Barcode Scanner
User's Guide

Precautions

Please read everything in the manual carefully before using the product described in this manual, and read the following notes carefully in order to ensure that the bar code scanning equipment according to the design indicators of safe use, please carefully keep the instructions, so that the future at any time to check.

1. All software (including firmware) provided to users with barcode scanning equipment is subject to software copyright and protection of the right.
2. Manufacturer retains to improve the stability or other performance of the barcode scanning device, while the software (including firmware) the right to make changes.
3. The contents of this manual are subject to change without notice.
4. The manufacturer is not responsible for any loss or claim arising out of the use of this manual by a third party.
5. Do not throw a barcode scan Equipment , bar code scanning must not be squeezed Equipment . Failure to do so can damage components, abort process execution, lose memory content, or interfere with the normal use of barcode scanning devices.
6. Only use your fingers or blunt objects to operate the switch buttons. Using a pointed object can damage the keys and cause a short circuit in the inner circuit.
7. A sudden change in temperature may result in frosting on the barcode scanning device housing. If you run a barcode scan device at this time, it may affect normal operation. Therefore, care should be taken to avoid possible condensation environments. If condensing frosting occurs, wait until it is completely dry before using the barcode scanning device.

Revision History

Version	Date	Describe
V00	2018-10-20	Initial version
V01	2018-11-20	Remove invalid content
V02	2018-12-15	Remove the hand-scanned phone barcode, add Han XinCode,modify the manual Chinese word description.
V03	2019-03-15	New series of common feature version manual
V04	2019-08-28	Add some suffix samples;add Chinese keyboard
V05	2019-8-31	Format adjustment
V06	2019-11-15	Add configuration method of keyboard operation
V07	2020-2-20	Add the verification setting of matrix25 code; add the setting of UPC-A conversion to EAN_13

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Foreword

Brief Introduction

This manual provides bar code scanning equipment Start-up and configuration instructions, as well as maintenance and customer support information.

Chapter Outline

Chapter 1 Connections and Basic Settings :introduces the method and default settings for bar code scanning devices

Chapter 2 Interface Types : Describes the main configuration of interface types

Chapter 3 Input / Output Settings: Describes Configuration Decoding Success / Failed LED and Buzzer Response

Chapter 4 Data Editing Describes :How to Add Prefix / Suffix

Chapter 5 Code System :Introduces All Code Systems and Configurations Supported by Barcode Scanning Equipment

Chapter 6 Universal Features :provides software version display and factory default configuration codes

Chapter 7 Common Problems and Solutions: List Common Problems and Solutions

Chapter 8 Equipment Maintenance and Customer Service :Introduces Equipment Maintenance and Customer Support Information

Appendix : provides commonly used code charts, etc.

Chapter 1 Connection and Basic Settings

Introduction

The barcode scanner supports three connection methods. Please follow the appropriate connection procedure to connect the barcode scanner.

Unpacking

To open the product packaging, perform the following steps:

- Remove the scanner and its accessories and inspect for damage during shipment.
- Make sure the items in the carton match your order.
- If there are any damaged or missing parts, please contact your supplier for after-sales service

Device Connection

The interface above the host is shown below:



USB USB interface on the host

RS232 RS232 interface on the host

USB Connection

The barcode scanner can be connected to the USB port of your computer.

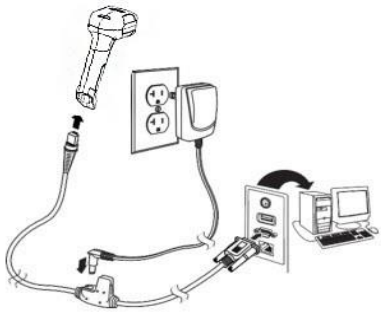
1. Connect the device interface (RJ45 connector) of the USB cable to the device.
2. Connect the host interface (USB interface) of the USB cable to the host.
3. The barcode scanner is humming.
4. Verify the operation by scanning the Sample Symbols at the end of this manual.



RS232 Connection

1. Connect the device interface (RJ45 connector) of the RS-232 cable to the scanner.
2. Connect the host interface (RS-232 interface) of the RS-232 cable to the host.
3. The barcode scanner is humming.
4. Verify the operation by scanning the Sample Symbols at the end of this manual.

The interface is configured for 115,200 baud, 8 data bits, no parity and 1 stop bit.



Barcode Reading

The barcode scanner has a line of sight/point that projects a red aiming beam that corresponds to the horizontal field of view of the barcode scanner. The line of sight/point should be at the center of the barcode, but it can be positioned in any direction to facilitate reading.

Linearbarcode



2D Matrixsymbol



The aiming beam or pattern is smaller when the barcode scanner is closer to the code and larger when it is farther from the code. Symbologies with smaller bars or elements (mil size) should be read closer to the unit. Symbologies with larger bars or elements (mil size) should be read farther from the unit. To read single or multiple symbols (on a page or on an object), hold the barcode scanner at an appropriate distance from the target, press the button, and center the aiming beam or pattern on the symbol. If the code being scanned is highly reflective (e.g., laminated), it may be necessary to tilt the code up 15° to 18° to prevent unwanted reflection.

Defaults Setting

Factory Default Setting

Scan the "**Load Factory Defaults**" barcode below to reset the barcode scanner to the factory default settings.



(800006.)

Load Factory Defaults

Chapter 2 Interface Type

Introduction

This chapter introduces the USB and RS232 interface types and lists their

related configurations.

RS232

Connect RS232 interface, you need to scan the "**RS232**" barcode, the serial port related configuration is: 115200 baud rate, 8 data bits, no parity, 1 stop bit, add carriage return and line feed by default.



(8810010.)
RS232

RS232 Baud Rate

Baud Rate sends the data from the scanner to the terminal at the specified rate. The host terminal must be set for the same baud rate as the scanner. Default =115200.



(8310030.)
300



(8310031.)
600



(8310032.)
1200



(8310033.)
2400



(8310034.)
4800



(8310035.)
9600



(8310036.)
19200



(8310037.)
38400



(8310038.)
57,600



(8310039.)
***115,200**

RS232 Word Length: Data Bits, Stop Bits, and Parity

Data Bits You can choose to transfer 7,8-bit data bits, and you must set the terminal to the same data bit as the barcode scanner to communicate properly. Default = 8.

Stop Bits sets the stop bits at 1 or 2. Default = 1.

Parity provides a means of checking character bit patterns for validity.

Default = None.



(8310063.)
7 Data,1 Stop, Parity Even



(8310060.)
7 Data, 1 Stop , Parity None



(8310066.)
7 Data, 1 Stop, Parity Odd



(8310064.)
7 Data, 2 Stop, Parity Even



(8310061.)
7 Data, 2 Stop Parity None



(8310067.)
7 Data, 2 Stop, Parity Odd



(8310065.)

8 Data, 1 Stop, Parity Even



(8310062.)
*** 8 Data, 1 Stop, Parity None**



(8310068.)
8 Data, 1 Stop, Parity Odd

USB

USB PC Keyboard

Scan one of the following code to program the scanner for USB PC Keyboard .Scanning these code also adds a CR and LF.



（881001124.）

USB Keyboard (PC)

USB Serial

Scan the following code to program the scanner to emulate a regular RS232-based COM Port.



(881001133.)

USB Serial

Note: No extra configuration (e.g., baud rate) is necessary.

Chapter 3 Input/Output Settings

Introduction

This chapter mainly introduces the configuration of the beep and LED of the barcode scanner when it is powered on, decoded, and triggered by the button.

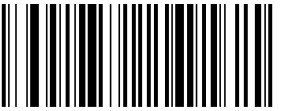
Startup Beeper

The scanner can be programmed to beep when it's started up. Default = Startup Beeper On.



(8410130.)

Startup Beeper Off



（8410131.)

*** Startup Beeper On**

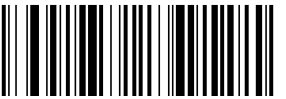
Trigger Click Beeper

To hear an audible click every time the scanner button is pressed, scan the **Trigger Click Beeper On** barcode below. Default = Trigger Click Beeper Off.



(8410140.)

***Trigger Click Beeper Off**



(8410141.)

Trigger Click Beeper On

Good Read and Error Read Indicators

Good Read Beeper

The beeper may be programmed On or Off in response to a good read. Default = Good Read Beeper On.



(8410010.)
Good Read Beeper Off



(8410011.)
*** Good Read Beeper On**

Good Read Beeper Volume

The beeper volume codes modify the volume of the beep the scanner emits on a good read. Default = High.



(8410091.)
Low



(8410092.)
Medium



(8410093.)
*** High**



(8410090.)
Off

Good Read Beeper Frequency

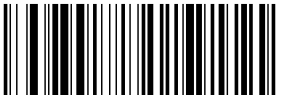
The beeper frequency codes modify the frequency of the beep the scanner emits on a good read. Default = Medium.



(8410061600.)
Low (1600 Hz)



(8410062400.)
*** Medium (2400 Hz)**



(8410064200.)
High (4200 Hz)

Good Read Beeper Duration

The beeper duration codes modify the length of the beep the scanner emits on a good read. Default = Normal .



(8410020.)
*** Normal**



(8410021.)
Short

Error Read Beeper Frequency

The beeper frequency codes modify the frequency of the sound the scanner emits when there is a bad read or error. Default = Razz.



(841007250.)
*** Razz (250 Hz)**



(8410073250.
Medium (3250 Hz)



(8410074200.)
High (4200 Hz)

Good Read LED

The LED indicator can be programmed **On** or **Off** in response to a good read. Default = On.



(8410081.)
*** Good Read LED On**



(8410080.)
Good Read LED Off

Good Read Delay

This sets the minimum amount of time before the scanner can read another barcode. Default = * Short Delay (750 ms)

.



(8510060.)

No Delay



(851006750.)

*** Short Delay (750 ms)**



(8510061000.)

Medium Delay (1,000 ms)



(8510061500.)

Long Delay (1,500 ms)

Chapter 4 Data Editing

Introduction

This chapter describes how to add prefixes and suffixes.

- Default prefix = None. Default suffix = None.
- A prefix or suffix may be added or cleared from one symbology or all symbologies.
- You can add any prefix or suffix from the ASCII Conversion Chart deplus Code I.D. and AIM I.D.
- Enter prefixes and suffixes in the order in which you want them to appear on the output.
- When setting up for specific symbologies (as opposed to all symbologies), the specific symbology ID value counts as an added prefix or suffix character.
- The maximum size of a prefix or suffix configuration is 200 characters, which includes header information.

Add Prefix or Suffix

Step 1. Scan the **Add Prefix** or **Add Suffix** symbol

Step 2. Determine the 2 digit Hex value from the Symbology Chart for the symbology to which you want to apply the prefix or suffix. For example, for Code 11, Code ID is “h” and Hex ID is “68”.

Step 3. Scan the 2 hex digits from the Programming Chart inside the back cover of this manual or scan **9**, **9** for all symbologies.

Step 4. Determine the hex value from the ASCII Conversion Chart , for the prefix or suffix you wish to enter.

Step 5. Scan the 2 digit hex value from the Programming Chart inside the back cover of this manual.

Step 6. Repeat Steps 4 and 5 for every prefix or suffix character.

Step 7. To add the Code I.D., scan **5**, **C**, **8**, **0**.
To add AIM I.D., scan **5**, **C**, **8**, **1**.
To add a backslash (\), scan **5**, **C**, **5**, **C**.

Step 8. Scan **Save** to exit and save, or scan **Discard** to exit without saving.



(889002.)
Add Prefix



(888002.)
Add Suffix



(800002.)
Save



(800000.)
Disgard

Example

Add a Suffix to a specific symbology

To send a CR (carriage return)Suffix for code 128. only:

Step 1. Scan **Add Suffix**.

Step 2. Determine the 2 digit hex value from the Symbology Charts for code 128.

Step 3. Scan **6**, **3** from the Programming Chart inside the back cover of this manual.

Step 4. Determine the hex value from the ASCII Conversion Chart , for the CR (carriage return).

Step 5. Scan **0**, **D** from the Programming Chart inside the back cover of this manual.

Step 6. Scan **Save**, or scan **Discard** to exit without saving.



(888002.)
Add Suffix



(K6K.)
6



(KAK.)
A



(K0K.)
0



(SDS.)
D



(800002.)
Save

To Add a Carriage Return Suffix to All Symbologies

Scan the following barcode if you wish to add a carriage return suffix to all symbologies at once. This action first clears all current suffixes, then programs a carriage return suffix for all symbologies.



(890000.)
Add CR Suffix All Symbologies

To Add a Line Break Suffix to All Symbologies

Scan the following barcode if you wish to add a line break suffix to all symbologies at once. This action first clears all current suffixes, then programs a line break suffix for all symbologies.



(888002990A.)
Add LF Suffix All Symbologies

To Add a Carriage Return &a Line Break Suffix to All Symbologies

Scan the following barcode if you wish to add a carriage return suffix and a line break suffix to all symbologies at once. This action first clears all current suffixes, then programs a carriage return suffix and a line break suffix for all symbologies.



(888002990D0A.)
Add CR and LF Suffix All Symbologies

Keyboard Operation

Different operations can be performed on the keyboard through configuration during decoding output, such as automatic saving after decoding output.
Step 1: determine the hexadecimal value corresponding to the keyboard operation to be performed from the ASCII conversion of keyboard operation, and Determine the 2-digit hexadecimal value of the barcode to be set
Step 2. scan the barcode of "add keyboard operation".
Step 3. Determine the sequence of keyboard operation and barcode output. If keyboard operation is in front, scan "add prefix" barcode, and then scan "add suffix" barcode.
Step 4. Scan the corresponding 4-digit hexadecimal values in the Programming Charts of this manual according to the corresponding hexadecimal values (including barcode type and corresponding keyboard operation)
Step 5. Scan "save" barcode.
Step 6, scan "end adding keyboard operation"



（**8210042**）
Add keyboard operation



（**8210040**）
End adding keyboard operation

Example: add operation that automatic preservation after decoding output for all kinds of barcodes

First, confirm the operation to be performed: save after barcode output, so suffix should be added after output barcode. Then determine the corresponding hexadecimal value according to the table in the appendix,all kinds of barcodes correspond to “9” “9”， The save operation corresponds to “1” “3”。
After confirmation, scan "add keyboard operation" barcode, add suffix barcode, 9, 9, 1, 3, and then scan "save" barcode and “end adding keyboard operation” barcode
(Here "9" and "9" correspond to all coding systems, and "1" and "3" correspond to decoding output and saving)

Clear Prefixes or Suffixes

You can clear a single prefix or suffix, or clear all prefixes/suffixes for a symbology. If you have been entering prefixes and suffixes for single symbologies, you can use **Clear One Prefix (Suffix)** to delete a specific character from a symbology. When you **Clear All Prefixes (Suffixes)**, all the prefixes or suffixes for a symbology are deleted.

Step 1. Scan the **Clear One Prefix** or **Clear One Suffix** symbol.

Step 2. Determine the 2 digit Hex value from the Symbology Charts for the symbology from which you want to clear the prefix or suffix.

Step 3. Scan the 2 digit hex value from the Programming Chart inside the back cover of this manual or scan **9**, **9** for all symbologies.

Step 4. Scan the **Save** symbol.



(889004.)
Clear One Prefix



(888004.)
Clear One Suffix



(800002.)
Save

Prefix Selections



(889002.)
Add Prefix



(889004.)
Clear One Prefix



(889003.)
Clear All Prefixes

Suffix Selections



(888002.)
Add Suffix



(888004.)
Clear One Suffix



(888003.)
Clear All Suffixes

Function Code Transmit

When this selection is enabled and function codes are contained within the scanned data, the scanner transmits the function code to the terminal. Default = Disable.



(8080071.)

***Enable**

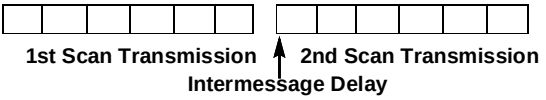


(8080070.)

***Disable**

Intermessage Delay

An intermessage delay of up to 5000 milliseconds (in 5ms increments) may be placed between each scan transmission. Scan the **Intermessage Delay** barcode below, then scan the number of 5ms delays, and the **Save** barcode using the Programming Chart inside the back cover of this manual.





(851004.)

Intermessage Delay

To remove this delay, scan the **Intermessage Delay** barcode, then set the number of delays to 0. Scan the **Save** barcode using the Programming Chart inside the back cover of this manual.

Example: set a bar code **Intermessage Delay** of 100ms:

First scan " **Intermessage Delay** ", then scan "2" "0" from the Programming Chart (100 / 5 = 20), then scan "**save**" barcode.

Chapter 5 Symbologies

Introduction

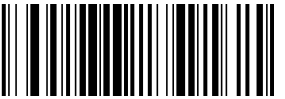
Each type of barcode has its own unique properties. The barcode scanner can be adjusted to accommodate these property changes through the configuration code in this chapter. The fewer the barcode types, the faster the barcode scanner can read. You can disable the barcode scanner to read the barcode types that will not be used to improve the performance of the barcode scanner.

All Symbologies

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



(9990011.)
All Symbologies On



(9990010.)
All Symbologies Off

Note: When **All Symbologies On** is scanned, 2D Postal Codes are not enabled. 2D Postal Codes must be enabled separately.

Message Length Description

You are able to set the valid reading length of some of the barcode symbologies. If the data length of the scanned barcode doesn't match the valid reading length, the scanner will issue an error tone. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length barcode data. This helps reduce the chances of a misread.

EXAMPLE: Decode only those barcodes with a count of 6-10 characters.
Min. length = 06 Max. length = 10

Step 1. Select the barcode symbology to set the maximum reading length or the minimum reading length, scan the **Minimum Message Length** barcode in its catalog, and scan the number "**6**" and "**Save**" barcodes from the Programming Chart .

Step 2. Scan the **Maxmum Message Length** barcode and scan the numbers **1**, **0** barcode and **Save** barcode from the Programming Chart . The above process sets the selected barcode symbology small reading length to 6 and the maximum reading length to 10

EXAMPLE: Decode only those barcodes with a count of 13 characters.
Min. length = 13 Max. length = 13

1D Barcode

If the bar code scanning device needs to decode all the one-dimensional code systems, please scan the bar code of “All 1D Barcode on”. Only solve specific code system, please scan " All 1D Barcode off" .



(9950040.)
All 1D Barcode on



(9950041.)
All 1D Barcode off

2D Barcode

If the bar code scanning device needs to decode all the two-dimensional code systems, please scan the bar code of “All 2D Barcode on”. Only solve specific code system, please scan " All 2D Barcode off"



(9950070.)
All 2D Barcode on



(9950071.)
All 2D Barcode on

Codabar



(900000.)
Default All Codabar Settings

On/Off



(9000031.)
*** On**



(9000030.)
Off

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. Default = Don't Transmit.



(9000061.)
Transmit



(9000060.)
*** Don't Transmit**

Check Character

No Check Character indicates that the scanner reads and transmits barcode data with or without a check character.

When Check Character is set to **Validate and Transmit,** the scanner will only read Codabar barcodes printed with a check character, and will transmit this character at the end of the scanned data.

When Check Character is set to Validate, but Don't Transmit, the unit will only read Codabar barcodes printed with a check character, but will not transmit the check character with the scanned data. Default = No Check Character.



(9000010.)

*** No Check Character**



(9000011.)

Validate but Don't Transmit



(9000012.)

Validate and Transmit

Concatenation

Codabar supports symbol concatenation. When you enable concatenation, the scanner looks for a Codabar symbol having a “D” start character, adjacent to a symbol having a “D” stop character. In this case the two messages are concatenated into one with the “D” characters omitted.



Select Require to prevent the scanner from decoding a single “D” Codabar symbol without its companion. This selection has no effect on Codabar symbols without Stop/Start D characters.



(9000021.)

On



(9000020.)

*** Off**



(9000022.)

Require

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 2-60. Minimum Default = 4, Maximum Default = 60.



(900005.)
Minimum Message Length



(900004.)
Maximum Message Length

Code 39

< Default All Code 39 Settings >



(901000.)
Default All Code *39* Settings

Code 39 On/Off



(9010011.)
*** On**



(9010010.)
Off

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. Default = Don't Transmit.



(9010091.)
Transmit



(9010090.)
*** Don't Transmit**

Check Character

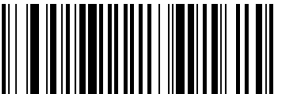
No Check Character indicates that the scanner reads and transmits bar-code data with or without a check character.

When Check Character is set to **Validate, but Don't Transmit**, the unit only reads Code 39 barcodes printed with a check character, but will not transmit the check character with the scanned data.

When Check Character is set to **Validate and Transmit**, the scanner only reads Code 39 barcodes printed with a check character, and will transmit this character at the end of the scanned data. Default = No Check Character.



(9010040.)
*** No Check Character**



(9010041.)
Validate, but Don't Transmit



(9010042.)
Validate and Transmit

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 0-48. Minimum Default = 0, Maximum Default = 48.



(901008.)
Minimum Message Length



(901007.)
Maximum Message Length

Code 39 Append

This function allows the scanner to append the data from several Code 39 barcodes together before transmitting them to the host computer. When the scanner encounters a Code 39 barcode with the append trigger character(s), it buffers Code 39 barcodes until it reads a Code 39 barcode that does not have the append trigger. The data is then transmitted in the order in which the barcodes were read (FIFO). Default = Off.



(9010021.)

On



(9010020.)

*** Off**

Example

After sanning **on** barcode, scan the three bar codes below in order. The barcode scanner does not output any data until the last bar code is scanned. After scanning the **ESS** barcode, the SUCCESS word is output correctly.



SU



CC



ESS

Code 32 Pharmaceutical (PARAF)

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

When you configure code32, you need to turn on code39 before you configure it.



(9010051.)

On



(9010050.)

*** Off**

FULL ASCII

If Full ASCII Code 39 decoding is enabled, certain character pairs within the bar-code symbol will be interpreted as a single character. For example:$V will be decoded as the ASCII character SYN, and /C will be decoded as the ASCII character #. Default = Off.

NUL%U	DLE $P	SP	SPACE	0	0	@	%V	P	P	‘	%W	p	+P
SOH$A	DC1 $Q	!	/A	1	1	A	A	Q	Q	a	+A	q	+Q
STX $B	DC2 $R	“	/B	2	2	B	B	R	R	b	+B	r	+R
ETX $C	DC3 $S	#	/C	3	3	C	C	S	S	c	+C	s	+S
EOT $D	DC4 $T	$	/D	4	4	D	D	T	T	d	+D	t	+T
ENQ $E	NAK $U	%	/E	5	5	E	E	U	U	e	+E	u	+U
ACK $F	SYN $V	&	/F	6	6	F	F	V	V	f	+F	v	+V
BEL $G	ETB $W	‘	/G	7	7	G	G	W	W	g	+G	w	+W
BS $H	CAN $X	(	/H	8	8	H	H	X	X	h	+H	x	+X
HT $I	EM $Y	)	/I	9	9	I	I	Y	Y	i	+I	y	+Y
LF $J	SUB $Z	*	/J	:	/Z	J	J	Z	Z	j	+J	z	+Z
VT $K	ESC %A	+	/K	;	%F	K	K	[	%K	k	+K	{	%P
FF $L	FS %B	,	/L	<	%G	L	L	\	%L	l	+L	|	%Q
CR $M	GS %C	-	/M	=	%H	M	M	]	%M	m	+M	}	%R
SO $N	RS %D	.	/N	>	%I	N	N	^	%N	n	+N	~	%S
SI$O	US %E	/	/O	?	%J	O	O	_	%O	o	+O	DEL	%T

Character pairs /M and /N decode as a minus sign and period respectively.
Character pairs /P through /Y decode as 0 through 9.



(9010031.)
FULL ASCII On



(9010030.)
*** FULL ASCII Off**

Interleaved 2 of 5

< Default All Interleaved 2 of 5 Settings >



(902000.)
Default All Interleaved 2 of 5 Settings

On/Off



(9020021.)
*** On**



(9020020.)
Off

Check Digit

No Check Digit indicates that the scanner reads and transmits barcode data with or without a check digit.

When Check Digit is set to **Validate, but Don't Transmit**, the unit only reads Interleaved 2 of 5 barcodes printed with a check digit, but will not transmit the check digit with the scanned data.

When Check Digit is set to **Validate and Transmit**, the scanner only reads Interleaved 2 of 5 barcodes printed with a check digit, and will transmit this digit at the end of the scanned data. Default = No Check Digit.



(9020010.)
*** No Check Digit**



(9020011.)

Validate, but Don't Transmit



(9020012.)

Validate and Transmit

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 2-80. Minimum Default = 4, Maximum Default = 80.



(902004.)

Minimum Message Length



(902003.)

Maximum Message Length

NEC 2 of 5

< Default All NEC 2 of 5 Settings >



(903000.)

Default All NEC 2 of 5 Settings

On/Off



(9030011.)

*** On**



(9030010.)

Off

Check Digit

No Check Digit indicates that the scanner reads and transmits barcode data with or without a check digit.

When Check Digit is set to **Validate, but Don't Transmit**, the unit only reads NEC 2 of 5 barcodes printed with a check digit, but will not transmit the check digit with the scanned data.

When Check Digit is set to **Validate and Transmit**, the scanner only reads NEC 2 of 5 barcodes printed with a check digit, and will transmit this digit at the end of the scanned data. Default = No Check Digit



(9030020.)

*** No Check Digit**



(9030021.)
Validate, but Don't Transmit



(9030022.)
Validate and Transmit

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 2-80. Minimum Default = 4, Maximum Default = 80.



(903004.)
Minimum Message Length



(903003.)
Maximum Message Length

Code 93

< Default All Code 93 Settings >



(904000.)
Default All Code 93 Settings

On/Off



(9040021.)
*** On**



(9040020.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 0-80. Minimum Default = 0, Maximum Default = 80.



(904004.)
Minimum Message Length



(904003.)
Maximum Message Length

Straight 2 of 5 Industrial (three-bar start/stop)

<Default All Straight 2 of 5 Industrial Settings>



(905000.)

Default All Straight 2 of 5 Industrial (three-bar start/stop)Settings

On/Off



(9050011.)

On



(9050010.)

*** Off**

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-48. Minimum Default = 4, Maximum Default = 48.



(905003.)

Minimum Message Length



(905002.)

Maximum Message Length

Straight 2 of 5 IATA (two-bar start/stop)

<Default All Straight 2 of 5 IATA Settings>



(906000.)

Default All Straight 2 of 5 IATA (two-bar start/stop)Settings

On/Off



(9060011.)

On



（9060010.）

Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-48. Minimum Default = 4, Maximum Default = 48.



(906003.)

Minimum Message Length



(906002.)

Maximum Message Length

Matrix 2 of 5

<Default All Matrix 2 of 5 Settings>



(907000.)
Default All Matrix 2 of 5 Settings

On/Off



(9070011.)
On



(9070010.)
*** Off**

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-80. Minimum Default = 4, Maximum Default = 80.



(907003.)
Minimum Message Length



(907002.)
Maximum Message Length

Check

Scan the barcode below to enable or disable the check function of matrix25.



(9070051.)
Enable Check Function



(9070050.)
Disable Check Function

Code 11

<Default All Settings>



(908000.)

Default All Code 11 Settings

On/Off



(9080021.)

On



(9080020.)

*** Off**

Check Digits Required

This option sets whether 1 or 2 check digits are required with Code 11 barcodes. Default = Two Check Digits.



(3110280.)

One Check Digit



(3110281.)

*** Two Check Digits**

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-80. Minimum Default = 4, Maximum Default = 80.



(908004.)

Minimum Message Length



(908003.)

Maximum Message Length

Code 128

<Default All Code 128 Settings>



(909000.)
Default All Code 128 Settings

On/Off



(9090011.)
*** On**



(9090010.)
Off

ISBT 128 Concatenation



(9020051.)
ISBT 128 On



(9020050.)
***ISBT 128 Off**

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 0-80. Minimum Default = 0, Maximum Default = 80.



(909003.)

Minimum Message Length



(909002.)

Maximum Message Length

GS1-128

<Default All GS1-128 Settings>



(910000.)
Default All GS1-128 Settings

On/Off



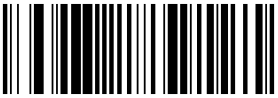
(9100011.)
*** On**



(9100010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-80. Minimum Default = 1, Maximum Default = 80.



(910003.)
Minimum Message Length



(910002.)
Maximum Message Length

Telepen

<Default All Telepen Settings>

(911000.)
Default All Telepen Settings

On/Off

(9110011.)
On

(9110010.)
*** Off**

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-60. Minimum Default = 1, Maximum Default = 60.

(911003.)
Minimum Message Length

(911002.)
Maximum Message Length

UPC-A

<Default All UPC-A Settings>



(912000.)
Default All UPC-A Settings



(9120031.)
*** On**



(9120030.)
Off

Check Digit

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



(9120041.)
*** On**



(9120040.)
Off

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. Default = On.



(9120051.)

*** On**



(9120050.)

Off

Addenda

This selection adds 2 or 5 digits to the end of all scanned UPC-A data. Default = Off for both 2 Digit and 5 Digit Addenda.



(9120011.)

2 Digit Addenda On



(9120010.)

*** 2 Digit Addenda Off**



(9120021.)

5 Digit Addenda On



(9120020.)

*** 5 Digit Addenda Off**

Addenda Required

When **Required** is scanned, the scanner will only read UPC-A barcodes that have addenda. You must then turn on a 2 or 5 digit addenda. Default = Not Required.



(9120061.)
Required



(9120060.)
*** Not Required**

Addenda Separator

When this feature is on, there is a space between the data from the barcode and the data from the addenda. When turned off, there is no space. Default = On.



(9120071.)
*** On**



(9120070.)
Off

Note

Scan the barcode below to convert UPC-A to EAN_13 or not.



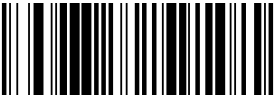
(9120111.)
Convert



(9120110.)
Not convert

UPC-E0

<Default All UPC-E Settings>



(914000.)

Default All UPC-E0 Settings

On/Off

Most U.P.C. barcodes lead with the 0 number system. To read these codes, use the ***UPC-E0 On** selection. If you need to read codes that lead with the 1 number system, use UPC-E1. Default = On.



(9140101.)

*** UPC-E0 On**

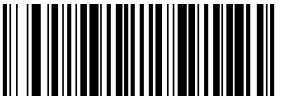


(9140100.)

UPC-E0 Off

Expand

UPC-E Expand expands the UPC-E code to the 12 digit, UPC-A format. Default = Off.



(9140021.)
On



(9140020.)
*** Off**

Addenda Required

When **Required** is scanned, the scanner will only read UPC-E barcodes that have addenda. Default = Not Required.



(9140031.)
Required



(9140030.)
*** Not Required**

Addenda Separator

When this feature is On, there is a space between the data from the barcode and the data from the addenda. When turned Off, there is no space. Default = On



(9140041.)
*** On**



(9140040.)
Off

Check Digit

Check Digit specifies whether the check digit should be transmitted at the end of the scanned data or not. Default = On.



(9140051.)

***On**



(9140050.)
Off

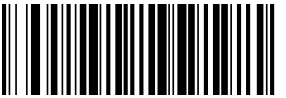
Number System

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. To prevent transmission, scan **Off**. Default = On.



(9140061.)

*** On**



(9140060.)

Off

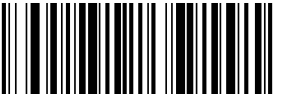
Addenda

This selection adds 2 or 5 digits to the end of all scanned UPC-E data.Default = Off for both 2 Digit and 5 Digit Addenda.



(9140071.)

2 Digit Addenda On



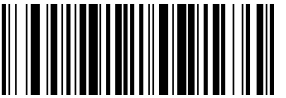
(9140070.)

*** 2 Digit Addenda Off**



(9140081.)

5 Digit Addenda On



(9140080.)

*** 5 Digit Addenda Off**

UPC-E1

Most U.P.C. barcodes lead with the 0 number system. For these codes, use UPC-E0. If you need to read codes that lead with the 1 number system, use the **UPC-E1 On** selection. Default = Off.



(9140091.)
UPC-E1 On



(9140090.)
*** UPC-E1 Off**

EAN/JAN-13

<Default All EAN/JAN Settings>



(915000.)
Default All EAN/JAN-13 Settings

On/Off



(9150011.)
***On**



(9150010.)
Off

Note: If you want to convert UPC-A barcodes to EAN-13 format, scan the **UPC-A Off** barcode.

Check Digit

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



(9150021.)
*** On**



(9150020.)
Off

Addenda

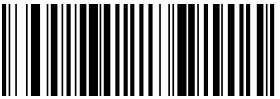
This selection adds 2 or 5 digits to the end of all scanned EAN/JAN-13 data. Default = Off for both 2 Digit and 5 Digit Addenda.



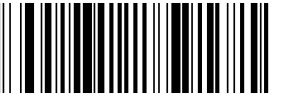
(9150031.)
2 Digit Addenda On



(9150030.)
*** 2 Digit Addenda Off**



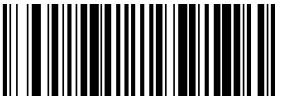
(9150041.)
5 Digit Addenda On



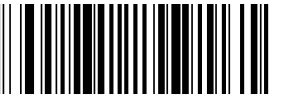
(9150040.)
*** 5 Digit Addenda Off**

Addenda Required

When **Required** is scanned, the scanner will only read EAN/JAN-13 barcodes that have addenda. Default = Not Required.



(9150051.)
Required



(9150050.)
*** Not Required**

Addenda Separator

When this feature is **On**, there is a space between the data from the barcode and the data from the addenda. When turned **Off**, there is no space. Default = On.



(9150061.)
*** On**



(9150060.)
Off

ISBN Translate

When **On** is scanned, EAN-13 Bookland symbols are translated into their equivalent ISBN number format. Default = Off.



(9150071.)
On



(9150070.)
*** Off**

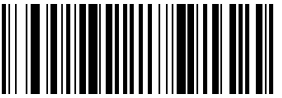
EAN/JAN-8

<Default All EAN/JAN-8 Settings>



(916000.)
Default All EAN/JAN-8 Settings

On/Off



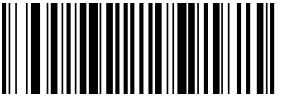
(9160011.)
*** On**



(9160010.)
Off

Check Digit

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



(9160021.)
*** On**



(9160020.)
Off

Addenda

This selection adds 2 or 5 digits to the end of all scanned EAN/JAN-8 data. Default = Off for both 2 Digit and 5 Digit *Addenda.*



(9160031.)
2 Digit Addenda On



(9160030.)
*** 2 Digit Addenda Off**



(9160041.)

5 Digit Addenda On



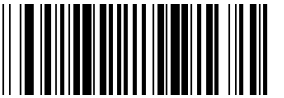
(9160040.)
*** 5 Digit Addenda Off**

Addenda Required

When **Required** is scanned, the scanner will only read EAN/JAN-8 barcodes that have addenda. Default = Not Required.



(9160051.)
Required



(9160050.)
*** Not Required**

Addenda Separator

When this feature is **On**, there is a space between the data from the barcode and the data from the addenda. When turned **Off**, there is no space. Default = On.



(9160061.)

*** On**



(9160060.)

Off

MSI

<Default All MSI Settings>



(917000.)

Default All MSI Settings

On/Off



(9170011.)

On



(9170010.)

*** Off**

Check Characte

MSI barcodes use different types of check characters. You can configure the barcode scanner to read the MSI barcode using the check character. Default = **Validate MOD 10, but Don't Transmit**

When Check Character is set to **Validate MOD 10 and Transmit**, the scanner will only read MSI barcodes printed with the specified type check character(s), and will transmit the character(s) at the end of the scanned data.

When Check Character is set to **Validate MOD 10, but Don't Transmit**, the unit will only read MSI barcodes printed with the specified type check character(s), but will not transmit the check character(s) with the scanned data.



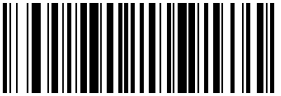
(9170020.)

*** Validate MOD 10, but Don't Transmit**



(9170021.)

Validate MOD 10 and Transmit



(9170026.)

Disable MSI Check Characters

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 4-48. Minimum Default = 4, Maximum Default = 48.



(917004.)

Minimum Message Length



(917003.)

Maximum Message Length

GS1 DataBar Omnidirectional

< Default All GS1 DataBar Omnidirectional Settings >



(918000.)

Default All GS1 DataBar Omnidirectional Settings

On/Off



(9180011.)

*** On**



(9180010.)

Off

GS1 DataBar Limited

< Default All GS1 DataBar Limited Settings >



(919000.)

Default All GS1 DataBar Limited Settings

On/Off



(9190011.)

*** On**



(9190010.)

Off

GS1 DataBar Expanded

< Default All GS1 DataBar Expanded Settings >

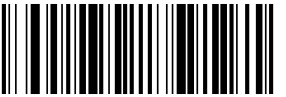


(920000.)
Default All GS1 DataBar Expanded Settings

On/Off



(9200011.)
*** On**



(9200010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 4-74. Minimum Default = 4, Maximum Default = 74.



(920003.)
Minimum Message Length



(920002.)
Maximum Message Length

PDF417

< Default All PDF417 Settings >



(924000.)
Default All PD417 Settings

On/Off



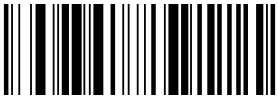
(9240011.)
*** On**



(9240010)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-2750. Minimum Default = 1, Maximum Default = 2750.



(924003.)
Minimum Message Length



(924002.)
Maximum Message Length

QR Code

< Default All QR Code Settings >



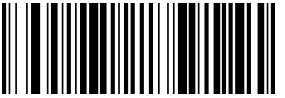
(928000.)
Default All QR Code Settings

On/Off

This selection applies to both QR Code and Micro QR Code.



(9280011.)
*** On**



(9280010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-7089. Minimum Default = 1, Maximum Default = 7089.



(928003.)
Minimum Message Length



(928002.)
Maximum Message Length

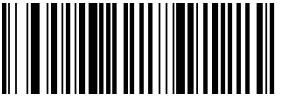
Data Matrix

< Default All Data Matrix Settings >



(930000.)
Default All Data Matrix Settings

On/Off



(9300011.)
*** On**



(9300010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-3116. Minimum Default = 1, Maximum Default = 3116.



(930002.)
Minimum Message Length



(930003.)
Maximum Message Length

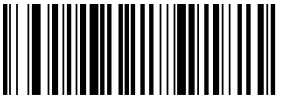
Aztec Code

< Default All Aztec Code Settings >

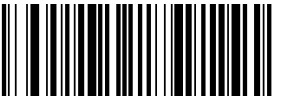


(931000.)
Default All Aztec Code Settings

On/Off



(9310011.)
*** On**



(9310010.)
off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-3832. Minimum Default = 1, Maximum Default = 3832.



(931003.)
Minimum Message Length



(931002.)
Maximum Message Length

China Post (Hong Kong 2 of 5)

<Default All China Post (Hong Kong 2 of 5) Settings>



(936000.)

Default All China Post (Hong Kong 2 of 5)Settings

On/Off



(9360011.)

On



(9360010.)

*** Off**

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 2-80. Minimum Default = 4, Maximum Default = 80.



(936003.)

Minimum Message Length



(936002.)

Maximum Message Length

Korea Post

<Default All Korea Post Settings>



(937000.)
Default All Korea Post Settings

On/Off



(9370011.)
On



(9370010.)
*** Off**

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 2-80. Minimum Default = 4, Maximum Default = 48.



(937003.)
Minimum Message Length



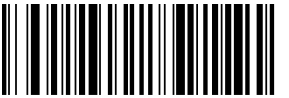
(937002.)
Maximum Message Length

Check Digit

This selection allows you to specify whether the check digit should be transmitted at the end of the scanned data. Default = Don't Transmit.



(9370041.)
On



(9370040.)
*** Off**

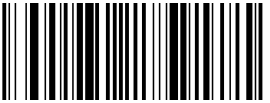
Han Xin Code

<Default All Han Xin Code Settings>



(932000.)
Default All Han Xin Code Settings

On/Off



(9320011.)
On



(9320010.)
*** Off**

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-1000. Minimum Default = 1, Maximum Default = 1000.



(932003.)
Minimum Message Length



(932002.)
Maximum Message Length

Maxi code

<defalt all maxi code settings>



(929000.)

On/Off



(9290011.)
On



(9290010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-150. Minimum Default = 1, Maximum Default = 150.



(929003.)
Minimum Message Length



(929002.)
Maximum Message Length

Micropdf

<defalt all micropdf settings>



(925000.)

On/Off



(9250011.)
On



(9250010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-366. Minimum Default = 1, Maximum Default = 366.



(925003.)
Minimum Message Length



(925002.)
Maximum Message Length

Composites

<defalt all composites settings>



(926000.)

On/Off



(9260011.)
On



(9260010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-2435. Minimum Default = 1, Maximum Default = 2435.



(926004.)
Minimum Message Length



(926003.)
Maximum Message Length

Codablock A

<defalt all composites settings>



(922000.)

On/Off



(9220011.)
On



(9220010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-600. Minimum Default = 1, Maximum Default = 600.



(922003.)
Minimum Message Length



(922002.)
Maximum Message Length

Codablock F

<defalt all composites settings>

(923000.)

On/Off

(9230011.)
On

(9230010.)
Off

Message Length

Scan the barcodes below to change the message length. Refer to Message Length Description for additional information. Minimum and Maximum lengths = 1-2048. Minimum Default = 1, Maximum Default = 2048.

(923003.)
Minimum Message Length

(923002.)
Maximum Message Length

Chapter 6 Utilities

Show Software Revision

Scan the barcode below to output the current software revision, unit serial number, and other product information.



(809004?.)

Show Revision

Chapter 7 Common Problems And Solutions

Problem: The barcode scanner does not work.

possible reason:

1. The barcode scanner is not powered, check the power of the equipment.
2. If you are using an incorrect cable, use the cable that was originally configured.
3. The cable interface is loose and reconnected.
4. Check if the button is normal.

Problem: The barcode scanner scans normally, but the data output is incorrect.

possible reason:

1. The cable interface is loose and reconnected.
2. Barcode scanner may not be configured to display the correct terminal.
3. If you are using a USB to RS232 cable, if the data output is garbled, it may be that the data reception speed of the device does not match the output speed of the barcode scanner.

Problem: Barcode scanner does not decode some barcodes.

possible reason:

1. The barcode is defective. Try to scan the same type of test barcode to see if it can be interpreted.
2. The distance between the barcode scanner and the barcode is not suitable. Please move closer or move away the barcode.
3. For barcodes with poor print quality, the preferred reading distance is 5-10 cm.
4. Confirm that your device is enabled for this barcode type.

Problem: Other conditions cannot be decoded.

possible reason:

1. Turn off the device power; properly connect the device to the barcode scanner; turn on the device and test it.
2. If the problem still cannot be solved, please contact the dealer or the manufacturer.

Chapter 8 Maintenance And Customer Service

Maintenance

1. Stains and dust on the scanning window can sometimes affect the normal operation of the barcode scanner. When cleaning, use a good quality tissue to wipe gently, or use a soft cloth to clean.
   If you use a paper with poor paper quality for a long time, it will damage the surface finish of the window and affect the reading effect of the barcode scanner.
2. The outer shell of the barcode scanner can be wiped with a soft, clean cloth. If necessary, add a small amount of detergent to the water, wipe it with a soft cloth and rub it.
3. Do not spray any liquid on the window.
4. The scanning window must be kept clean and the supplier is not liable for damage caused by improper maintenance.

Customer Service

If you need help installing or troubleshooting a device, please contact us

Reference Charts

Symbology Charts

Linear Symbologies

Symbology	AIM			
	ID	Possible Modifiers (m)	ID	Hex
All Symbologies				99
Codabar	]Fm	0-1	a	61
Code 11	]H3		h	68
Code 128	]Cm	0, 1, 2, 4	j	6A
Code 32 Pharmaceutical (PARAF)	]X0		<	3C
Code 39 (supports Full ASCII mode)	]Am	0, 1, 3, 4, 5,7	b	62
TCIF Linked Code 39 (TLC39)	]L2		T	54
Code 93 and 93i	]Gm	0-9, A-Z, a-m	i	69
EAN	]Em	0, 1, 3, 4	d	64
EAN-13 (including Bookland EAN)	]E0		d	64
EAN-13 with Add-On	]E3		d	64
EAN-13 with Extended Coupon	]E3		d	64
EAN-8	]E4		D	44
EAN-8 with Add-On	]E3		D	44

Symbology	AIM			
	ID	Possible Modifiers (m)	ID	Hex
GS1				
GS1 DataBar	]em	0	y	79
GS1 DataBar Limited	]em		{	7B
GS1 DataBar Expanded	]em		}	7D
GS1-128	]C1		I	49
2 of 5				
China Post (Hong Kong 2 of	]X0		Q	51
Interleaved 2 of 5	]Im	0, 1, 3	e	65
Matrix 2 of 5	]X0		m	6D
NEC 2 of 5	]X0		Y	59
Straight 2 of 5 IATA	]Rm	0, 1, 3	f	66
Straight 2 of 5 Industrial	]S0		f	66
MSI	]Mm	0, 1	g	67
Telepen	]Bm		t	74
UPC		0, 1, 2, 3, 8,		
UPC-A	]E0		c	63
UPC-A with Add-On	]E3		c	63
UPC-A with Extended Coupon	]E3		c	63
UPC-E	]E0		E	45
UPC-E with Add-On	]E3		E	45
UPC-E1	]X0		E	45
Add Code ID				5C 80
Add AIM Code ID				5C 81
Add Backslash				5C 5C
Batch Mode Quantilty			5	35

2D Symbologies

Symbology	AIM			
	ID	Possible Modifiers (m)	ID	Hex
All Symbologies				99
Aztec Code	]zm	0-9, A-C	z	7A
Chinese Sensible Code (Han Xin Code)	]X0		H	48
Codablock A	]O6	0, 1, 4, 5,	V	56
Codablock F	]Om	0, 1, 4, 5,	q	71
Code 49	]Tm	0, 1, 2, 4	l	6C
Data Matrix	]dm	0-6	w	77
GS1	]em	0-3	y	79
GS1 Composite	]em	0-3	y	79
GS1 DataBar Omnidirecti	]em	0-3	y	79
MaxiCode	]Um	0-3	x	78
PDF417	]Lm	0-2	r	72
MicroPDF417	]Lm	0-5	R	52
QR Code	]Qm	0-6	s	73
Micro QR Code	]Qm		s	73

Postal Symbologies

Symbology	AIM			
	ID	Possible Modifiers (m)	ID	Hex
All Symbologies				99
Australian Post	]X0		A	41
British Post	]X0		B	42
Canadian Post	]X0		C	43

Symbology	AIM			
	ID	Possible Modifiers	ID	Hex
China Post	]X0		Q	51
InfoMail	]X0		,	2c
Intelligent Mail Bar Code	]X0		M	4D
Japanese Post	]X0		J	4A
KIX (Netherlands)	]X0		K	4B
Korea Post	]X0		?	3F
Planet Code	]X0		L	4C
Postal-4i	]X0		N	4E
Postnet	]X0		P	50

ASCII Conversion Chart

Hex	Dec	Char
00	0	NUL （Null char.）
01	1	SOH （Start of Header）
02	2	STX （Start of Text）
03	3	ETX （End of Text）
04	4	EOT （End of Transmission)
05	5	ENQ （Enquiry）
06	6	ACK （Acknowledgment）
07	7	BEL （Bell）
08	8	BS （Backspace）
09	9	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）

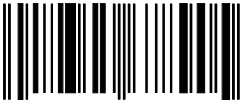
25	37	% （Percent）
26	38	& （Ampersand）
27	39	` （Single Quote）
28	40	(（Right / Closing Parenthesis）
29	41	)（Right / Closing Parenthesis）
2a	42	* （Asterisk）
2b	43	+ （Plus）
2c	44	,（Comma）
2d	45	-（Minus / Dash）
2e	46	. （Dot）
2f	47	/ （Forward Slash）
30	48	0
31	49	1
32	50	2
33	51	3
34	52	4
35	53	5
36	54	6
37	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）
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）

Sample Symbols

UPC-A



01234567890

Interleaved 2 of 5



Code 128

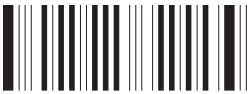


Straight 2 of 5Industrial



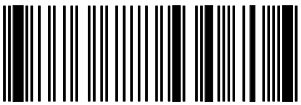
123456

Matrix 2 of 5



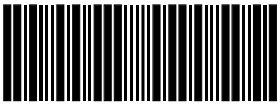
6543210

Code 93



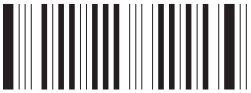
123456-9$

Straight 2 of 5Industrial



123456

Matrix 2 of 5



6543210

GS1DataBar



PDF417



12345678

Codabar



BC321

Data Matrix



TestSymbol

QRCode



Numbers

Aztec



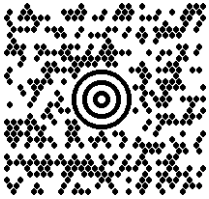
12345678

Micro PDF417



Test Message

MaxiCode



Test Message

Programming Charts



(K0K.)
0



(K1K.)
1



(K2K.)
2



(K3K.)
3



(K4K.)
4



(K5K.)
5



(K6K.)
6



(K7K.)
7



(K8K.)
8



(K9K.)



(KAK.)
A



(KBK.)
B



(KCK.)
C



(KDK.)
D



(KEK.)
E



(KFK.)
F



(800002.)

Save



(800000.)

Discard

Note: If an error occurs while scanning a letter or number (before scanning the "**Save**" barcode), scan the "**Discard**" barcode, rescan the correct letter or number, and then scan the "**Save**" barcode.

ASCII conversion of keyboard operation

HEX	DEC	CTRL+X	FUNCTION	
00	0	CTRL+@		
01	1	CTRL+A	Select all	
02	2	CTRL+B	Bold	
03	3	CTRL+C	Copy	
04	4	CTRL+D	Bookmark	
05	5	CTRL+E	Center	
06	6	CTRL+F	Find	
07	7	CTRL+G		
08	8	CTRL+H	History	
09	9	CTRL+I		
0a	10	CTRL+J	Justify	
0b	11	CTRL+K	Hyperlink	
0c	12	CTRL+L		
0d	13	CTRL+M		
0e	14	CTRL+N	New	
0f	15	CTRL+O	Open	
10	16	CTRL+P	Print	
11	17	CTRL+Q	Quit	
12	18	CTRL+R		
13	19	CTRL+S	save	
14	20	CTRL+T		
15	21	CTRL+U		F12
16	22	CTRL+V	Paste	F1
17	23	CTRL+W		F2
18	24	CTRL+X		F3
19	25	CTRL+Y		F4
1a	26	CTRL+Z		F5
1b	27	CTRL+[		F6
1c	28	CTRL+\		F7
1d	29	CTRL+]		F8
1e	30	CTRL+^		F9
1f	31	CTRL+-		F10
7f	32	CTRL+		