

Programming Manual

for barcode scanners

RCE-1000 / RCE-1100

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V.2

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Introduction

Thank you for selecting this laser barcode scanner. This scanner is equipped with the advanced laser optical technology. Morever, it enables lots of barcode decoding settings to meet your applications.

It is easy to change any decoding setting of this scanner. You just need to follow the setup flow chart and scan the required barcodes. Your new settings will be kept in the scanner even after power off. Also, you can change back the factory defaults easily.

Should you have any question in changing the settings, please feel free to contact your supplier.

Scan the barcode below to see the version of your scanner decoder.

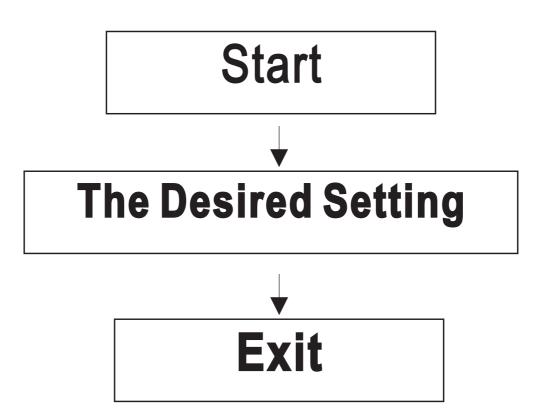
Show the version



Setup Flow Chart

Every time you need to change one of the settings, please follow this flow chart. Scan each required barcode to complete the setting change.

When the setting is successfully changed, you will hear one long and one short beep. When the setting change is not successful, you'll hear 3 short beeps to alert. Then, you need to restart it again.



" DEFAULT " refers to the default setting in this manual.

Set All Defaults

Scan this barcode to erase all your previous settings and to recall back all the default settings.



Keyboard Language

Start



Start

·	9
US English DEFAULT	
French	- DB
German	
United Kingdom	- DD
Japanese	- DE
Dutch	- DF

Exit



Keyboard Language

Start



Start

D	an	is	h



Icelandic



Spanish



Swedish/Finnish



Portuguese



Exit



Keyboard Language

Start



Norwegian



Hungarian



Latin American



Lithuanian



Italian





Belgian

Swiss German

Exit







Intercharacter Delay for Keyboard Wedge

Start



Start

There are 10 options of intercharacter delay and intermessage delay. Use Appendix 2 to input your choice by scanning Optional Barcodes "00" to "09". The Default is "00".

Example: How to set intercharacter delay as 200ms? Scan "Start".→Scan option ★ here.→Scan Optional Barcodes "09" in Appendix 2.→Scan "Exit".

★ Set Intercharacter delay

Option "00" for 50µs; "01" for 1ms; "02" for 5ms; "03" for 10ms; "04" for 20ms; "05" for 30ms; "06" for 40ms; "07" for 50ms;



Set Intermessage delay

Option "00" for 500µs; "01" for 1ms; "02" for 1.5m; "03" for 2ms; "04" for 2.5ms; "05" for 3ms; "06" for 3.5ms; "07" for 4ms;



○ Reserved



Exit



Keyboard Shift, Alt, Ctrl Key Disabled

Start



Start

This scanner ignores keyboard's Alt, Shift, Ctrl key to function unless you change setting to option* here to enable.

★ Disable Shift, Alt, Ctrl to work DEFAULT



Enable Shift, Alt, Ctrl key to work as normal



 Numeric Keypad Select (No-use) DEFAULT



 Numeric Keypad Select (Use)



Exit



Keyboard Function-key Data Unread

Start



Start

If your data contains function-key such as F1, F2 in the keyboard, this scanner will ignore it to read. Please choose option★ here. Then, such kind of data can be read.

★ Disable function-key data to read DEFAULT



Enable function-key data to read



Exit



RS232 Baud Rate

Start



Start

★ 9600 DEFAULT



*****600



• 1200



2400



• 4800



Exit



RS232 Baud Rate

Start



Start

19200



⊙ Reserved 1



○ Reserved 2



○ Reserved 3



⊙ Reserved 4



Exit



RS232 Data Bits & Parity

Start



Start

★ Data 8 bits DEFAULT



◆ Data 7 bits



• Parity none DEFAULT



Parity even



Parity odd



- 1

Exit



Scanning Mode

Start



Start

★ Normal scan DEFAULT

You press the button to turn on laser to scan for a good read. Laser turn off when you release the button or automatically off when a good read.



Laser-always-on scan

Laser keeps on, but you need to press the button to get a read. Laser will auto-turn off if no good read in 2 minutes.



Normal scan with auto-off

The same as normal scan. Moreover, laser will auto-turn off if no good read in 3 seconds.



Testing scan

This is for testing. You press the button to activate laser. When you stay on the button, laser will keep reading until you release the button.



Continuous testing scan

This is for testing. Once you press the button to turn on laser, laser will auto-continuously read. Press the button again to turn laser off.



Exit



Scanning Mode

Start



Start

Continuous scan 1

Once you press the button to activate laser, it will auto-continuously read the next different barcode.

Press the button once to turn laser off.



Continous scan 2

Once you press the button to activate laser, it will auto-continuously read at the set interval.

Press the button again to turn laser off. Or, laser will auto-turn off if no good in 180 seconds.



There are 9 options of interval to set. The default is for 0.4 seconds.

Use Appendix 2 to input your choice by scanning "01" to "09".

Optional Barcode "01" is for interval 0.2 seconds, "02" for 0.4 seconds..., and "09" for 1.8 seconds.

Example: Set interval as 1.8 seconds.

Scan "Start"→Scan Option • here→Scan "0" and then "9" in Appendix 2→Scan "Exit".

ALSO,

There are 9 options to set time for auto-off. The default is for 180 seconds. Laser will trun off if no good read in 180 seconds.

Set time for auto-off

"01" is no auto-off. "02" is for 30 secs.

"03" is for 60 secs. "04" is 120 secs.

"05" is for 180 secs. "06" is 5 mins.

"07" is 10 mins. "08" is 20 mins.

"09" is 30 mins.



Exit



Read Redundancy

Start



Start

★ No redundancy DEFAULT	$\star N$	o re	dund	ancy	DEFAULT
--------------------------------	-----------	------	------	------	---------



Two times redundancy
Data will be decoded 2 times
before it is transmitted to reduce
the probability of reading errors.



• Three times redundancy
Data will be decoded 3 times
before it is transmitted to reduce
the probability of reading errors.



Four times redundancy
 Data will be decoded 4 times
 before it is transmitted to reduce
 the probability of reading errors.



⊙ Reserved



Exit



Buzzer Tone

Start



Start

★ Buzzer tone high &duration long DEFAULT



★ Disable buzzer



Buzzer tone high & duration shortest



Buzzer tone high & duration short



 Buzzer tone medium & duration shortest



Exit



Buzzer Tone

Start



Start

Buzzer tone medium & duration short



Buzzer tone medium & duration long



Buzzer tone low & duration short



Buzzer tone low & duration long



 Enable power-up tone DEFAULT



Exit



Buzzer Tone

Start



Start

Disable power-up tone



○ Reserved 1



○ Reserved 2



⊙ Reserved 3



⊙ Reserved 4



Exit





Start

★ Select normal quiet zone

DEFAULT



★ Select small quiet zone



• Select large quiet zone 1



• Select large quiet zone 2



Exit



String Structure

Start



Start

The structure of scanned data can be programmed. You can add prefix, code ID, suffix or change the terminator as your options. If you need all these options, each scan of data will be transmitted in the following arrangement.

Prefix	Code ID	Scanned Data	Suffix	String Terminator

Exit



Prefix/Suffix

Start



Start

You can input up-to 10 characters as the prefix or suffix of data. Check Appendix 1 for your input character(s). Then, scan the Optional Barcodes in Appendix 2 to input.

Example: Set "AB" as the prefix.

Scan "Start"→Scan "★ Prefix" in this page→Check Appendix 1→Scan "4", "1" and "4", "2" in Appendix 2→Scan "Exit".

	A 1	C 1
4	SAT	nrativ
	OGL	prefix



* Clear prefix



Set suffix



Exit



Prefix/Suffix

Start



Start

Clear suffix



○ Reserved 1



○ Reserved 2



○ Reserved 3



○ Reserved 4



Exit





Start

You can place 1 character in front of the certain code type as its ID. Check Appendix 1 for your input character. Then, scan the Optional Barcodes in Appendix 2 to input. As a result, you can easily tell from different code types by their code IDs.

Example: Set EAN 8's ID as "1".

Scan "Start "→Scan Option "• EAN 8 ". →Check Appendix 1→Scan" 3" and then "1" in Appendix 2. →Scan "Exit".

★ Set EAN 13/UPC A's ID



* Set UPC E's ID



Set EAN 8's ID



Exit





Start

• Set Code 128's ID



• Set Interleaved 2 of 5's ID



• Set Industrial 2 of 5's ID



Set Codabar's ID



• Set Code 39's ID



Exit





Start

• Set Code 93's ID



• Set Code 11's ID



⊙Set all codes' ID

EAN 13/ UPC A= "A"; UPC E= "B"; EAN 8= "C"; Code 128= "D"; Interleaved 2 of 5= "E"; Industrial 2 of 5= "F"; Codabar= "G"; Code 39= "H"; Code 93= "I".



⊙ Clear all codes' ID



⊙ Reserved 1



Exit



String Terminator

Start



Start

★ Select CR as terminator:

DEFAULT

"CR, Carriage Return" will be transmitted at the very end of every string to separate from the next one.



* Select no terminator

Nothing will be transmitted at the very end of the string to separate from the next one.



Select Tab as terminator

"Tab" will be transmitted at the very end of every string to separate from the next one.



Select Esc as terminator

"Esc" will be transmitted at the very end of every string to separate from the next one.



Select Space as terminator

"Space" will be transmitted at the very end of every string to separate from the next one.



Exit



String Case Conversion

Start



Start

★ No case conversio	n DEFAULT
----------------------------	------------------





Conver to upper case



⊙ Reserved 1



⊙ Reserved 2



Exit



Symbology EAN/JAN 13

Start



Start



* Disable



• Enable check character transmission DEFAULT



• Disable check character transmission



 Enable leading digit transmission DEFAULT



Exit



Symbology EAN/JAN 13

Start



Start

•	Disable leading digit
	transmission



 Select EAN/JAN 13 without supplement digit

DEFAULT



 Select EAN/JAN 13 with 2 or 5 supplement digits



Select EAN/JAN 13
 with only 5 supplement
 digits



Select EAN/JAN 13
 with only 2 supplement
 digits



Exit





Start

★ Disable EAN13 to ISBNconversion DEFAULT



Enable EAN 13 to ISBN conversion



Exit



Symbology EAN/JAN 8

Start



Start

★ Enable DEFAULT



Disable



Enable check character transmission DEFAULT



Disable check character transmission



Select EAN/JAN 8 without supplement digit

DEFAULT



Exit



Symbology EAN/JAN 8

Start



Start

Select EAN/JAN 8
 with 2 or 5 supplement
 digits



Select EAN/JAN 8
 with only 5 supplement
 digits



Select EAN/JAN 8
 with only 2 supplement
 digits



Diable EAN 8 expansion

DEFAULT



Enable EAN 8 expansion
 Five zeros will be transmitted in front of the scanned EAN 8 data to expand as EAN 13.



Exit



Symbology UPC A

Start



Start

★ Enable DEFAULT



* Disable



• Enable check character transmission DEFAULT



 Disable check character transmission



 Enable leading digit transmission DEFAULT



Exit



Symbology UPC A

Start



Start

 Disable leading digit transmission



 Select UPC A without supplement digit

DEFAULT



 Select UPC A with 2 or 5 supplement digits



 Select UPC A with only 5 supplement digits



 Select UPC A with only 2 supplement digits



Exit



Symbology UPC E

Start



Start

★ Enable DEFAULT



* Disable



• Enable check character transmission DEFAULT



 Disable check character transmission



 Select UPC E without supplement digit

DEFAULT



Exit



Symbology UPC E

Start



Start

 Select UPC E with 2 or 5 supplement digits



 Select UPC E with only 5 supplement digits



 Select UPC E with only 2 supplement digits



Disable UPC E expansion

DEFAULT



Enable UPC E expansion
 Five Zeros will be transmitted in front of the scanned UPC E data to expand as UPC A.



Exit



Start



Start

★ Select standard ASCII

DEFAULT



* Select full ASCII



Disable start/end character
 transmission DEFAULT



 Enable start/end character transmission



 Disable check character verification DEFAULT



Exit



Start



Start

 Enable check character verification



 Disable check character transmission DEFAULT



 Enable check character transmission



Set Min. length
You can set Min. length

You can set Min. length from 1 to 99 digits. The default is for 3 digits. Scan "Start"→Scan option "• Set Min. length" here→Scan "01" to "99" in Appendix 2 →Scan "Exit".



Set Max. length

You can set Max. length from 1 to 99 digits. The default is for 99 digits. Scan "Start"→Scan Option "• Set



Max.

Length" here -> Scan "01" to "99" in

Exit



Symbology Interleaved 2 of 5

Start



Start

\bigstar	Ena	ble
------------	-----	-----



* Disable DEFAULT



 Disable check character verification DEFAULT



 Enable check character verification



 Disable check checksum transmission DEFAULT



Exit



Symbology Interleaved 2 of 5

Start



Start

 Enable check character transmission



• User define 3 sets available



Set Min. length
 You can set Min. length

You can set Min. length from 1 to 99 digits. The default is for 3 digits. Scan "Start"→Scan option "• Set Min. length" here→Scan "01" to "99" in Appendix 2 →Scan "Exit".



Set Max. length

You can set Max. length from 01 to 99 digits. The default is for 99 digits. Scan "Start"→Scan Option "• Set Max. Length" here →Scan "01" to "99" in Appendix 2 →Scan "Exit".



⊙ Reserved



E x i t



Symbology Industrial 2 of 5

Start



Start

★ Enat	ole
---------------	-----



* Disable DEFAULT



 Disable check character verification DEFAULT



 Enable check character verification



 Disable check character transmission DEFAULT



Exit



Symbology Industrial 2 of 5

Start



Start

 Enable check character transmission



 User define 3 sets available



Set Min. length

You can set Min. length from 1 to 99 digits. The default is for 3 digits. Scan "Start"→Scan option "• Set Min. length" here →Scan "01" to "99" in Appendix 2 →Scan "Exit".



Set Max. length

You can set Max. length from 01 to 99 digits. The default is for 99 digits. Scan "Start"→Scan option "• Set Max. length" here →Scan "01" to "99" in Appendix 2 →Scan "Exit".



⊙ Reserved



Exit



Start



Start

★ Enable Default	- OB
* Disable	- OA
Set Min. length	

Set Min. length
You can set Min. length from 1 to
99 digits. The default is for 3 digits.
Scan "Start"→Scan option " Set Min.
length" here →Scan "01" to "99" in
Appendix 2 → Scan "Exit".



Set wax. length
You can set Max. length from 01 to
99 digits. The default is for 99 digits.
Scan "Start"→Scan option " Set Max.
length" here →Scan "01" to "99" in
Appendix 2 → Scan "Exit".



⊙ Reserved



⊙ Reserved



Exit



Symbology Codabar / NW 7

Start



Start

★ Enal	ble [DEFAULT
---------------	-------	---------



Disable



• Disable start/end character transmission DEFAULT



 Enable start/end character transmission



 Select transmission type of start/end character: ABCD → ABCD



Exit



Symbology Codabar/NW 7

Start



Start

•	Select transmission type of
	start/end character:
	ABCD → TN*E



 Select transmission type of start/end character: abcd → abcd

 Select transmission type of start/end character: abcd → tn*e



○ Reserved 1



⊙ Reserved 2



Exit



Start



Start

★ Enable DEFAULT



Two of Check (Enable) DEFAULT



⋆ Disable



One of Check(Enable)



Disable full ASCII DEFAULT



Trans Check Char(Disable) DEFAULT



Enable full ASCII



• Trans Check Char(Enable)



Number of Check(Disable)



○ Reserved 1



Exit



Start



Start

★ Enable DEFAULT



Trans Check Char(Disable) DEFAULT



* Disable



Trans Check Char(Enable)



Two of Check Char(Enable) DEFAULT



• Set Min. Length



Number of Check Char(Disable)



Set Max. Lenth



One of Check Char(Enable)



⊙ Reserved 1



Exit



Italian Pharma Code (Code C32) Function



START START



-JO

Disable C32 Pharma (Default)



-JP

Enable C32 Pharma



Code39 Disable



Code39 Enable (Default)



EXIT

HEX / ASCII Table

How to use this HEX/ASCII table?

If you need to input "1" for your setting, please check the table below to see which 2 characters you need. In this case, you need "• " and "1". Then, scan Optional Barcode "3" first and

Optional Barcode "1" second. Optional Barcodes are listed in Appendix 2.

First

Another Example:

"A" = HEX" and "1"

	For RS232		For Keyboard Wedge							
	→	*	→	*	*					
0	NUL	DLE	INS	F2	SPACE		(a)	Р	`	р
1	SOH	DC1	DEL	F3	!	(1)	A	Q	а	q
ond 2	STX	DC2	NumLock	F4	11	2	В	R	b	r
3	ETX	DC3	CTRL (L)	F5	#	3	С	S	С	S
4	EOT	DC4	CTRL (R)	F6	\$	4	D	Т	d	t
5	ENQ	NAK	Home	F7	%	5	Е	U	е	U
6	ACK	SYN	End	F8	&	6	F	V	f	V
7	BEL	ETB	Arrow (L)	F9	ı	7	G	W	g	W
8	BS	CAN	BS	F10	(8	Н	Χ	h	Χ
9	HT	EM	Tab	F11)	9		Υ	i	У
A	LF	SUB	Page Up	F12	*	:	J	Z	i	Z
B	VT	ESC	Page Dow	1 ESC	+	,	K		k	{
C	FF		Caps Lock	Shift (L)	,	<	L	\		
D	CR	GS	CR	Shift (R)	-	=	M]	m	}
E	SO	RS	Arrow (R)	Alt (L)		>	Ν	٨	n	~
F	SI	US	F1	Alt (R)	/	?	0	_	0	

Optional Barcode

