**USER'S GUIDE** 

# **BARCODE SCANNER**

SC504







# **DISCLAIMER**

Please read this manual carefully before using the described product. Follow these notes to ensure the safe use of the barcode scanning equipment according to the design specifications. Keep this manual safe for future reference.

All software provided with the barcode scanning equipment, including firmware, is subject to software copyright and protection.

The manufacturer reserves the right to make changes to improve the stability or other performance of the barcode scanning device, including the software (including firmware). The contents of this manual are subject to change without notice. The manufacturer is not responsible for any loss or claim arising from the use of this manual by a third party.

Do not drop or squeeze the barcode scanning equipment. Failure to do so can damage components, abort process execution, lose memory content, or interfere with the normal use of the barcode scanning devices. Use only 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. A sudden change in temperature may result in frosting on the barcode scanning device housing. If you run a barcode scanning device at this time, it may affect normal operation. Therefore, 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			
VOO	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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# **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 interface on the host



RS232 interface on the host



#### **USB CONNECTION**

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

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.

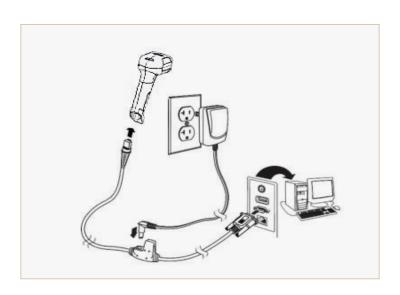
4. Verify the operation by scanning the Sample Symbols at the end of this manual.



#### **RS232 CONNECTION**

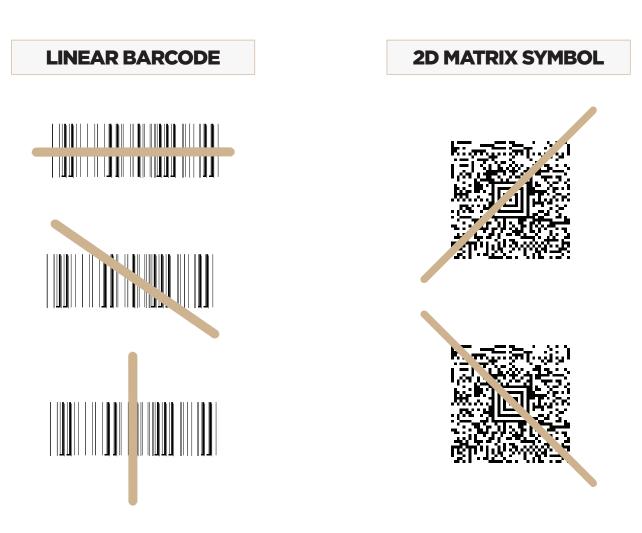
- 1. Connect the device interface (RJ45 connector) of the RS-232 cable to the scanner.
- 2. Connect the host interface (RS-232 interface) of the RS-232 cable to the host.
- 3. The barcode scanner is humming.
- 4. Verify the operation by scanning the Sample Symbols at the end of this manual.

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.



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. Symbology's with smaller bars or elements (mil size) should be read closer to the unit. Symbology's 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),

#### FACTORY DEFAULTS SETTING

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



**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.



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.



# 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.



#### **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.



**USB Keyboard (PC)** 

#### **USB Serial**

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



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.



**Good Read Beeper Off** 



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.



# **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



\* Good Read LED On



\* 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)



No Delay



\* 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 symbologist.
- You can add any prefix or suffix from the deploys 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 symbologist (as opposed to all symbologist), 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 <u>Symbology Chart</u> 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 symbologist.

# 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.



#### **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 O, D from the Programming Chart inside the back cover of this manual.

# Step 6.

Scan Save, or scan Discard to exit without saving.



# To Add a Carriage Return Suffix to All Symbologist

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



(890000.)
Add CR Suffix All Symbology's

# To Add a Line Break Suffix to All Symbologist

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



Add LF Suffix All Symbologist

# To Add a Carriage, Return & Line Break Suffix to All Symbologist

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



Add CR and LF Suffix All Symbologist

#### **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 symbology's, you can use **Clear One Prefix (Suffix)** to delete a specific char-acter 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 symbology's.

# Step 4.

Scan the Save symbol.



(889004.) Clear One Prefix



(888004.) Clear One Suffix



300002.) Save

#### **PREFIX SELECTIONS**



Add Prefix



(889004.) Clear One Prefix



Clear All Prefixes

# **SUFFIX SELECTIONS**



(888002.) Add Suffix



(888004.) Clear One Suffix



(888003.)
Clear All Prefixes

#### **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

#### **INTERMISSIVE DELAY**

An intermissive delay of up to 5000 milliseconds (in 5ms increments) may be placed between each scan transmission. Scan the **Intermissive 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.



**Intermissive Delayipsum** 



(851004.)
Intermissive Delay

To remove this delay, scan the **Intermissive 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 Intermissive Delay of 100ms:

First scan "Intermissive Delay", then scan "2" "0" from the Programming

Chart (100 / 5 = 20), then scan "save" barcode

**Intermissive Delay** 



Intermissive Delay

# **Chapter 5 Symbologies**

#### INTRODUCTION

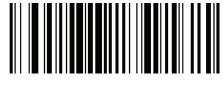
Each type of barcode has its own unique properties. The barcode scanner can be adjusted to accommodate these property changes through the configuration code in this chapter. The fewer the barcode types, the faster the barcode scanner can read. You can disable the barcode scanner to read the barcode types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

#### **ALL SYMBOLOGY'S**

If you want to decode all the symbology's allowable for your scanner, scan the **All Symbology's 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.)

NOTE: When All Symbology's 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 read- ing 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 Maximum 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.)

#### **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"



All 2D Barcode on



(9950071.) All 2D Barcode on

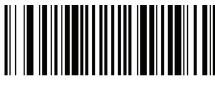
## **BARCODE**



(900000.)
Default All Barcode Settings

# ON/OFF





(900030.) 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



\* 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 concatenate- 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 mes- sages are concatenated into one with the "D" characters omitted.



Select Require preventing 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.



Minimum Message Length



(900004.) Maximum Message Length

**CODE 39** 

< Default All Code 39 Settings >



Default All Code 39 Settings

**CODE 39 ON/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



\* 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.



Minimum 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 char-acter(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.





## **EXAMPLE**

After scanning 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.







# **CODE 32 PHARMACEUTICAL (PARAF)**

Code 32 Pharmaceutical is a form of the Code 39 symbology used by Ital- ian 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 barcode 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	DLE	SP	0 0	@%V	РР	,	p
%U	\$P	SPA		( , , ,		%	+
		CE				W	P
SOH	DC1	!	1 1	A A	QQ	a +A	q
\$A	\$Q	. /					+
	$\vdash$	Α		$\vdash$	$\vdash$		Q
STX	DC2	"	2 2	ВВ	R R	b +B	r
\$B	\$R	/					+
Emy	DCO	В		0 0	0 0		R
ETX	DC3	# ,	3 3	C C	S S	c +C	s
\$C	\$S	c /					s +
ЕОТ	DC4	\$	4 4	D D	ТТ	d +D	t
\$D	\$T		^ ^			u .b	
12	'	D '					T
ENQ	NAK	%	5 5	ЕЕ	υυ	e +E	u
\$E	\$U	/					+
		Е					U
ACK	SYN	&	6 6	F F	v v	f +F	v
\$F	\$V	/					+
	$\Box$	F	$\square$	$\perp$	$\blacksquare$		V
BEL	ETB	, , , , , , , , , , , , , , , , , , ,	7 7	G G	W W	g +G	w
\$G	\$W	/					,,, +
P.C.	CAN	G		,, ,,	V V	1	W
BS	CAN	Ι, Ι	8 8	н н	хх	h +H	х .
\$H	\$X						X
		Н					Λ

HT	EM \$Y	) /I	9 9	I I	Y Y	į +I	у
\$I	фΙ						+ Y
LF	SUB	* /J	: ,	JJ	Z Z	j +J	z
\$J	\$Z		z /				z +
VT	ESC	+	;	КК	[	k +K	{
\$K	%A	/	%		%		%
<u> </u>		K	F	<u> </u>	K		P
FF	FS	,	<	L L	\	l +L	
\$L	%B	/	%		%		%
$\square$		L	G	$\square$	L	$\square$	Q
CR	GS	-	=	M M	]	m +M	}
\$M	%C	/	%		%		%
		M	Н		M		R
SO	RS		>	N N	^	n +N	~
\$N	%D	/	%		%		%
		N ´	I		N		S
SI\$	US	/	?	0 0		o +0	DEL
0	%E	· /	%		- %		%Т
		o ´	J		0		

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



#### **INTERLEAVED 2 OF 5**

< Default All Interleaved 2 of 5 Settings >



(902000.)
Default All Interleaved 2 of 5 Settings

# ON/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.



\* No Check Digit



(9020011.)
Validate, but Don't Transmit



(9020012.) Validate and Transmit

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.



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





## **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.

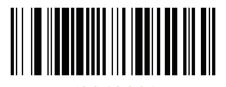


(903004.) Minimum Message Length



(903003.) Maximum Message Length

< Default All Code 93 Settings >



(904000.)
Default All Code 93 Settings

ON/OFF



(9040021.) \*On



(9040020.) Off

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)

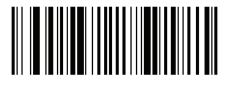
<Default All Straight 2 of 5 Industrial Settings>



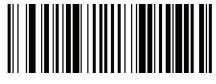
(905000.)

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

# ON/OFF



(9050011.) ON



(9050010.) \*OFF

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.



Minimum Message Length



(905002.) Maximum Message Length

STRAIGHT 2 OF 5 IATA (TWO-BAR START/STOP)

<Default All Straight 2 of 5 IATA Settings>



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

## ON/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.



Minimum Message Length



Maximum Message Length

**MATRIX 2 OF 5** 

<Default All Matrix 2 of 5 Settings>



(90/000.)
Default All Matrix 2 of 5 Settings

ON/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.



**Maximum Message Length** 

## **CHECK**

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



**Enable Check Function** 



**Disable Check Function** 

## CODE 11

<Default All Settings>



**Default All Code 11 Settings** 

## **CHECK DIGITS REQUIRED**

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



**One Check Digit** 



\* Two Check Digits

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.



Minimum Message Length



(908003.)

**CODE 128** 

<Default All Code 128 Settings>



Default All Code 128 Settings

ON/OFF



(9090011.) \*ON



(9090010.) OFF

**ISBT 128 CONCATENATION** 



(9020051.) ISBT 128 On



(920050.) ISBT 128 Off

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.



(909002)

Maximum Message Length

**GS1-128** 

<Default All GS1-128 Settings>



Default All GS1-128 Settings

ON/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.



Minimum Message Length



(910002.) Maximum Message Length

## **TELEPEN**

<Default All Telepen Settings>



**Default All Telepen Settings** 

# ON/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.



Minimum Message Length



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.





## **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.





## **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.



2 Digit Addenda On



(9120021.) 5 Digit Addenda On



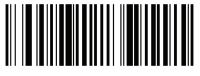
\* 2 Digit Addenda Off



(9120020.) \*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



\* 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.



\*On



(9120070.) Off

NOTE: Scan the barcode below to convert UPC-A to EAN\_13 or not.





**UPC-EO** 

<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-EO 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.)



(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





## **CHECK DIGIT**

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

prevent transmission, scan Off. Default = On





#### **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



5 Digit Addenda On



\* 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>



**Default All EAN/JAN-13 Settings** 

## ON/OFF





NOTE: If you want to convert UPC-A barcodes to EAN-13 format,

## **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





## **ADDENDA**

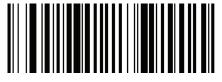
This selection adds 2 or 5 digits to the end of all scanned EAN/JAN-13 data. Default = Off for both 2 Digit and 5 Digit Addenda



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.





EAN/JAN-8

<Default All EAN/JAN-8 Settings>



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

ON/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.





#### **ADDENDA**

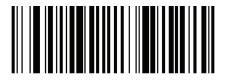
This selection adds 2 or 5 digits to the end of all scanned EAN/JAN-8 data. Default = Off for both 2 Digit and 5 Digit Addenda.



2 Digit Addenda On



(9150030.) \* 2 Digit Addenda Off



5 Digit Addenda On



(9160040.) \* 5 Digit Addenda Off

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.





**MSI** 

<Default All MSI Settings>



(917000.)
Default All MSI Settings

## ON/OFF

<Default All MSI Settings>



(917000.)
Default All MSI Settings

#### **CHECK CHARACTER**

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.



**Maximum Message Length** 

## **GS1 DATABAR OMNIDIRECTIONAL**

< Default All GS1 DataBar Omnidirectional Settings >



**Default All GS1 DataBar Omnidirectional Settings** 

ON/OFF





Off

**GS1 DATABAR LIMITED** 

< Default All GS1 DataBar Limited Settings >



(919000.)

**Default All GS1 DataBar Limited Settings** 

## ON/OFF



(9190011.) \*On



(9190010.) Off



(9190010.)

(9190010.) Off

## **GS1 DATABAR EXPANDED**

< Default All GS1 DataBar Expanded Settings >



(920000.)
Default All GS1 DataBar Expanded Settings

# ON/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 >



Default All PD417 Settings

ON/OFF



(9240011.) On

)

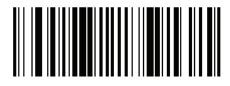


(9240010) Off

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.



Minimum Message Length



(924002.)
Maximum Message Length

## **QR CODE**

< Default All QR Code Settings >



**Default All QR Code Settings** 

## ON/OFF

This selection applies to both QR Code and Micro QR Code





## **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.



Minimum Message Length



## **DATA MATRIX**

< Default All Data Matrix Settings >



**Default All Data Matrix Settings** 

## ON/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.



Minimum Message Length



Minimum Message Length

## **AZTEC CODE**

< Default All Aztec Code Settings >



(931000.)
Default All Aztec Code Settings

## ON/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.) Minimum Message Length

## **CHINA POST (HONG KONG 2 OF 5)**

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



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

# ON/OFF



(9360011.) On



(9360010.) \*Off

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.



Minimum Message Length



(936002.) Maximum Message Length

## **KOREA POST**

<Default All Korea Post Settings>



Default All Korea Post Settings

# ON/OFF



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.





HAN XIN CODE

<Default All Han Xin Code Settings>



(932000.)
Default All Han Xin Code Settings

ON/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.



Minimum Message Length



(932002.)
Maximum Message Length

## **MAXI CODE**

<default 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

## **MICRO PDF**

<defalt all micropdf settings>



(925000.)

## ON/OFF



(9250010.)

## (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





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.



**Minimum Message Length** 



(926003.)**Maximum Message Length** 

## **CODA BLOCK A**

<defalt all composites settings>



(922000.)

# ON/OFF



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.



**Minimum Message Length** 



**Maximum Message Length** 

## **CODABLOCK F**

<default 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.



**Show Revision** 

# **Chapter 7: Common Problems and Solutions**

#### PROBLEM: BARCODE SCANNER MALFUNCTION

#### Possible Reasons:

- 1. Barcode scanner is not powered. Check power supply.
- 2. Incorrect cable. Use the originally configured cable.
- 3. Loose cable interface. Reconnect.
- 4. Check button functionality.

## PROBLEM: INCORRECT DATA OUTPUT

#### Possible Reasons:

- 1. Loose cable interface. Reconnect.
- 2. Incorrect terminal configuration.
- 3. USB to RS232 cable mismatch in data reception speed.

#### PROBLEM: INCOMPLETE BARCODE DECODING

## Possible Reasons:

- 1. Defective barcode. Test with a similar barcode.
- 2. Inappropriate distance between the barcode and the scanner. Adjust distance.

- 3. For low-quality printed barcodes, maintain a reading distance of 5-10 cm.
- 4. Confirm device compatibility with the barcode type.

#### PROBLEM: UNABLE TO DECODE UNDER DIFFERENT CONDITIONS

#### **Possible Reasons:**

- 1. Turn off the device, reconnect the barcode scanner, then turn it back on.
- 2. If the problem persists contact the manufacturer.

# **Chapter 8 Maintenance And Customer Service**

#### **MAINTENANCE**

- 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.

#### **REFERENCE & SYMBOLOGY CHARTS**

# **REFERENCE & SYMBOLOGY CHARTS**

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)	јхо		<	3C	
Code 39 (supports Full ASCII mode)	]Am	0, 1, 3, 4, 5, 7	b	62	
TCIF Linked Code 39 (TLC39)	]L2		т	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 Code	]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	у	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 5)	JXO		Q	51	
Interleaved 2 of 5	]lm	0, 1, 3	е	65	
Matrix 2 of 5	]XO		m	6D	
NEC 2 of 5	JXO		Y	59	
Straight 2 of 5 IATA	]Rm	0, 1, 3	f	66	
Straight 2 of 5 Industrial	]50		f	66	
MSI	]Mm	O, 1,	g	67	
Telepen	]Bm		t	74	
UPC		0, 1, 2, 3, 8,			

SYMBOLOGY	AIM				
STABOLOGI	ID	POSSIBLE MODIFIERS (m)	ID	HEX	
UPC-A	]EO		С	63	
UPC-A with Add-On	]E3		С	63	
UPC-A with Extended Coupon Code	]E3		С	63	
UPC-E	]EO		E	45	
UPC-E with Add-On	]E3		E	45	
UPC-E1	JXO		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			
STMBOLOGI	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		н	48
Codablock A	]06	0, 1, 4, 5, 6	V	56
Codablock F	]Om	0, 1, 4, 5, 6	q	71
Code 49	]Tm	0, 1, 2, 4	1	6C
Data Matrix	]dm	0-6	w	77
GS1	]em	0-3	У	79
GS1 Composite	]em	0-3	У	79
GS1 DataBar Omnidirectional	]em	0-3	У	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	]xO		A	41
British Post	]x0		В	42
Canadian Post	]xO		С	43

SYMBOLOGY	AIM				
STMBOLOGI	ID	POSSIBLE MODIFIERS (m)	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		Р	50	

# **POSTAL SYMBOLOGIES**

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)	
Oa	10	LF (Line Feed)	
Ob	11	VT (Vertical Tab)	
Ос	12	FF (Form Feed)	
Od	13	CR (Carriage Return)	
Oe	14	SO (Shift Out)	
Of	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)	

HEX	DEC	CHAR
18	24	CAN (Cancel)
19	25	EM (End of Medium)
<b>1</b> a	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)
<b>2</b> a	42	* (Asterisk)
2b	43	+ (Plus)
<b>2</b> c	44	,(Comma)
2d	45	- (Minus / Dash)
<b>2</b> e	46	. ( <b>Dot</b> )
2f	47	/ (Forward Slash)

HEX	DEC	CHAR
30	53	5
31	54	6
32	55	7
33	56	8
34	57	9
35	58	: (Colon)
36	59	; (Semi-colon)
37	60	< (Less Than)
38	61	= (Equal Sign)
39	62	> (Greater Than)
<b>3</b> a	63	? (Question Mark)
3b	64	@ (AT Symbol)
3c	65	A
3d	66	В
3e	67	С
3f	68	D
40	69	E
41	70	F
42	71	G
43	72	н
44	73	I
45	74	J
46	75	K
47	76	L
48	77	M

HEX	DEC	CHAR
49	73	I
4a	74	J
4b	75	К
4c	76	L
4d	77	М
4e	78	N
4f	79	0
50	80	Р
51	81	Q
52	82	R
53	83	S
54	84	Т
55	85	U
56	86	V
57	87	W
58	88	X
59	89	Υ
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	а

HEX	DEC	CHAR
62	98	b
63	99	С
64	100	d
65	101	е
66	102	f
67	103	g
68	104	h
69	105	i
6a	106	j
6b	107	k
6c	108	I
6d	109	m
6e	110	n
6f	111	o
70	112	р
71	113	q
72	114	r
73	115	s
74	116	t
75	117	u
76	118	v
77	119	w
78	120	х
79	121	у
<b>7</b> a	122	z

HEX	DEC	CHAR		
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

Code 128



Interleaved 2 of 5



12345678

Straight 2 of 5Industrial



Matrix 2 of 5



6543210

Code 93



Straight 2 of 5Industrial



Matrix 2 of 5



GS1DataBar



QRCode



Aztec



12345678

Data Matrix



TestSymbol

### **PROGRAMMING CHARTS**



(KOK.) 0



(K1K.) 1



(K2K.) 2



3



4



5



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**

00	0	CTRL+@		
01	1	CTRL+A	Select all	
02	2	CTRL+B	Bold	
03	3	CTRL+C	Сору	
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		
Oa	10	CTRL+J	Justify	
Ob	11	CTRL+K	Hyperlink	
Oc	12	CTRL+L		
Od	13	CTRL+M		
Oe	14	CTRL+N	New	
Of	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+		



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