G1-G6 & C1-C2 & FN1 substitution string setting

Format of barcode data transmission

Prefix	Code name	Preamble	Code ID	Code length	Code data	Code ID	Postamble	Suffix

Suffix string setting: The <enter > key is represented in different ASCII when it is applied by different OS. For a Windows/DOS OS, <enter> is represented as <CR><LF> (0x0D 0x0A); for an Apple MAC OS, <enter> is represented as <CR> (0x0D); for a Linux/Unix OS, <enter> is represented as <LF> (0x0A).

**Prefix/Suffix string setting:** & **Preamble/Postamble string setting:**

They are appended to the data automatically when a barcode is decoded.

Example: Add a symbol of "$" as a prefix for all symbols.

Steps:

1) Scan SETUP and Prefix string setting barcode.

2) Use the ASCII table to find the value of $→24.

3) Scan 2 and 4 from the barcode on the foldout back page.

4) Scan END barcode.

Scanning steps: Scan the following barcodes in order.
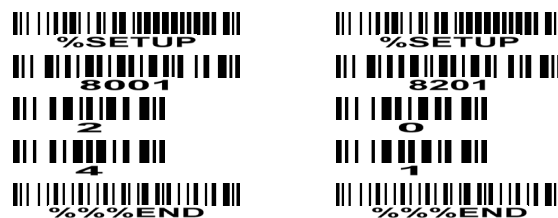
Insert G1/G2/G3/G4 string setting: The scanner offers 4 positions and 4 character strings to insert among the symbol.

Example: Set G1 string to be "AB".

Original code data	"1 2 3 4 5 6"
Output code data	"1 2 A B 3 4 5 6"

Steps:
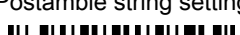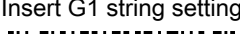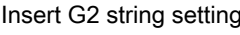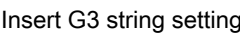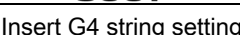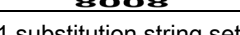
1) Scan SETUP and Insert G1 string setting barcode "8005".

2) Use the ASCII table to find the value of A→41, B→42.

3) Scan 4, 1 and 4, 2 from the barcode on the foldout back page.

4) Scan END barcode.

5) Refer to the chapter of G1-G4 string position & Code ID position.

6) Refer to the chapter of Hand-held scan & some global settings.

Testing barcode:

123456

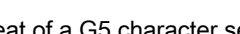| Option bar code	Option	Alpha. entry
Prefix string setting 8001	0-22 characters None	00-FF$_{16}$ 00*
Suffix string setting 8002	0-22 characters <ENTER>	00-FF$_{16}$ 0D0A*
Preamble string setting 8003	0-22 characters None	00-FF$_{16}$ 00*
Postamble string setting 8004	0-22 characters None	00-FF$_{16}$ 00*
Insert G1 string setting 8005	0-22 characters None	00-FF$_{16}$ 00*
Insert G2 string setting 8006	0-22 characters None	00-FF$_{16}$ 00*
Insert G3 string setting 8007	0-22 characters None	00-FF$_{16}$ 00*
Insert G4 string setting 8008	0-22 characters None	00-FF$_{16}$ 00*
FN1 substitution string setting 8009	0-4 characters <SP>	00-FF$_{16}$ 20*
Truncate leading G5 string setting 8010	A un-defined character 1-22 defined characters <0>	00 01-7F$_{16}$ 30*
Repeat of a G5 character setting 8011	Once Defined times Un-defined times (All)	01* 01-22 FF
Truncate ending G6 string setting 8012	A un-defined character 1-22 defined characters <0>	00 01-7F$_{16}$ 30*
Repeat of a G6 character setting 8013	Once Defined times Un-defined times (All)	01* 01-22 FF
Single character C1 replacement 8014	<0000>	0000* 0000-FFFF$_{16}$
Single character C2 replacement 8015	<0000>	0000* 0000-FFFF$_{16}$

%%%END END

String transmission

Note: The information in this chapter is closely related to the chapter of String setting.

Format of barcode data transmission

Prefix	Code name	Preamble	Code ID	Code length	Code data	Code ID	Postamble	Suffix

Prefix transmission: By setting Enable, prefix will be appended before the data transmitted.

Suffix transmission: By setting Enable, suffix will be appended after the data is transmitted.

Code name transmission: By setting Enable, code name will be transmitted before code data.

Preamble transmission: By setting Enable, preamble will be appended before the data transmitted.

Postamble transmission: By setting Enable, postamble will be appended after the data is transmitted.

Code ID transmission: Code ID can be transmitted in the format of either Proprietary ID or AIM ID. Refer to the chapter of Default setting for each barcode.

Code length transmission: The length of code data string can be transmitted before the code data when Enable is selected. The length is represented by a number with two digits.

Case conversion: The characters within code data or the whole output string can be set in either upper case or lower case.
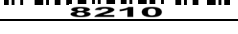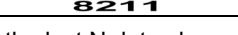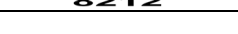
FN1 substitution transmission: The scanner supports a FN1 substitution feature for keyboard wedge, USB and RS-232 interface. The replacement string of FN1 can be chosen by user (see chapter of G1-G6 & FN1 substitution string setting).

All-non-printable-character string transmission with string setting: By setting enable, all string settings, e.g. Preamble transmission or Insert G1 string setting, are active for an all-non-printable-character string. Here a non-printable character means a character with ASCII value between 0x00 to 0x1F.

Transmit the first N data characters only: The scanner supports to only transmit the first N data characters of a barcode. The number of N can be set as a digit between 1 and 99.

Transmit the last N data characters only: The scanner supports to only transmit the last N data characters of a barcode. The number of N can be set as a digit between 1 and 99.

Option bar code	Option	Alpha. entry
Prefix transmission ‖‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖‖ ‖‖‖ 8201	Disable	00*
	Enable	01
Suffix transmission ‖‖ ‖‖‖‖‖‖‖‖‖‖ ‖‖ ‖‖‖ 8202	Disable	00
	Enable	01*
Code name transmission ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ 8203	Disable	00*
	Enable	01
Preamble transmission ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ 8204	Disable	00*
	Enable	01
Postamble transmission ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ 8205	Disable	00*
	Enable	01
Code ID transmission ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖ ‖‖‖ 8206	Disable	00*
	Proprietary ID	01
	AIM ID	02
Code length transmission ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖ ‖‖‖ 8207	Disable	00*
	Enable	01
Case conversion ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ 8208	Disable	00*
	Upper (data only)	01
	Lower (data only)	02
	Upper (whole string)	03
	Lower (whole string)	04
FN1 substitution transmission ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ 8209	Disable	00*
	Keyboard wedge/USB	01
	RS-232	02
	Keyboard wedge/USB/RS-232	03
All-non-printable-character string transmission with string setting ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖‖‖ 8210	Disable	00*
	Enable	01
Transmit the first N data characters only ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖‖‖ ‖ ‖‖‖ 8211	All	99*
	01-99	01-99
Transmit the last N data characters only ‖‖ ‖‖‖‖‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ 8212	All	99*
	01-99	01-99

‖‖ ‖ ‖‖‖‖‖‖ ‖‖‖ ‖‖ ‖‖‖‖ ‖‖‖‖ ‖‖‖ %%%END END

Test Chart

UPC-A

6 59871 23231 9

UPC-E

0 232310 7

EAN-8

0123 4510

EAN-13

1 234567 891019

Code 39

0189-.+$AZ

Code 32

A908765439

Code 128

01AZ[+-*/]za98

Interleaved 2 of 5

0123456789

Industrial 2 of 5
(Default setting: Read disable)

0123456789

Matrix 2 of 5

9876543210

Code 93

01AZ+-/*az89

UCC/EAN 128

01AZ[}+-az54

Code 11
(Default setting: Read disable)

123456789-0

MSI/Plessey

0123456789

UK/Plessey

01ABEF89

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GS1 DataBar Expanded

Ab_09+yZ

ASCII Table

H L	for keyboard wedge		for RS-232	
	0	1	0	1
0	Null		NUL	DLE
1	Up	F1	SOH	DC1
2	Down	F2	STX	DC2
3	Left	F3	ETX	DC3
4	Right	F4	EOT	DC4
5	PgUp	F5	ENQ	NAK
6	PgDn	F6	ACK	SYN
7		F7	BEL	ETB
8	Bs	F8	BS	CAN
9	Tab	F9	HT	EM
A		F10	LF	SUB
B	Home	Esc	VT	ESC
C	End	F11	FF	FS
D	Enter	F12	CR	GS
E	Insert	Ctrl+	SO	RS
F	Delete	Alt+	SI	US

Notes: The 2nd and the 3rd columns above are used for keyboard wedge only.

H L	2	3	4	5	6	7
0	SP	0	@	P	`	p
1	!	1	A	Q	a	q
2	"	2	B	R	b	r
3	#	3	C	S	c	s
4	$	4	D	T	d	t
5	%	5	E	U	e	u
6	&	6	F	V	f	v
7	'	7	G	W	g	w
8	(	8	H	X	h	x
9	)	9	I	Y	i	y
A	*	:	J	Z	j	z
B	+	;	K	[	k	{
C	,	<	L	\	l		
D	-	=	M	]	m	}
E	.	>	N	^	n	~
F	/	?	O	_	o	DEL

Example: ASCII "A" = "41".

Barcode representing non-printable character

Notes to make the following barcode:

1. According to different barcode printing software, the method of printing following barcode is different.

2. If using CODESOFT software, firstly read the information through "Help→Index→Code128→Special input syntax".   Also refer to ASCII table.   For example, if we wish to make "F1" barcode, select "code128", then select "CODE A" type, and input "{DOC1}" as data.

Up ↑	**Down ↓**
Left ←	**Right →**
Page Up	**Page Down**
Backspace	**Tab**
Home	**End**
Enter	**Insert**
Delete	**F1**
F2	**F3**
F4	**F5**
F6	**F7**
F8	**F9**
F10	**Esc**
F11	**F12**

Configuration alphanumeric entry barcode

```
||| |▌||▌|| |||
      0
```

```
||| |▌|▌||▌| |||
          1
```

```
||| |▌|▌||▌| |||
     2
```

```
||| |▌▌|▌||▌ |||
          3
```

```
||| |▌|▌▌|| |||
     4
```

```
||| |▌||▌▌| |||
          5
```

```
||| |▌▌|▌▌▌ |||
     6
```

```
||| ▌▌▌▌||| |||
          7
```

```
||| ▌▌|▌||| |||
     8
```

```
||| ▌|▌▌||| |||
          9
```

```
||| || ▌|▌|| |||
      A
```

```
||| | ▌▌|| |▌ |||
          B
```

```
||| || ▌▌| | |||
      C
```

```
||| || |▌|▌ | |||
          D
```

```
||| | ▌|▌|▌ ||| |||
      E
```

```
||| | | ▌▌| | |||
          F
```