TR-UM006

Tera

Model: 8100 / HW0002 / HW0008

Barcode Scanner

User Manual

Ver.01.2.02

Newer & Multilingual User Manual online:
https://www.tera-digital.com

About This Manual

An asterisk (*) next to an option indicates the default setting.

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 barcodes in this manual.

Note: If there is no further setting command within 20 seconds, the scanner will automatically exit the programming mode.

For correct and effective use of the product, please read this manual carefully and do not scan configuration barcodes at random. Some settings would otherwise be temporarily unavailable.

The scanner’s keyboard layout default is a US keyboard.

Please do not hesitate to contact us if you have any questions.

Important Notice:
Please include your Order Number and Product Model Number in the email.

Official Customer Service

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User manuals are available in Spanish, French, Italian and German, and can be downloaded from our website. You may visit our official website via the link below or by scanning the given QR code:
https://www.tera-digital.com

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Real Time Mode*

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Storage Mode

Upload All Stored Codes

Upload Total Records

Clear All Stored Codes

Power Timeout Timer

1 min

5 mins

10 mins

30 mins

Never

Immediately

Communications & Pairing

USB-COM/Virtual Serial Port

USB-COM

2.4Ghz Wireless Pairing

When connected successfully, the scanner is able to scan barcodes into text fields.

Step 1: Scan the “2.4G Mode” barcode.

Note: The scanner will connect to the previously paired USB receiver in preference.

2.4G Mode

Step 2: Scan the “Pairing” barcode to get the scanner ready for pairing, with the LED indicator flashing rapidly.

Pairing

Step 3: Plug in the USB receiver and wait till the scanner emits a beep and the LED indicator turns into solid blue, indicating the pairing has succeeded.

Note: A double press on the trigger or not detecting any pairing requests within 1 min will cause the scanner to exit pairing when the scanner is in pairing state.

Bluetooth HID Pairing (Bluetooth settings not available on HW0008.)

Step 1: Scan the “Bluetooth HID” symbol.

Note: The scanner will connect to the previously paired Bluetooth device in preference.

Bluetooth HID

Step 2: Scan the “Pairing” symbol, the LED indicator flashing blue.

Pairing

Step 3: Enable Bluetooth on your device and locate a device named “Bar-Code Scanner HID”

Step 4: Tap/Click “BarCode Scanner HID” to pair it with your device.

Step 5: The scanner beeps once and the LED turns to solid blue, indicating the pairing has succeeded.

Note: A double trigger press or not detecting any pairing requests within 1 min will cause the scanner to exit pairing when the scanner is in pairing state.

Bluetooth SPP Pairing

This connection mode only works with applications designed for SPP purpose. If you are not familiar with Bluetooth SPP, please use Bluetooth HID.

Step 1: Scan the “Bluetooth SPP” symbol.

To continue pairing the scanner with your device, launch a specifically designed application (can be downloaded from application store).

Bluetooth SPP

Step 2: Locate a device named “BarCode Scanner SPP” in the application.

Step 3: Tap/click “BarCode Scanner SPP” to pair it with your device.

Step 4: The scanner beeps once and the LED turns to solid blue, indicating the pairing has succeeded.

Bluetooth BLE Pairing

This connection mode only works with applications designed for BLE purpose. If you are not familiar with Bluetooth BLE, please use Bluetooth HID.

Step 1: Scan the “Bluetooth BLE” barcode.

To continue pairing the scanner with your device, launch a specifically designed application (can be downloaded from application store).

Bluetooth BLE

Step 2: Locate a device named “BarCode Scanner BLE” in the application.

Step 3: Tap/click “BarCode Scanner BLE” to pair it with your device.

Step 4: The scanner beeps once and the LED turns to solid blue, indicating that the pairing has succeeded.

Bluetooth Settings

Hold the trigger for 8s to get the scanner ready for Bluetooth HID pairing

Long press to enter
Bluetooth HID Pairing On

Long press to enter
Bluetooth HID Pairing Off

Virtual HID Keyboard Settings

(For iOS Bluetooth HID only)

Show/hide Keyboard

Double press trigger to show/hide keyboard On

Double press trigger to show/hide keyboard Off

Bluetooth HID Transfer Rate

If the transmitted data gets lost or garbled, try to reduce the transfer rate.

Fast

Medium*

Slow

Ultra-slow

Change Bluetooth Name

How to Change Bluetooth Name
Step 1: Scan the “Customize Bluetooth Name” symbol.

Customize Bluetooth Name

Step 2: Scan the barcode that contains characters desired. (Users need to generate a barcode that contains characters desired.)

Note: The default name is BarCode Scanner. The target characters selected will be the new Bluetooth Name when the setting is done.
a) The maximum configuration of Bluetooth Name is 16 characters. If inputted characters are more than 16 characters, the scanner picks up the first 16 characters as the new Bluetooth name.
b) Structure of Bluetooth Name: Bluetooth Name + Bluetooth Profile. Users can only modify the name but not the profile.

Keyboard Country Layout

By default, the keyboard layout is a US keyboard. To change this layout, scan the appropriate country code below to program the keyboard for your country or language.


United States


Germany


France


Spain


Italy


Japan


Belgium (French)


Portugal


United Kingdom


German iOS Keyboard


Brazil (Portuguese)


Russia


Czech


Italy 142


Turkey Q


Turkey F


Sweden/ Finland


Mexico (Spanish)


Denmark


Norway (Written)


Croatia/Serbia


Switzerland (German)


Switzerland (French)


Dutch (Netherlands)


Hungary

Poland | Canada (French) | Argentina (Latin) | Slovakia | International keyboard

Keyboard Conversion

Conversion Off *

Convert All Characters to Upper Case

Convert All Characters to Lower Case

Invert Case of All Characters

Replace Group Separators

Step 1: Scan the “Replacement On” barcode below.

Replacement On

Step 2: Refer to the “Appendix ASCII Chart” and scan the appropriate barcode.

For example:

Replace GS character with a printable character |

Step 1: Scan the “Replacement On” barcode.

Step 2: Locate the character | in the ASCII chart and scan the rightmost barcode in the same column.

Don’t Replace Group Separators

Replacement Off

Prefix/Suffix Selections

The maximum size of a prefix/suffix configuration is 32 bytes.

Add a prefix

Step 1: Scan the “Add Prefix” barcode.

Add Prefix

Step 2: Refer to the ASCII chart, locate and scan the barcodes representing desired characters.

For example, add 3 numbers, 7, 8, 9, at the beginning of a barcode ABC123, and get the reading of 789ABC123.

Step 1: Scan the “Add Prefix” barcode.

Step 2: Locate the barcodes representing 7, 8, 9, respectively in the appendix chart and scan the three barcodes in the order in which you want them to output.

Clear Prefixes

Step 1: Scan the “Add Prefix” symbol.

Step 2: Scan the “Exit Programing Mode” symbol in the Appendix

Note: Resetting to wireless factory defaults will remove prefixes and suffixes as well.

Add a suffix

Step 1: Scan the “Add Suffix” barcode.

Add Suffix

Step 2: Refer to the ASCII chart, locate and scan the barcodes representing desired characters.

For example, add 3 characters, X, Y, Z, at the end of a barcode ABC123, and get the reading of ABC123XYZ.

Step 1: Scan the “Add Suffix” barcode.

Step 2: Locate the barcodes representing X, Y, Z, respectively in the appendix chart and scan the three barcodes in the order in which you want them to output.

Clear Suffixes

Step 1: Scan the “Add Suffix” symbol.

Step 2: Scan the “Exit Programing Mode” symbol in the Appendix

Note: Resetting to wireless factory defaults will remove prefixes and suffixes as well.

Drop Characters

The maximum size of this configuration is 16 characters.

Step 1: Scan either the “Drop the first characters” or the “ Drop the last characters” barcode.

Drop the first characters

Drop the last characters

Step 2: Scan the appropriate digit code from the “Appendix – ASCII Chart” depending on your needs.

1 digit

2 digits

3 digits

4 digits

Don’t Drop Characters

Step 1: Scan either the “Drop the first characters” or the “Drop the last characters” barcode.

Step 2: Scan the “Exit Programming Mode” from the Appendix – Enter/Exit Programming Mode.

Resetting to wireless factory defaults will remove these settings as well.

Terminators

Add Carriage Return<CR> (0x0D)*

Add Line Feed<LF> (0x0A)

Add <CR>& <LF> (0x0D,0x0A)

Add Horizontal Tab<HT> (0x09)

None

Timestamp

This selection enables the scanner to add timestamp to any scanned barcodes. Be aware that this function is only available to the scanners whose wireless versions are above 3.0.


Show Current Time


Timestamp Prefix


Timestamp Suffix


No Timestamp

Note: The scanner's time will be restored to the default when the scanner shuts down. To make sure that the timestamp is synchronized with the host PC, a time sync utility is needed. Please contact the customer service for the time sync tool.

Escape Character Sets

This feature is designed to be used in conjunction with the prefix and suffix function. If you need to add control characters (1-31 characters in the ASCII chart) as prefix and/or suffix, you should select an escape character set first. With different character sets, the added characters may vary. By default, the scanner uses escape character set 0. If you simply need to add a printable character (32-127 characters in the ASCII chart) as prefix and/or suffix, just scan the "Add Prefix" or "Add Suffix", and then scan the barcode representing the character needed from the ASCII chart.


Escape Character Set 0*


Escape Character Set 1


Escape Character Set 2


Escape Character Set 3


Escape Character Set 4

Appendix–Enter/Exit Configuration Mode


Enter Configuration Mode


Exit Configuration Mode

Appendix – Control Character Chart

HEX	DEC	ASCII	Set 0	Set 1	Set 2	Set 3	Set 4
01	01	SOH	NULL	Home	Ctrl+A	Alt+001	Numpad Enter
02	02	STX	Ctrl+B	End	Ctrl+B	Alt+002	Cap Lock
03	03	ETX	Ctrl+C	Up Arrow	Ctrl+C	Alt+003	Right Arrow
04	04	EOT	Custom 1*	Down Arrow	Ctrl+D	Alt+004	Up Arrow
05	05	ENQ	Custom 2*	Left Arrow	Ctrl+E	Alt+005	NULL
06	06	ACK	Custom 3*	Right Arrow	Ctrl+F	Alt+006	NULL
07	07	BEL	Custom 4*	Shift+Tab	Ctrl+G	Alt+007	Enter
08	08	BS	Back Space	Back Space	Back Space	Alt+008	Left Arrow
09	09	HT	Tab	Tab	Tab	Alt+009	Tab
0A	10	LF	Enter	Enter	Ctrl+J	Alt+010	Down Arrow
0B	11	VT	NULL	NULL	Ctrl+K	Alt+011	Tab
0C	12	FF	NULL	NULL	Ctrl+L	Alt+012	delete
0D	13	CR	Enter	Enter	Enter	Alt+013	Enter
0E	14	S0	F1	Page Up	Ctrl+N	Alt+014	Insert
0F	15	S1	F2	Page Down	Ctrl+O	Alt+015	Esc
10	16	DLE	F3	F11	Ctrl+P	Alt+016	F11
11	17	DC1	F4	NULL	Ctrl+Q	Ctrl+Q	Home
12	18	DC2	F5	NULL	Ctrl+R	Alt+018	Print Screen
13	19	DC3	F6	NULL	Ctrl+S	Alt+019	Back Space
14	20	DC4	F7	NULL	Ctrl+T	Alt+020	Shift tab
15	21	NAK	F8	F12	Ctrl+U	Alt+021	F12
16	22	SYN	F9	F1	Ctrl+V	Alt+022	F1
17	23	TB	F10	F2	Ctrl+W	Alt+023	F2
18	24	CAN	F11	F3	Ctrl+X	Alt+024	F3
19	25	EM	F12	F4	Ctrl+Y	Alt+025	F4
1A	26	SUB	NULL	F5	Ctrl+Z	Alt+026	F5
1B	27	Esc	Esc	F6	Ctrl+[	Alt+027	F6
1C	28	FS	ALT+028	F7	Ctrl+\	Alt+028	F7

1D	29	GS	ALT+029	F8	Ctrl+]	Alt+029	F8
1E	30	RS	NULL	F9	Ctrl+^	Alt+030	F9
1F	31	US	NULL	F10	Ctrl+_	Alt+031	F10

Note: By default, custom values are null and users can customize the values and save them as custom shortcuts.

Appendix –ASCII Character Chart

HEX	ASCII(DEC)	Char	Symbol
01	01	SOH	
02	02	STX	
03	03	ETX	
04	04	EOT	
05	05	ENQ	
06	06	ACK	
07	07	BEL	

08	08	BS	
09	09	HT	
0A	10	LF	
0B	11	VT	
0C	12	FF	
0D	13	CR	
0E	14	S0	
0F	15	S1	
10	16	DLE	

11	17	DC1	
12	18	DC2	
13	19	DC3	
14	20	DC4	
15	21	NAK	
16	22	SYN	
17	23	TB	
18	24	CAN	
19	25	EM	

1A	26	SUB	
1B	27	Esc	
1C	28	FS	
1D	29	GS	
1E	30	RS	
1F	31	US	
20	32	SP	
21	33	!	
22	34	"	

23	35	#	
24	36	$	
25	37	%	
26	38	&	
27	39	`	
28	40	(	
29	41	)	
2A	42	*	
2B	43	+	

2C	44	,	
2D	45	-	
2E	46	.	
2F	47	/	
30	48	0	
31	49	1	
32	50	2	
33	51	3	
34	52	4	

35	53	5	
36	54	6	
37	55	7	
38	56	8	
39	57	9	
3A	58	:	
3B	59	;	
3C	60	<	
3D	61	=	

3E	62	>	
3F	63	?	
40	64	@	
41	65	A	
42	66	B	
43	67	C	
44	68	D	
45	69	E	
46	70	F	

47	71	G	
48	72	H	
49	73	I	
4A	74	J	
4B	75	K	
4C	76	L	
4D	77	M	
4E	78	N	
4F	79	O	

50	80	P	
51	81	Q	
52	82	R	
53	83	S	
54	84	T	
55	85	U	
56	86	V	
57	87	W	
58	88	X	

59	89	Y	
5A	90	Z	
5B	91	[	
5C	92	\	
5D	93	]	
5E	94	^	
5F	95	_	
60	96	'	
61	97	a	

62	98	b	
63	99	c	
64	100	d	
65	101	e	
66	102	f	
67	103	g	
68	104	h	
69	105	i	
6A	106	j	

6B	107	k	
6C	108	l	
6D	109	m	
6E	110	n	
6F	111	o	
70	112	p	
71	113	q	
72	114	r	
73	115	s	

74	116	t	
75	117	u	
76	118	v	
77	119	w	
78	120	x	
79	121	y	
7A	122	z	
7B	123	{	
7C	124	|	

7D	125	}	
7E	126	~	
7F	127	DEL	
C7	199	Ç	
E7	231	ç	

How to enable the scanner to input special characters

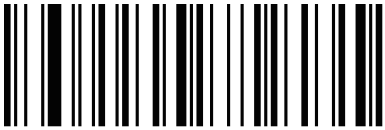
1. Scan the following three configuration codes from left to right.



2. Scan the appropriate keyboard layout code from the Keyboard Country Layout section (page 7).

Chapter 2 General Settings

Factory Default



Reset to Factory Defaults

Check Firmware Version

Show Firmware Version

Lights

Illumination Lights

The white illumination lights are designed to improve scanner performance in dim ambient condition.

Lights On *

Lights Off

Data Format

Character Encoding

ANSI
(MS Notepad, Excel)*

Unicode
(MS Word)

UTF-8

Raw Data

European Single-byte

Centering Window

Centering Off*

Center Only

Video Reverse

Inverse Barcode Settings 1

Regular barcodes: white background and black bars
Inverse barcodes: black background and white bars

Regular Only*

Inverse Only

Both Regular and Inverse

Inverse Barcode Settings 2

All 1D Symbologies
Inverse On

All 1D Symbologies
Inverse Off*

All 2D Symbologies
Inverse On

All 2D Symbologies
Inverse Off*

URL QR Code

URL QR Code On*

URL QR Code Off

Chapter 3 Scanning

Scan Modes

Manual Trigger Mode

Manual Trigger Mode*

Continuous Scan Mode

Continuous Scan Mode

Sensor-activated Mode

Sensor-activated Mode

Sensitivity – Sensor-activated Mode

High*

Medium

Low

Chapter 4 Symbologies

Description

If you want to decode all the symbologies allowable for your scanner, scan the All Symbologies On code. If on the other hand, you want to decode only a particular symbology, scan All Symbologies Off followed by the On symbol for that particular symbology.

Note: Scanner performance may reduce by scanning All Symbologies On. Only scan All Symbologies On when needed.

Overall Settings

All Symbologies On

All Symbologies Off

All 1D Symbologies On

All 1D Symbologies Off

All 2D Symbologies On

All 2D Symbologies Off

UPC-A

On*

Off

UPC-A Check Digit

This selection allows you to specify whether the check digit should be transmitted at the end of the scanned data or not.

On*

Off

UPC-A Addenda

This selection adds 2 or 5 digits to the end of all scanned UPC-A data.

2-digit Addenda On

2-digit Addenda Off*

5-digit Addenda On

5-digit Addenda Off*

UPC-A Addenda Required

When Required is scanned, the scanner will only read UPC-A barcodes with addenda. You must then turn on a 2 or 5 digit addenda listed above.

Required

Not Required*

UPC-A Addenda Separator

When this feature is on, there is a space between the data from the bar code and the data from the addenda. When turned off, there is no space.

On*

Off

UPC-A Number System

The numeric system digit of a U.P.C symbol is normally transmitted at the beginning of the scanned data, but the unit can be programmed so it will not transmit it.

On*

Off

UPC-A converted to EAN-13

When On is selected, UPC-A barcodes are converted to 13-digit EAN-13 codes by adding a zero to the front. When Off is scanned, UPC-A codes are read as UPC-A.


On


Off*

UPC-E0


On*


Off

UPC-E1


On


Off*

UPC-E Check Digit

This selection allows you to specify whether the check digit should be transmitted at the end of the scanned data or not.


On*


Off

UPC-E Addenda

This selection adds 2 or 5 digits to the end of all scanned UPC-A data.


2-digit Addenda On


2-digit Addenda Off*


5-digit Addenda On


5-digit Addenda Off*

UPC-E Addenda Required

When Required is scanned, the scanner will only read UPC-E barcodes with addenda. You must then turn on a 2 or 5 digit addenda listed above.

Required

Not Required*

UPC-E Addenda Separator

When this feature is on, there is a space between the data from the bar code and the data from the addenda. When turned off, there is no space.

On*

Off

UPC-E0 Leading Zero

This feature allows the transmission of a leading zero at the beginning of scanned data. To prevent transmission, scan Off.

On*

Off

UPC-E0 Expand

UPC-E0 Expand expands the UPC-E code to the 12-digit, UPC-A format.

On

Off*

EAN-8

EAN-8 On/Off

On*

Off

EAN-8 Check Digit

Transmit Check Digit*

Don't Transmit Check Digit

EAN-8 Addenda

2-digit Addenda On

2-digit Addenda Off*

5-digit Addenda On

5-digit Addenda Off*

EAN-8 Addenda Required

Required

Not Required*

EAN-8 Addenda Separator

When this feature is on, there is a space between the data from the bar code and the data from the addenda. When turned off, there is no space.

On*

Off

EAN-8 Converted to EAN-13

This selection expands EAN-8 to the 13-digit, EAN-13 format.

On

Off*

EAN-13

EAN-13 On/Off

On*

Off

EAN-13 Check Digit

Transmit Check Digit*

Don't Transmit Check Digit

EAN-13 Addenda

2-digit Addenda On

2-digit Addenda Off*

5-digit Addenda On

5-digit Addenda Off*

EAN-13 Addenda Required

Required

Not Required*

EAN-13 Addenda Separator

When this feature is on, there is a space between the data from the bar code and the data from the addenda. When turned off, there is no space.

On*

Off

ISBN Translate

When On is scanned, EAN-13 symbols are translated into their equivalent ISBN number format.

On

Off*

ISBN Check Digit

Transmit Check Digit

Don't Transmit Check Digit*

ISSN Translate

On

Off*

ISSN On/Off

On

Off*

ISSN Check Digit

Transmit Check Digit

Don't Transmit Check Digit*

Code 128

On*

Off

GS1-128(UCC/EAN 128)


On*


Off

Code 39

Code 39 On/Off


On*


Off

Code 39 Check Character

No Check Character indicates that the scanner reads and transmits barcode with or without a check character. When Check Character is set to Validate and Transmit, the scanner will only read barcodes with a check character, and will transmit this character at the end of the scanned data.


Mod 43, Validate


No Check Character*


Transmit Check Digit


Don't Transmit Check Digit*

Code 39 Start/Stop Characters

Start/Stop characters identify the leading and trailing ends of the barcode. You may either transmit, or not transmit Start/Stop characters.


Transmit


Don't Transmit*

Code 39 Full ASCII

If Full ASCII Code 39 decoding is enabled, certain character pairs within the barcode symbol will be interpreted as a single character.


Full ASCII On


Full ASCII Off*

Code 32 Pharmaceutical（PARAF）

Code 32 Pharmaceutical On/Off

Code 32 Pharmaceutical is a form of the Code 39 symbology used by Italian pharmacies. This symbology is also know as PARAF.

On

Off*

Check Digit

Transmit Check Digit*

Don't Transmit Check Digit

Add Prefix A to Code 32

On

Off*

Code 32 Not Good Read

On*

Off

Note: Being a variant of Code 39, Code 32 may be recognized as Code 39 when Code 32 is disabled and Code 39 is enabled. In this case, the output may be incorrect. If you turn on Code 32 Not Good Read, the scanner will still input the data even if it is wrong; if you disable the feature, the scanner will not scan Code 32 barcodes as well as Code 39 barcodes.

Code 93

On*

Off

Code 11

Code 11 On/Off


On


Off*

Code 11 Check Digits


1 check digit*


2 check digits

Transmit Check Digit


On*


Off

Codabar（NW-7）

Codabar On/Off


On*


Off

Codabar Check Character


No Check Character*


Mod 16, Validate

Transmit Check Digit


On


Off*

Codabar Start/Stop Characters

Start/Stop characters identify the leading and trailing ends of the barcode. You may either transmit, or not transmit Start/Stop characters.

On

Off*

Interleaved 2 of 5

Interleaved 2 of 5 On/Off

On*

Off

Interleaved 2 of 5 Check Character

No Check Character indicates that the scanner reads and transmits barcode with or without a check character. When Check Character is set to Validate and Transmit, the scanner will only read barcodes with a check character, and will transmit this character at the end of the scanned data.

No Check Character*

Mod 10, Validate

Transmit Check Digit

Don't Transmit Check Digit*

Matrix 2 of 5

Matrix 2 of 5 On/Off

On*

Off

Matrix 2 of 5 Check Character


Validate, and Transmit


No Check Character*


Validate, but Don't Transmit

Industrial 2 of 5


On*


Off

Standard 2 of 5(IATA 2 of 5)


On


Off*

MSI Plessey

MSI Plessey On/Off


On


Off*

MSI Plessey Check Character

No Check Character indicates that the scanner reads and transmits barcode with or without a check character. When Check Character is set to Validate and Transmit, the scanner will only read barcodes with a check character, and will transmit this character at the end of the scanned data.


No Check Character*


1 digit Mod 10


2-digit Mod 10


1 digit Mod 10,
1 digit Mod 11


Transmit Check Digit


Don't Transmit Check Digit*

Telepen

Teplepen On/Off

On

Off*

Telepen Output

Numeric

Alphanumeric*

Febraban

Febraban On/Off（ITF25）

On

Off*

Febraban On/Off (Code 128)

On

Off*

Check Character

No Check Character indicates that the scanner reads and transmits barcode with or without a check character. When Check Character is set to Validate and Transmit, the scanner will only read barcodes with a check character, and will transmit this character at the end of the scanned data.

Validate, and Transmit

No Check Character*

GS1 DataBar 14 (RSS-14)

On*

Off

Note: GS1 DataBar 14 is also known as GS1 Databar Omnidirectional, RSS-14

GS1 DataBar Limited（RSS-Limited）


On*


Off

Note: GS1 DataBar Limited is also known RSS-Limited

GS1 DataBar Expanded (RSS-Expanded)


On*


Off

Note: GS1 DataBar Expanded is also known as RSS-Expanded

QR Code

QR Code On/Off


On*


Off

QR Code - Inverse


Regular Only*


Both Regular and Inverse

Micro QR Code

Micro QR Code On/Off


On*


Off

Micro QR Code - Inverse


Regular Only*


Both Regular and Inverse

Data Matrix

Data Matrix On/Off

On*

Off

Data Matrix - Rectangular

On

Off*

Data Matrix - Inverse

Regular Only*

Both Regular and Inverse

PDF 417

On*

Off

MicroPDF417

On

Off*

MaxiCode

On

Off*

Aztec Code

Aztec Code On/Off

On

Off*

Aztec Code - Inverse

Regular Only*

Both Regular and Inverse

GS1 Composite Code

On

Off*

Chapter 5 Data Editing

Code ID Prefix

If you wish to know the type of the barcode being scanned, enable this feature. When this feature is enabled, the scanner will add a letter to the beginning of the barcode data. Refer to the Code ID chart in the appendix section to learn the meaning of the letter.

Off*

On

Insert Characters

The scanner is capable of inserting characters in between any two digits of barcode data. The maximum size of this configuration is 10 characters.

Show Inserted Characters

Hide Inserted Characters*

Insert characters from the X digit

This programming code sets up the position where the command takes effect. Inputted numbers should be between 1 and 255. For example, if you need to insert characters from the 16th digit, scan “0”,”1”, “6”. If you scan “0”, “0”, “0”, the inserted characters will appear at the beginning of the barcode data; if the number of digits inputted is beyond barcode length, the inserted characters will appear at the end of the barcode data. Refer to “Example: Insert Characters” for details.

Insert Characters from the X digit

Select characters to be inserted

After selecting the position where you want to insert the character, you should choose the characters which you want to insert.

Characters to be inserted

Replace Characters

This selection allows the scanner to replace any printable characters with other desired characters.

Refer to “**Example: Replace Characters**” for details.

Characters to be replaced

Target Characters

Note: If you wish to reset the settings, scan Characters to Be Replaced and scan “0”,”0”, “0” from the “Programming Chart” respectively

Appendix – Programming Chart

This chart is used to configure prefix and suffix, message length and other settings with variable values. Be sure to scan Enter/Exit Programming Mode code before scanning numeric codes below and scan Enter/Exit Programming Mode after scanning all the numeric codes needed.


0


1


2


3


4


5


6


7


8


9

Appendix – Enter/Exit Programming Mode

To configure viable parameters like prefix and suffix, message length, you should first scan Enter/Exit Programming Mode, then the desired selections, finally the Enter/Exit Programming Mode again. If you have scanned the Enter/Exit Programming mode and wish to modify other non-variable settings, you need to exit the programming mode and then scan other configuration codes.


Enter/Exit Programming Mode

Appendix - Code ID & AIM ID

Num	Symbology	Code ID	AIM ID	Description
1	Code 128	A	]C0	
2	GS1 128	B	]C1	
3	EAN-8	C	]E4	
4	EAN-8 with Add-on	C	]E3	
5	EAN-13	D	]E0	
6	EAN-13 with Add-on	D	]E3	
7	UPC-E	E	]E0	
8	UPC-E with Add-on	E	]E3	
9	UPC-A	F	]E0	
10	UPC-A with Add-on	F	]E3	
11	UPC-E1	E	]X0	
12	ISBN	d	]E0	
13	Code11	1	]Hm	m: 0,1,3
14	Code39 Base32	f	]X0	
15	Interleaved 2 of 5	G	]Im	m: 0,1,3
16	Industrial 2 of 5	h	]S0	
17	Standard 2 of 5	H	]R0	
18	Code 39	I	]Am	m: 0,1,3,4,
19	Codabar	J	]Fm	m: 0,2,4
20	MSI Plessey	K	]Mm	m: 0,1,2,3,

21	Code 93	L	]G0	
22	GS1 Databar Omnidirectional	M	]e0	
23	GS1 Databar Limited	[	]e0	
24	GS1 Databar Expanded	]	]e0	
25	HongKong 2 of 5(China Post)	P	]X9	
26	Matrix 2 of 5	Q	]X0	
27	PDF417	N	]Lm	m: 0,1,2
28	Micro PDF417	O	]Lm	m: 0,1,2,3,
29	Hanxin	S	]XH	
30	AztecCode	T	]zm	m: 0-9, A-C
31	QR code	U	]Qm	m: 0-6
32	Micro QR	U	]Qm	m: 0-6
33	Data Matrix	V	]dm	m: 0-6
34	Maxi Code	W	]Um	m: 0-3
35	GS1 Composite	M / [/] / …	]e0	
36	Telepen	8	]Bm	m: 0,1,2,4

Note: The Code ID that represents GS1 Composite Code depends on the types of the composite codes.

Appendix –ASCII Character Chart

HEX	ASCII(DEC)	Char
00	00	NUL (Null char.)
01	01	SOH (Start of Header)
02	02	STX (Start of Text)
03	03	ETX (End of Text)
04	04	EOT (End of Transmission)
05	05	ENQ (Enquiry)
06	06	ACK (Acknowledgment)
07	07	BEL (Bell)
08	08	BS (Backspace)
09	09	HT (Horizontal Tab)
0A	10	LF (Line Feed)
0B	11	VT (Vertical Tab)
0C	12	FF (Form Feed)
0D	13	CR (Carriage Return)
0E	14	SO (Shift Out)
0F	15	SI (Shift In)
10	16	DLE (Data Link Escape)
11	17	DC1 (XON) (Device Control 1)
12	18	DC2 (Device Control 2)

13	19	DC3 (XOFF) (Device Control 3)
14	20	DC4 (Device Control 4)
15	21	NAK (Negative Acknowledgment)
16	22	SYN (Synchronous Idle)
17	23	ETB (End of Trans. Block)
18	24	CAN (Cancel)
19	25	EM (End of Medium)
1A	26	SUB (Substitute)
1B	27	ESC (Escape)
1C	28	FS (File Separator)
1D	29	GS (Group Separator)
1E	30	RS (Request to Send)
1F	31	US (Unit Separator)
20	32	SP (Space)
21	33	! (Exclamation Mark)
22	34	" (Double Quote)
23	35	# (Number Sign)
24	36	$ (Dollar Sign)
25	37	% (Percent)
26	38	& (Ampersand)
27	39	` (Single Quote)

28	40	((Right / Closing Parenthesis)
29	41	) (Right / Closing Parenthesis)
2A	42	* (Asterisk)
2B	43	+ (Plus)
2C	44	, (Comma)
2D	45	- (Minus / Dash)
2E	46	. (Dot)
2F	47	/ (Forward Slash)
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	55	7
38	56	8
39	57	9
3A	58	: (Colon)
3B	59	; (Semi-colon)
3C	60	< (Less Than)

3D	61	= (Equal Sign)
3E	62	> (Greater Than)
3F	63	? (Question Mark)
40	64	@ (AT Symbol)
41	65	A
42	66	B
43	67	C
44	68	D
45	69	E
46	70	F
47	71	G
48	72	H
49	73	I
4A	74	J
4B	75	K
4C	76	L
4D	77	M
4E	78	N
4F	79	O
50	80	P
51	81	Q

52	82	R
53	83	S
54	84	T
55	85	U
56	86	V
57	87	W
58	88	X
59	89	Y
5A	90	Z
5B	91	[(Left / Opening Bracket)
5C	92	\ (Back Slash)
5D	93	] (Right / Closing Bracket)
5E	94	^ (Caret / Circumflex)O
5F	95	_ (Underscore)
60	96	' (Grave Accent)
61	97	a
62	98	b
63	99	c
64	100	d
65	101	e
66	102	f

67	103	g
68	104	h
69	105	i
6A	106	j
6B	107	k
6C	108	l
6D	109	m
6E	110	n
6F	111	o
70	112	p
71	113	q
72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w
78	120	x
79	121	y
7A	122	z
7B	123	{ (Left/ Opening Brace)

7C	124	| (Vertical Bar)
7D	125	} (Right/Closing Brace)
7E	126	~ (Tilde)
7F	127	DEL (Delete)

Example: Insert Characters

For example: insert a letter X between the 4th digit and 5th digit of the sample barcode.
First, refer to the “Appendix-ASCII Chart” for the DEC value of number 4 and letter X. We can find that the 3-digit DEC values of the two characters are 004 and 088.

The original data of the sample is 1616abcd. When the setting is done, we get 1616Xabcd.

Step 1: Scan the “Enter/Exit Programming Mode” barcode, the beeper emitting 3 beeps.

Step 2: Scan the “Insert characters from the X digit” barcode.

Step 3: Scan “0”,”0”, “4” from the “Programming Chart” respectively.(Every 3 numbers are regarded as a group and the beeper will beep once, twice, and 3 times on each scan).

Step 4: Scan the “Characters to be inserted” barcode.

Step 5: Scan “0”,”8”, “8” from the “Programming Chart” respectively.(Every 3 numbers are regarded as a group and the beeper will beep once, twice, and 3 times on each scan.)

Step 6: Scan the “Enter/Exit Programming Mode” symbol to save the settings, the beeper emitting 3 beeps.

Step 7: Scan the “Show Inserted Characters” barcode.

Example: Replace characters

For example: Replace 6 in the sample code with letter X.

First, refer to “Appendix – ASCII Chart” for the DEC values of “6” and “X”. We can easily notice that the DEC value for “6” is 054 and the value for “X” is 088.

The original data of the sample is 1616abcd. When the setting is done, we get 1X1Xabcd.

Step 1: Scan the “Enter/Exit Programming Mode” barcode, the beeper emitting 3 beeps.

Step 2: Scan the “Characters to be replaced” symbol.

Step 3: Scan “0”,”5”, “4” from the “Programming Chart” respectively.(Every 3 numbers are regarded as a group and the beeper will beep once, twice, and 3 times on each scan)

Step 4: Scan the “Target Character” symbol.

Step 5: Scan “0”,”8”, “8” from the “Programming Chart” respectively.(Every 3 numbers are regarded as a group and the beeper will beep once, twice, and 3 times on each scan)

Step 6: Scan the “Enter/Exit Programming Mode” symbol to save the settings, the beeper emitting 3 beeps.