 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 i Insert group selection i bar code
- (13) scan $i0_i$ and $i1_i$ 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	 Enable
	 * Disable
Accuracy	 * Read 1 Time
	 Read 2 Times

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	 Disable
	 * Enable
Code ID Setting (Default : F)	 Ref: Appendix (20-7EH)



Start configuration



End configuration


ITEM	OPTION
UPC-A Expand to EAN-13	 * Disable
	 Enable
Check Digit Send	 Disable
	 * Enable
Truncate Leading Zero	 * Disable
	 Enable
Truncate Leading (Default:00)	 Ref: Appendix (00-0DH)
Truncate Ending (Default:00)	 Ref: Appendix (00-0DH)
Insert group selection	 Ref: Appendix (00; 02H)



Start configuration



End configuration

ITEM	OPTION
Supplement digits	 * NONE
	 2 digits
	 5 digits
	 2 or 5 digits




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







3.3 EAN-13



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)



Start configuration



End configuration

ITEM	OPTION
Truncate Ending (Default : 00)	 Ref: Appendix (00-0DH)
Supplement digits	 * None
	 2 digits
	 5 digits
	 2 or 5 digits
ISBN/ISSN Conversion	 * Disable
	 Enable
Insert group selection (Default : 00)	 Ref: Appendix (00-02H)







3.4 EAN-8



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
<p>Truncate Ending (Default : 00)</p>	 Ref: Appendix (00-08H)
<p>Supplement digits</p>	 * None
	 2 digits
	 5 digits
	 2 or 5 digits
<p>Insert group selection (Default : 00)</p>	 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/End transmission	 * Disable
	 Enable



Start configuration



End configuration

ITEM	OPTION
Transmit Start/End Character	 * Disable
	 Enable
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: 00)	 Ref: Appendix (0-3CH)



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)








3.9 Interleaved 2 of 5



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)






3.10 Industrial 2 of 5



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 : 00)	 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)








3.13 MSI/Plessey



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)








3.14 CODE 32



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)






3.15 CODE 11



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)




3.16 Function Key Emulation



Start configuration





























End configuration

ITEM	OPTION
Function Key	 * Disable
	 Enable
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)

 PAGE UP(\$E)	 F5(\$U)
 PAGE DOWN(\$F)	 F6(\$V)
 BS(\$H)	 F7(\$W)
 TAB(\$I)	 F8(\$X)
 HOME(\$K)	 F9(\$Y)
 END(\$L)	 F10(\$Z)
 ENTER(\$M)	 ESC(%A)
 INSERT(\$N)	 F11(%B)
 DELETE(\$O)	 F12(%C)

Appendix A i

Dec	Hex	Char.	Dec	Hex	Char.
0	00	NUL	32	20	SP
1	01	SOH	33	21	!
2	02	STX	34	22	i
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	i
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	i
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



2



3



4



5



6



7



8



9



0



A



B



C



D



E



F



Confirm configuration



End Configuration

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	



DEFAULT



CHECK VERSION

Version: 1.44