

IDAutomation SC5USB (Rev. D) Scanner Programming Manual

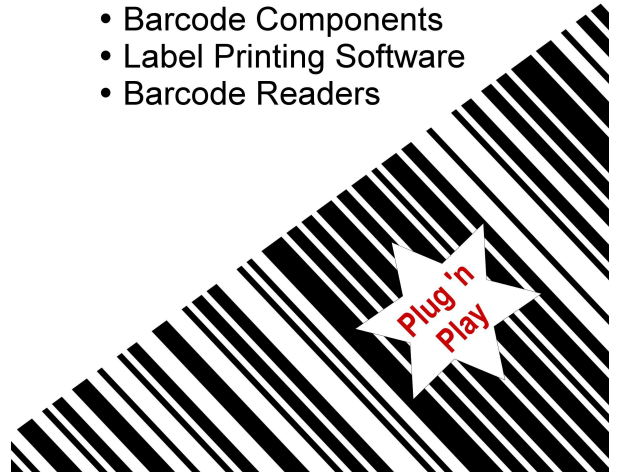


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Limited Warranty

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Introduction - Installation

USB Keyboard Emulation [Default]

- 1) Connect the USB cable between scanner and PC.
- 2) Your operating system will automatically detect the USB device and emulate a USB keyboard.

Keyboard Wedge

- 1) Power off the terminal/computer.
- 2) Disconnect the keyboard cable from the back of the terminal/computer.
- 3) Connect the appropriate interface cable to the scanner and to the terminal/computer.
- 4) Turn the terminal/computer power on.

Note: *If any of the above operations do not work, turn off the power, reseal the cable on the scanner and on the PC and go through all the above steps again.*

Default Symbology Settings

The default setting for each barcode is shown in the chart below:

Code Type	Read Enable	Checksum Verification Enable	Checksum Transmission Enable	Code ID
UPC-A	V	V	V	A
UPC-E	V	V	V	E
EAN-13	V	V	V	F
EAN-8	V	V	V	FF
Code-39	V			□
Interleaved 2 of 5	V			i
Industrial 2 of 5		-	-	i
Matrix 2 of 5				B
Codabar				%
Code-128 & GS1-128	V	V		#
Code-93		V two digits		&
Code-11		V one digit		O
MSI/Plessey		V		@
UK/Plessey		V		@
Telepen				S
Standard 2 of 5		V	V	i
GS1 DataBar (RSS)		V		R4
GS1 DataBar (RSS) Limited		V		RL
GS1 DataBar (RSS) Expanded		V		RX
China Post Italian				t
Pharmacode.				p
PDF417	V			

Programming the Scanner

To program the scanner, you must scan a series of programming barcodes in the correct order. In the back of this manual, you will see a table of alphanumeric barcodes, which are used to program the various options available.

To program each option, you must:

1. Scan the **Program** barcode on the parameter setting page.
2. Enter the option mode by scanning the **Option Bar Code**.
3. To the right of the option barcode, the corresponding alphanumeric inputs are listed. Scan these alphanumeric entries from the **back of the manual**. *Default properties are designated with an asterisk “*”.*
4. Scan the **Finish** barcode from the **back of the manual**.
5. Scan the **Exit** barcode, listed on the lower right hand corner of each parameter setting page.



Symbology Settings

UPC-A

Information about this symbology is available at:

<http://idautomation.com/upceanfaq.html>

Format:

Leading Zero	Data Digits (11 Digits)	Check Digit
-----------------	----------------------------	----------------

Checksum transmission: By setting to Enable, the checksum will be transmitted.

Truncate leading/ending: The leading or ending digits of the barcode data characters can be truncated when these values are set to non-zero.

Code ID setting: Code ID setting is a character used to represent the symbol upon a successful reading. A Code ID setting is prefixed to the beginning or ending if the feature is selected. If you want to transmit the Code ID, you must set the Code ID transmission to Enable first. Refer to Code ID transmission.

Insertion group selection: The scanner offers one or two insertion groups by setting one or two digits to indicate which insertion group you want to insert. Refer to Character insertion. Example: Group 2 → set 02 or 20.






Group 1 and 4 → set 14 or 41.



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Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable	00
	Enable	01 <input type="checkbox"/>

 *NAB* Checksum verification	Disable Enable	00 01 <input type="checkbox"/>
 *NAC* Checksum transmission	Disable Enable	00 01 <input type="checkbox"/>
 *NAF* Truncate leading	0-15	00-15 00 <input type="checkbox"/>
 *NAG* Truncate ending	0-15	00-15 00 <input type="checkbox"/>
 *NAH* Code ID setting	00-ffH ASCII code	00-ffH < A > <input type="checkbox"/>
 *NAI* Insert group selection	00-44	00-44 00 <input type="checkbox"/>



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Exit

UPC-A

Supplement digits: The Supplement digits barcode is the supplemental 2 or 5 characters for the UPC code.

Format:

Leading Zero	Data Digits (11 Digits)	Check Digit	Supplement Digits 2 or 5 or UCC / EAN 128
-----------------	----------------------------	----------------	---

Truncation / Expansion: The leading "0" digit of the UPCA data characters can be truncated when the function is enabled.



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
<p>*NAJ*</p> <p>Supplement digits</p>	None	00 <input type="checkbox"/>
	2 digits	01
	5 digits	02
	UCC/EAN 128	03
	Auto detection	04
<p>*NAK*</p> <p>Truncation/ Expansion</p>	None	00
	Truncate	01 <input type="checkbox"/>
	Leading zero	
	Expand to EAN13	02



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Exit

UPC-E

Information about this symbology is available at:

<http://idaautomation.com/upceanfaq.html>

Format:

Leading Zero	Data Digits (6 Digits)	Check Digit
--------------	------------------------	-------------

Checksum transmission: By setting to **Enable**, the checksum will be transmitted.



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
<p>*OAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00</p> <p>01 <input type="checkbox"/></p>
<p>*OAB*</p> <p>Checksum verification</p>	<p>Disable</p> <p>Enable</p>	<p>00</p> <p>01 <input type="checkbox"/></p>
<p>*OAC*</p> <p>Checksum transmission</p>	<p>Disable</p> <p>Enable</p>	<p>00</p> <p>01 <input type="checkbox"/></p>



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Exit

UPC-E

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.

Supplement digits:

Format:

Leading Zero	Data Digits (6 Digits)	Check Digit	Supplement Digits
-----------------	---------------------------	----------------	-------------------

Truncate Leading zero: Refer to Truncate Leading zero of UPCA.

Expansion: The expansion function is used only for UPCE and EAN-8 code reading. It extends the barcode when the feature is enabled.

Example: Barcode "0123654" Output: "0012360000057"






UPCE-1: Enables scanner to read UPCE with the leading digit of 1.



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
<p>*OAF*</p> <p>Truncate leading</p>	0-15	00-15 00□
<p>*OAG*</p> <p>Truncate ending</p>	0-15	00-15 00□
<p>*OAH*</p> <p>Code ID setting</p>	00-ffH ASCII code	00-ffH < E >□

 *OAI* Insert group selection	00-44	00-44 00 <input type="checkbox"/>
 *OAJ* Supplement digits	None 2 digits 5 digits UCC/EAN 128 Auto detection	00 <input type="checkbox"/> 01 02 03 04
 *OAK* Truncation/Expansion	Disable Enable	00 <input type="checkbox"/> 01
 *OAL* Expansion	Disable Enable	00 <input type="checkbox"/> 01
 *OAM* UPCE-1	Disable Enable	00 <input type="checkbox"/> 01



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Exit

EAN-13

Information about this symbology is available at:

<http://idautomation.com/upceanfaq.html>






Format:

Data Digits (12 Digits)	Check Digit
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Program

Option Bar Code	Option	Alphanumeric Entry
 *GAA* Read	Disable Enable	00 01 <input type="checkbox"/>
 *GAB* Checksum verify	Disable Enable	00 01 <input type="checkbox"/>
 *GAC* Checksum transmission	Disable Enable	00 01 <input type="checkbox"/>
 *GAF* Truncate leading	0-15	00-15 00 <input type="checkbox"/>
 *GAG* Truncate ending	0-15	00-15 00 <input type="checkbox"/>



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Exit

EAN-13

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.

Supplement digits: 2 or 5 or UCC / EAN 128



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
<p>*GAH*</p> <p>Code ID setting</p>	00-ffH ASCII code	00-ffH < F > □
<p>*GAI*</p> <p>Insert group selection</p>	00-44	00-44 00 □
<p>*GAJ*</p> <p>Supplement digits</p>	None 2 digits 5 digits UCC/EAN 128 Auto detection	00 □ 01 02 03 04
<p>*GAL*</p> <p>ISBN/ISSN conversion</p>	Disable Enable	00 □ 01



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Exit

EAN-8

Information about this symbology is available at:

<http://idaautomation.com/upceanfaq.html>

Format:

Data Digits (7 Digits)	Check Digit
---------------------------	----------------

Checksum transmission: By setting to Enable, the checksum will be transmitted.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.





Insertion group selection: Refer to Insertion group selection of UPCA.



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
<p>*FAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00</p> <p>01 <input type="checkbox"/></p>
<p>*FAB*</p> <p>Checksum verification</p>	<p>Disable</p> <p>Enable</p>	<p>00</p> <p>01 <input type="checkbox"/></p>
<p>*FAC*</p> <p>Checksum transmission</p>	<p>Disable</p> <p>Enable</p>	<p>00</p> <p>01 <input type="checkbox"/></p>

 *FAF* Truncate leading	0-15	00-15 00□
 *FAG* Truncate ending	0-15	00-15 00□
 *FAH* Code ID setting	Two characters 00-ffH ASCII code	00-ffH, 00-ffH < FF >□
 *FAI* Insert group selection	00-44	00-44 00□







Exit

EAN-8



Program

Expansion: Refer to Expansion of UPCE.

Option Bar Code	Option	Entry
 *FAJ* Supplement digits	None	00 <input type="checkbox"/>
	2 digits	01
	5 digits	02
	UCC/EAN 128	03
	Auto detection	04
 *FAJ* Supplement digits	None	00 <input type="checkbox"/>
	2 digits	01
	5 digits	02
	2,5 digits	03
	UCC/EAN 128	04
	2, UCC/EAN 128	05
	5, UCC/EAN 128	06
	All	07
 *FAK* Truncation/Expansion	Disable	00 <input type="checkbox"/>
	Enable	01
 *FAL* Expansion	Disable	00 <input type="checkbox"/>
	Enable	01



Exit

Code 128 & GS1-128

Information about this symbology is available at:

<http://idautomation.com/code128faq.html>

Format:

Data Digits (Variable)	MOD 103 Checksum (Required)
---------------------------	--------------------------------




Checksum Verification: The checksum is the mod 103 of all data digits.

Checksum Transmission: By setting to **Enable**, the checksum will be transmitted.



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Program

Option Bar Code	Option	Entry
 *DAA* Read	Disable Enable	00 01 <input type="checkbox"/>
 *DAB* Checksum Verification	Disable Enable	00 01 <input type="checkbox"/>
 *DAC* Checksum Transmission	Disable Enable	00 <input type="checkbox"/> 01



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Exit

Code 128 & GS1-128

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.

GS1 Format: Code 128 may be translated according to the GS1-128 (UCC/EAN-128) format if it starts with an FNC1 character. When enabled, the first FNC1 will be translated to "J"1", and FNC1 codes thereafter in the same symbol will be a <GS> (1D16) field separator code. For example:

J	C1	Data	<GS>	Data	Checksum
---	----	------	------	------	----------

FNC2 Append: When enabled, if the scanner reads a barcode that includes the FNC2 code it is not transmitted until a barcode is scanned that does not include the FNC2.

GS1 (UCC/EAN) 128 ID setting: Sets the Code ID for GS1-128 output format.









Field Separator Code: This feature is only used for the GS1-128 format. The Field separator code reassigns FNC1 codes (that are not the first FNC in the barcode) to another value. The default of ASCII code is <GS>(1D).



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Program

Option Bar Code	Option	Entry
<p>*DAD*</p> <p>Max. code length</p>	00-64	00-64 00 <input type="checkbox"/>
<p>*DAE*</p> <p>Min. code length</p>	00-64	00-64 00 <input type="checkbox"/>

 *DAF* Truncate leading	0-15	00-15 00□
 *DAG* Truncate ending	0-15	00-15 00□
 *DAH* Code ID setting	00-ffH ASCII	00-ff < # >□
 *DAI* Insert group selection	00-44	00-44 00□
 *DAJ* Format	Standard GS1-128	00□ 01
 *DAK* Append	Disable Enable	00□ 01
 *DAL* GS1-128 ID	00-ffH ASCII	00-ff < 1D >□
 *DAM* Field separator code	00-ffH ASCII	00-ff 1D□



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Exit

Code 39

Information about this symbology is available at:

<http://idaautomation.com/code39faq.html>

Format:

Start	Data Digits (Variable)	Checksum (Optional)	End
"□"			"□"

Checksum verification: The checksum of Code-39 is optional.

Checksum transmission: By setting to **Enable**, the checksum will be transmitted.



Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 BAA Read	Disable Enable	00 01□
 BAB Checksum verification	Disable Enable	00□ 01
 BAC Checksum transmission	Disable Enable	00□ 01

Max./Min. code length: Each symbology has its own Max./Min. Code Length. They can be set to qualify data entry. If their Max./Min. Code Length is zero, the Global Min./Max. Code Length is in effect. The length is defined as to the actual barcode data length to be sent. Data with lengths exceeding these limits will be rejected. If the Minimum length setting is greater than the Maximum length setting, the symbology will not be readable.

Format: **Full ASCII** Code-39 is an enhanced decoding of

Code-39 that combines one of the digits +, %, \$ and/ with one of the other digits (A to Z).

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 *BAD* Max. code length	00-64	00-64 00□
 *BAE* Min. code length	00-64	00-64 00□
 *BAF* Truncate leading	0-20	00-20 00□
 *BAG* Truncate ending	0-15	00-15 00□
 *BAH* Code ID setting	00-ffH ASCII code	00-ffH <□>
 *BAI* Insert group selection	00-44	00-44 00□
 *BAJ* Format	Standard Full ASCII	00□ 01

Code 39





Append: This function allows several symbols to be concatenated and decoded as one single data entry. The scanner will not transmit the embedded appending code (space for Code-39). If Enabled and other symbols were read again with the appended code, then codes will be transmitted without Code ID, Preamble and Prefix. When a symbol is decoded without the appended code, the data will be transmitted without Code ID and Prefix, but the Postamble Suffix codes are appended. This function is used when the first number of code 39 is a space. Example: <space>123456.

Start/end transmission: The start and end characters of Code-39 are“□”. You can transmit all data digits including the two “□”.



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Program

Option Bar Code	Option	Alphanumeric Entry
 <div> <div>*BAK*</div> <div>Append</div> </div>	<div>Disable</div> <div>Enable</div>	<div>00□</div> <div>01</div>
 <div> <div>*BAM*</div> <div>Start/end transmission</div> </div>	<div>Disable</div> <div>Enable</div>	<div>00□</div> <div>01</div>



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Exit

For all settings related at **Truncate** leading/ending, **Code ID** setting and **Insertion Group** selection, refer to the appropriate section of UPCA.

Codabar

Format:

Start	Data Digits (Variable)	Checksum (Optional)	End
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Checksum Verification: Verifies the MOD 16 check digit.

Checksum Transmission: By setting to Enable, the checksum will be transmitted.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.






Code ID setting: Refer to Code ID setting of UPCA.



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Program

Option Bar Code	Option	Alphanumeric Entry
<p>*EAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00□</p> <p>01□(8110)</p>
<p>*EAB*</p> <p>Checksum Verification</p>	<p>Disable</p> <p>Enable</p>	<p>00□</p> <p>01</p>
<p>*EAC*</p>	<p>Disable</p> <p>Enable</p>	<p>00□</p> <p>01</p>

Checksum Transmission		
 *EAD* Max. code length	00-64	00-64 00□
 *EAE* Min. code length	00-64	00-64 00□
 *EAF* Truncate leading	0-15	00-15 00□
 *EAG* Truncate ending	0-15	00-15 00□
 *EAH* Code ID setting	00-ffH ASCII code	00-ffH < % > □



Exit

Codabar

Insertion group selection: Refer to Insertion group selection of UPCA.

Start/End type: Codabar has four pairs of Start/End patterns; you may select one pair to match your application.

Start/End Transmission: Refer to Start/End Transmission of Code 39.



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Program

Option Bar Code	Option	Alphanumeric Entry
 <p>*EAI*</p> <p>Insert group selection</p>	00-44	00-44 00 <input type="checkbox"/>
 <p>*EAJ*</p> <p>Start/End type</p>	ABCD/ABCD abcd/abcd ABCD/TN*E Abcd/tn*e	00 <input type="checkbox"/> 01 02 03
 <p>*EAK*</p> <p>Start/End transmission</p>	Disable Enable	00 <input type="checkbox"/> 01



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Exit

Code 93

Format:

Data Digits (Variable)	Checksum1	Checksum2
---------------------------	-----------	-----------

Checksum Verification: Verifies two mod 47 check digits.

Checksum Transmission: By setting to Enable, the checksum will be transmitted.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.



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Program

Option Bar Code	Option	Alphanumeric Entry
<p>*CAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00 <input type="checkbox"/></p> <p>01</p>
<p>*CAB*</p> <p>Checksum Verification</p>	<p>Disable</p> <p>Enable (two digits)</p>	<p>00</p> <p>01 <input type="checkbox"/></p>

 *CAC* Checksum Transmission	Disable Enable	00□ 01
 *CAD* Max. code length	00-64	00-64 00□
 *CAE* Min. code length	00-64	00-64 00□
 *CAF* Truncate leading	0-15	00-15 00□
 *CAG* Truncate ending	0-15	00-15 00□
 *CAH* Code ID setting	00-ffH ASCII code	00-ffH < & >□
 *CAI* Insert group selection	00-44	00-44 00□



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Exit

Code 11

Format:

Data Digits (Variable)	Checksum1	Checksum2
---------------------------	-----------	-----------

Checksum Verification: The checksum is presented as the sum module 11 of all data digits.

Checksum Transmission: By setting to Enable, checksum1 and checksum2 will be transmitted upon your selected checksum verification method.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.








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Program

Option Bar Code	Option	Alphanumeric Entry
 AA Read	Disable Enable	00 <input type="checkbox"/> 01
 AAB Checksum Verification	Disable One digit Two digits	00 01 <input type="checkbox"/> 02

 AAC	Disable Enable	00 <input type="checkbox"/> 01
-----------	-------------------	-----------------------------------

Checksum Transmission		
 *AAD* Max. code length	00-64	00-64 00□
 *AAE* Min. code length	00-64	00-64 00□
 *AAF* Truncate leading	0-15	00-15 00□
 *AAG* Truncate ending	0-15	00-15 00□
 *AAH* Code ID setting	00-ffH ASCII code	00-ffH < O > □
 *AAI* Insert group selection	00-44	00-44 00□



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Exit

GS1 DataBar

Information about this symbology is available at:

http://idaautomation.com/gs1_databar_composite.html

Format:

Data Digits (Variable)	Internal Checksum (Required)
---------------------------	---------------------------------

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.






UCC/EAN 128 emulation: Refer to Transmission, Code ID transmission must be set as AIM ID enable. Then JC1 will be identified as prefix of barcode data transmission.



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Program

Option Bar Code	Option	Alphanumeric Entry
 TAA Read	Disable Enable	00 <input type="checkbox"/> 01
 TAD Max. code length	00-64	00-64 64 <input type="checkbox"/>
 TAE Min. code length	00-64	00-64 01 <input type="checkbox"/>

 *TAF* Truncate leading	0-15	00-15 00□
 *TAG* Truncate ending	0-15	00-15 00□
 *TAH* Code ID setting	00-ffH ASCII code	00-ffH < R4 >□
 *TAI* Insert group selection	00-44	00-44 00□
 *TAK* UCC/EAN128 emulation	Disable Enable	00□ 01



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Exit

GS1 DataBar Limited

Information about this symbology is available at:

http://idaautomation.com/gs1_databar_composite.html

Format:

Data Digits (Variable)	Internal Checksum (Required)
---------------------------	---------------------------------

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.







Insertion group selection: Refer to Insertion group selection of UPCA.

UCC/EAN 128 emulation: Refer to UCC/EAN 128 emulation of DataBar.



Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 <input type="checkbox"/> 01
 Max. code length	00-64	00-64 64 <input type="checkbox"/>

 *UAE* Min. code length	00-64	00-64 01 <input type="checkbox"/>
 *UAF* Truncate leading	0-15	00-15 00 <input type="checkbox"/>
 *UAG* Truncate ending	0-15	00-15 00 <input type="checkbox"/>
 *UAH* Code ID setting	00-ffH ASCII code	00-ffH < RL > <input type="checkbox"/>
 *UAI* Insert group selection	00-44	00-44 00 <input type="checkbox"/>
 *UAK* UCC/EAN128 emulation	Disable Enable	00 <input type="checkbox"/> 01



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Exit

GS1 DataBar Expanded

Information about this symbology is available at:

http://idaautomation.com/gs1_databar_composite.html

Format:

Data Digits (Variable)	Internal Checksum (Required)
---------------------------	---------------------------------

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.






UCC/EAN 128 emulation: Refer to GS1-128 128 emulation of DataBar.



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Program

Option Bar Code	Option	Alphanumeric Entry
<p>Read</p>	Disable Enable	00 <input type="checkbox"/> 01
<p>Max. code length</p>	00-99	00-99 99 <input type="checkbox"/>
<p>Min. code length</p>	00-99	00-99 01 <input type="checkbox"/>

 *VAF* Truncate leading	0-15	00-15 00□
 *VAG* Truncate ending	0-15	00-15 00□
 *VAH* Code ID setting	00-ffH ASCII code	00-ffH < RX >□
 *VAI* Insert group selection	00-44	00-44 00□
 *VAK* UCC/EAN128 emulation	Disable Enable	00□ 01



Exit

Interleaved 2 of 5 (ITF)

Information about this symbology is available at:

<http://idaautomation.com/itffaq.html>

Format:

Data Digits (Variable)	Checksum (Optional)
---------------------------	------------------------

Checksum verification: Verify mod 10 checksum.

Checksum transmission: By setting to Enable, the checksum will be transmitted.



\$%+PRO

Program

Option Bar Code	Option	Alphanumeric Entry
 IAA Read	Disable Enable	00 01 <input type="checkbox"/>
 IAB Checksum verification	Disable Enable	00 <input type="checkbox"/> 01
 IAC Checksum transmission	Disable Enable	00 <input type="checkbox"/> 01






Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Interleaved 2 of 5

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 *IAD* Max. code leading	00-64	00-64 00□
 *IAE* Min. code leading	00-64	00-64 00□
 *IAF* Truncate leading	0-15	00-15 00□
 *IAG* Truncate ending	0-15	00-15 00□
 *IAH* Code ID setting	00-ffH ASCII code	00-ffH < i > □
 *IAI* Insert group selection	00-44	00-44 00□



Exit

Industrial 2 of 5

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.



Insertion group selection: Refer to Insertion group selection of UPCA.



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 HAA Read	Disable Enable	00 <input type="checkbox"/> 01
 HAD Max. code length	00-64	00-64 00 <input type="checkbox"/>
 HAE Min. code length	00-64	00-64 00 <input type="checkbox"/>
 HAF Truncate leading	0-15	00-15 00 <input type="checkbox"/>
 HAG Truncate ending	0-15	00-15 00 <input type="checkbox"/>

 *HAH* Code ID setting	00-ffH ASCII code	00-ffH < i > □
 *HAI* Insert group selection	00-44	00-44 00 □



Exit

Matrix 2 of 5

Format:

Data Digits (Variable)	Checksum (Optional)
---------------------------	------------------------

Checksum Verification: Verify mod 10 checksum.

Checksum Transmission: By setting to Enable, the checksum will be transmitted.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.






Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.



Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 <input type="checkbox"/> 01
 Checksum Verification	Disable Enable	00 <input type="checkbox"/> 01
 Checksum	Disable Enable	00 <input type="checkbox"/> 01

Transmission		
 *PAD* Max. code length	00-64	00-64 00□
 *PAE* Min. code length	00-64	00-64 00□
 *PAF* Truncate leading	0-15	00-15 00□
 *PAG* Truncate ending	0-15	00-15 00□
 *PAH* Code ID setting	00-ffH ASCII code	00-ffH < B >□
 *PAI* Insert group selection	00-44	44 00□



Exit

MSI/Plessey

Format:

Data Digits (Variable)	Checksum1	Checksum2
---------------------------	-----------	-----------

Checksum Verification: MSI/Plessey has one or two checksum digits. The checksum may be decoded in 3 different methods Mod10, Mod10/10 and Mod 11/10. The checksum1 and checksum2 will be calculated as the sum module 10 or 11 of the data digits.

Checksum Transmission: By setting to Enable, checksum1 and checksum2 will be transmitted upon your selected checksum verification method.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.



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Program

Option Bar Code	Option	Alphanumeric Entry
<p>*KAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00□</p> <p>01</p>
<p>*KAB*</p> <p>Checksum</p> <p>Verification</p>	<p>Disable</p> <p>Mod 10</p> <p>Mod 10/10</p> <p>Mod 11/10</p>	<p>00□(8110)</p> <p>01□</p> <p>02</p> <p>03</p>

 *KAC* Checksum Transmission	Disable Enable	00 <input type="checkbox"/> 01
 *KAD* Max. code length	00-64	00-64 00 <input type="checkbox"/>
 *KAE* Min. code length	00-64	00-64 00 <input type="checkbox"/>
 *KAF* Truncate leading	0-15	00-15 00 <input type="checkbox"/>
 *KAG* Truncate ending	0-15	00-15 00 <input type="checkbox"/>
 *KAH* Code ID setting	00-ffH ASCII code	00-ffH < @ > <input type="checkbox"/>
 *KAI* Insert group selection	00-44	00-44 00 <input type="checkbox"/>



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Exit

UK/Plessey

Format:

Data Digits (Variable)	Checksum1+2 (Optional)
---------------------------	---------------------------

Checksum Verification: The UK/Plessey has one or two optional checksum digits. The checksum1 and checksum2 will be calculated as the sum module 10 or 11 of the data digits.

Checksum Transmission: By setting to Enable, the checksum will be transmitted.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.






Insertion group selection: Refer to Insertion group selection of UPCA.



\$%+PRO

Program

Option Bar Code	Option	Alphanumeric Entry
<p>*LAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00 <input type="checkbox"/></p> <p>01</p>
<p>*LAB*</p> <p>Checksum Verification</p>	<p>Disable</p> <p>Enable</p>	<p>00</p> <p>01 <input type="checkbox"/></p>
<p>*LAC*</p>	<p>Disable</p> <p>Enable</p>	<p>00 <input type="checkbox"/></p> <p>01</p>

Checksum Transmission		
 *LAD* Max. code length	00-64	00-64 00□
 *LAE* Min. code length	00-64	00-64 00□
 *LAF* Truncate leading	0-15	00-15 00□
 *LAG* Truncate ending	0-15	00-15 00□
 *LAH* Code ID setting	00-ffH ASCII code	00-ffH < @ > □
 *LAI* Insert group selection	00-44	00-44 00□



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Exit

PDF417

Information about this symbology is available at:

<http://idaautomation.com/pdf417faq.html>

Read: Up to 500 characters may be dependably read with the SC5USB-D model scanner. To allow this scanner to read PDF417, the aiming beam must be aligned above the top of the symbol and then slowly moved from the top to the bottom as it is kept horizontal. Light clicks will be heard in the scanner as each row is read. If a successful read is accomplished, keep moving the scanner up and down the symbol until it beeps. In the event the symbol is difficult to scan, improve the quality of the symbol by increasing the N dimension to 4 or 5 (the bar height) and the error correction level.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.



Code ID setting: Refer to Code ID setting of UPCA.




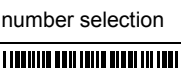
Insertion group selection: Refer to Insertion group selection of UPCA.



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Program

Option Bar Code	Option	Alphanumeric Entry
 QAA Read	Disable Enable	00 <input type="checkbox"/> 01
 QAF Truncate leading	0-15	00-15 00 <input type="checkbox"/>

 QAG Truncate ending	0-15	00-15 00□
 QAH Code ID setting	00-ffH ASCII code	00-ffH < RX >□
 QAI Insert group number selection	00-44	00-44 00□
 QAJ Escape sequence transmit	Disable Enable	00□ 01



Exit

Standard 2 of 5

Format:

Data Digits (Variable)	Checksum1 (Optional)
---------------------------	-------------------------

Checksum verification: The checksum is made as the sum mod 10 of the numerical values of all data digits.

Checksum transmission: By setting to Enable, the checksum will be transmitted.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.






Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.



Program

Option Bar Code	Option	Alphanumeric Entry
<p>*JAA*</p> <p>Read</p>	Disable	00□
	Enable	01
<p>*JAD*</p>	00-64	00-64
		00□

Max. code length		
 *JAE* Min. code length	00-64	00-64 00□
 *JAF* Truncate leading	0-15	00-15 00□
 *JAG* Truncate ending	0-15	00-15 00□
 *JAH* Code ID setting	00-ffH ASCII code	00-ffH < i > □
 *JAI* Insert group selection	00-44	00-44 00□



Exit

Telepen

Checksum Verification: The checksum is presented as the sum mod 10 or 11 of the data digits.

Checksum Transmission: By setting to Enable, the checksum will be transmitted.

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.







Insertion group selection: Refer to Insertion group selection of UPCA.



\$%+PRO

Program

Option Bar Code	Option	Alphanumeric Entry
<p>*MAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00 <input type="checkbox"/></p> <p>01</p>
<p>*MAB*</p> <p>Checksum Verification</p>	<p>Disable</p> <p>Enable</p>	<p>00 <input type="checkbox"/></p> <p>01</p>
<p>*MAC*</p> <p>Checksum Transmission</p>	<p>Disable</p> <p>Enable</p>	<p>00 <input type="checkbox"/></p> <p>01</p>

 *MAD* Max. code length	00-64	00-64 00□
 *MAE* Min. code length	00-64	00-64 00□
 *MAF* Truncate leading	0-15	00-15 00□
 *MAG* Truncate ending	0-15	00-15 00□
 *MAH* Code ID setting	00-ffH ASCII code	00-ffH < S >□
 *MAI* Insert group selection	00-44	00-44 00□
 *MAJ* Format	Numeric only Full ASCII only	00□ 01



Exit

China Post

Format:

Data Digits (Variable)	Checksum1 (Optional)
---------------------------	-------------------------

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.





Insertion group selection: Refer to Insertion group selection of UPCA.



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Program

Option Bar Code	Option	Alphanumeric Entry
<p>*SAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00 <input type="checkbox"/></p> <p>01</p>
<p>*SAD*</p> <p>Max. code length</p>	<p>00-64</p>	<p>00-64</p> <p>11 <input type="checkbox"/></p>
<p>*SAE*</p> <p>Min. code length</p>	<p>00-64</p>	<p>00-64</p> <p>11 <input type="checkbox"/></p>

 *SAF* Truncate leading	0-15	00-15 00□
 *SAG* Truncate ending	0-15	00-15 00□
 *SAH* Code ID setting	00-ffH ASCII code	00-ffH < t > □
 *SAI* Insert group selection	00-44	01-44 00□



Exit

Italian Pharmacode

Format:

Data Digits (Variable)	Checksum1 (Optional)
---------------------------	-------------------------

Max./Min. code length: Refer to Max./Min. code length of Code-39.

Truncate leading/ending: Refer to Truncate leading/ending of UPCA.

Code ID setting: Refer to Code ID setting of UPCA.

Insertion group selection: Refer to Insertion group selection of UPCA.

Leading “A”: If this function is enabled, each prefix of data shall be A.



\$%+PRO

Program

Option Bar Code	Option	Alphanumeric Entry
<p>*WAA*</p> <p>Read</p>	<p>Disable</p> <p>Enable</p>	<p>00 <input type="checkbox"/></p> <p>01</p>
<p>*WAD*</p> <p>Max. code length</p>	<p>00-64</p>	<p>00-64</p> <p>12 <input type="checkbox"/></p>
<p>*WAE*</p>	<p>00-64</p>	<p>00-64</p> <p>09 <input type="checkbox"/></p>

Min. code length		
 *WAF* Truncate leading	0-15	00-15 00□
 *WAG* Truncate ending	0-15	00-15 00□
 *WAH* Code ID setting	00-ffH ASCII code	01-ffH < p > □
 *WAI* Insert group selection	00-44	00-44 00□
 *WAJ* Leading "A"	Disable Enable	00□ 01



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Exit


Interface Selection

The decoder in the scanner supports interfaces such as USB, keyboard wedge, RS232 serial wedge and wand emulation. In most of the cases, simply selecting an appropriate cable with a device code will work for a specific interface.



\$%+PRO

Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 *1AA* Interface selection	Keyboard Wedge	00
	RS-232	01
	Wand emulation	02
	USB	03
	Keyboard	04 <input type="checkbox"/> [Default]
	/RS232/USB	
	Auto detection	
	Reserved	05

Note: ☐ -Default



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Exit

Keyboard wedge


As a keyboard interface, the scanner supports most of the popular PCs and IBM terminals. The installation of the wedge is a fairly simple process without any changes of software or hardware.

Keyboard Type: Select the keyboard type connector for your host computer. The scanner must be selected to the appropriate host interface cable converter.



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Program

Option Bar Code	Option	Alphanumeric Entry
 *2AA* Keyboard type	IBM AT, PS/2	00 <input type="checkbox"/>
	Reserved	01
	Reserved	02
	Reserved	03
	Reserved	04
	Reserved	05
	Reserved	06



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Exit

Keyboard wedge & USB Keyboard Emulation

Keyboard Layout: The selecting of keyboard layout supports many country languages other than the USA keyboard layout.

Keyboard Speed: By selecting, you can change the output speed of the scanner to match the host computer. This is generally set to 00 or 01 to work in high speed mode. If some output characters of barcode have been lost, you may need to set 05 or 06 to match your host keyboard speed.

Function Key Emulation: If Enabled, the scanner can simulate pressing a function-key in your application while the barcode data contains an ASCII value between 01₍₁₆₎ to 1F₍₁₆₎. Refer to the ASCII table, at the end of this manual.




Numeric Key: The Keypad has to be selected if your application program only accepts keypad numeric entries. If enabled, the scanner will output code as if pressing the numeric keypad. (The keypad is in the right side of keyboard, and Num Lock control key is also on.) If Alt+Keypad is selected, Caps Lock and output will be independent.



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
<p>*2AB*</p> <p>Keyboard layout</p>	USA	00□
	Belgium	01
	Danish	02
	France	03
	Germany	04
	Italian	05
	Portuguese	06
	Spanish	07

	Swedish	08
	Switzerland	09
	UK	10
	Latin American	11
	Japanese	12
 *2AC* Keyboard speed	0-8 0 : high clock rate	00-08 01 <input type="checkbox"/>
 *2AD* Function key Emulation	Disable Enable	00 01 <input type="checkbox"/>
 *2AE* Numeric key	Alphabetic key Numeric keypad Alt+Keypad	00 <input type="checkbox"/> 01 02



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Exit

Keyboard wedge & USB Keyboard Emulation

Power-on simulation: It is recommended to Enable this function if you are working without a keyboard installed. It simulates a keyboard.





Inter-character delay: This delay is inserted after each data character is transmitted. If the transmission speed is too high, the system may not be able to receive all characters.

Block transmission delay: A delay timer between barcode data output.



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Program

Option Bar Code	Option	Alphanumeric Entry
 *2AF* Caps lock	Caps lock"ON" Caps lock"OFF"	00 01 <input type="checkbox"/>
 *2AG* Power-on simulation	Disable Enable	00 <input type="checkbox"/> 01
 *2AH* Inter-character delay	00-99 msec	00-99 02 <input type="checkbox"/>
 *2AI* Block trans. delay	00-99 10 msec	00-99 10 <input type="checkbox"/>



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Exit

RS-232

CTS: Clear To Send (Hardware Signal)

RTS: Request To Send (Hardware Signal)

Xon: Transmit On (ASCII Code 11₁₆)

Xoff: Transmit Off (ASCII Code 13₁₆)

Flow control:

None-The communication only uses TxD and RxD signals without regard for any hardware or software handshaking protocol.

RTS/CTS-If the scanner wants to send the barcode data to host computer, it will issue the RTS signal first, wait for the CTS signal from the host computer, and then perform the normal data communication. If there is no replied CTS signal from the host computer after the timeout (Response Delay) duration, the scanner will issue 5 warning beeps.

Xon/Xoff- When the host computer is unable to accept data, it sends a Xoff code to inform the scanner to suspend data transmission, and Xon to continue.

ACK/NAK- When the ACK/NAK protocol is used, the scanner waits for an ACK (acknowledge) or (not acknowledge) from the host computer after data transmission, and will resend in response to a NAK.

Inter-character delay: It is delay time between data character's data output. It is also the same as Inter-char. delay of keyboard wedge.

Block transmission delay: It is a delay time between barcode data output. It is also same as Block transmission delay of keyboard wedge.

Response delay: This delay is used for serial communication of the scanner waiting for handshaking acknowledgment from the host computer.

RS-232



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 3AA	None RTS/CTS Xon/Xoff ACK/NAK	00 <input type="checkbox"/> 01 02 03
 3AB	00-99 (msec)	00-99 00 <input type="checkbox"/>
 3AC	00-99 (10 msec)	00-99 00 <input type="checkbox"/>
 3AD	00-99 (100 msec)	00-99 20 <input type="checkbox"/>



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Exit

RS-232



\$%+PRO

Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 *3AE* Baud rate	300 BPS	00
	600 BPS	01
	1200 BPS	02
	2400 BPS	03
	4800 BPS	04
	9600 BPS	05 <input type="checkbox"/>
	19200 BPS	06
	38400 BPS	07
 *3AF* Parity	None	00 <input type="checkbox"/>
	Odd	01
	Even	02
 *3AG* Data bit	8 bits	00 <input type="checkbox"/>
	7 bits	01
 *3AH* Stop bit	One bit	00 <input type="checkbox"/>
	Two bits	01



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Exit

Wand Emulation

Bar/space polarity:

High/low- Black will be transmitted as a high voltage level (+5) and space as low level (0V).

Low/high- Black will be transmitted as a low voltage level (0V) and space as high level (+5).

Initial polarity: Initial signal state is a High voltage level (+5) or a Low voltage level (0V).



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
<p>*4AA*</p> <p>Bar/space polarity</p>	<p>High/low</p> <p>Low/high</p>	<p>00 <input type="checkbox"/></p> <p>01</p>
<p>*4AB*</p> <p>Initial polarity</p>	<p>Low</p> <p>High</p>	<p>00 <input type="checkbox"/></p> <p>01</p>

Output speed: This setting is the same as the serial transmission baud rate, and it must be approbated to your wand decode resolution. The unit of speed is a width of minimum narrow bar (X dimension).

Margin delay: The width of margin time will be added before and after in each barcode data automatically when it is transmitted.

Transmit delay: The delay time before barcode data output. It is the same as the Block transmission delay of the keyboard wedge.

Option Bar Code	Option	Alphanumeric Entry
 *4AC* Output speed	620 pps 1250 pps 2500 pps 5000 pps 10000 pps 20000 pps *pps: pixel per second	00 01 02 03□ 04 05
 *4AD* Reserved		00□
 *4AE* Reserved		00□
 *4AF* Margin delay	00-99 (10 pixel)	00-99 15□
 *4AG* Transmit delay	00-99 (10 msec)	00-99 30□



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Exit

Scan Configuration

Scanning mode:

Good-read off: The trigger button must be pressed to activate scanning. The light source of the scanner stops scanning when there is a successful read or no code is decoded after the Stand-by duration elapses.

Momentary: The trigger button acts as a switch. Press the button to activate scanning and release the button to stop scanning.

Alternate: The trigger button acts as a toggle switch. Press the button to activate or stop continuous scanning.

Timeout off: The trigger button must be pressed to activate scanning, and scanner stops scanning when no code is decoded after the Stand-by duration has elapsed.

Continuous: The scanner always keeps reading, and it does not matter when the trigger button is pressed or the duration has elapsed.





Double read timeout: If the barcode has been scanned twice, then only the first barcode will be accepted.

Double confirm: If enabled, the scanner will require successful decoding several times to confirm the barcode data. If you set Double confirm, the Multi field scan Enable function will not be able to work.



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 *7AA* Scanning mode	Good-read off Momentary Alternate Timeout off Continuous	00 01 <input type="checkbox"/> [Default] 02 03 04 05 (Test only)
 *7AB* Stand-by duration	01-99 (second)	00-99 06 <input type="checkbox"/> (8110/8210) 10 <input type="checkbox"/> (8150/8310)
 *7AC* Double read timeout	01-99 (10 msec)	01-99 50 <input type="checkbox"/>
 *7AD* Double confirm	00-99 (00: no double confirm)	00-09 00 <input type="checkbox"/>



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Exit

Scan Configuration

Multi field scan: The scanner can read many sets of barcode data on the same scanning line at the same time, even if they are different barcode symbologies.

Global min./max. code length: Global Minimum and Maximum length can be set to qualify data entry. The length is defined as the actual barcode data length to be sent. Barcodes with lengths that exceed these limits will be rejected. Make sure that the Minimum length setting is no greater than the Maximum length setting, or the barcode will not be readable. In particular, you can set the same value for both Minimum and Maximum reading length to force decoding of only a fixed length barcode.

Inverted image scan: If Enabled the scanner will scan both black/white barcodes with white/black backgrounds.

CTS trigger: This operation enabled an external device to control scanning. The CTS trigger is controlled by applying an external trigger signal to the CTS input. When active, this signal causes scanning to begin.


Power saving: Places the scanner in an idle state during idle time to optimize power usage.






Position indication: This function can indicate the specific location before scanning. You can also set up the time of indication.



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Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 *7AE* Multi field scan	Disable Enable	00 <input type="checkbox"/> 01

 *7AF* Global min. code length	00-63	00-63 04 <input type="checkbox"/>
 *7AG* Global max. code length	00-63	04-63 63 <input type="checkbox"/>
 *7AH* Inverted image scan	Disable Enable	00 <input type="checkbox"/> 01
 *7AI* CTS trigger	Disable Enable	00 <input type="checkbox"/> 01
 *7AK* Position indication	Disable 30 second 60 second 90 second 120 second 150 second 180 second Continue	00 <input type="checkbox"/> 01 02 03 04 05 06 07



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Exit

Indications

Power on alert: An alert signal to indicate a successful self-test.

LED indication: After each successful scan, the LED above the scanner will light up to indicate a good barcode reading.




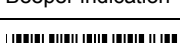
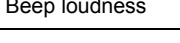
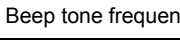
Beeper indication: After each successful reading, the scanner will beep to indicate a good barcode reading. Its Beep loudness, Beep tone freq and Beep tone duration are adjustable.

Beep loudness, tone frequency and duration: You may adjust Beep Loudness, Beep tone and Beep duration for a good reading.



\$%+PRO

Program

<i>Option Bar Code</i>	<i>Option</i>	<i>Alphanumeric Entry</i>
 *5AA* Power on alert	Disable Enable	00 01 <input type="checkbox"/>
 *5AB* LED indication	Disable Enable	00 01 <input type="checkbox"/>
 *5AC* Beeper indication	Disable Enable	00 01 <input type="checkbox"/>
 *5AD* Beep loudness	00-07	00-07 07 <input type="checkbox"/>
 *5AE* Beep tone frequency	00-99 (100Hz)	00-99 26 <input type="checkbox"/>
 *5AF* Beep tone duration	00-99 (10 msec)	00-99 10 <input type="checkbox"/>



%\$\$

Exit

String Settings

Prefix characters: Up to 22 ASCII characters may be sent before the data digits.

Prefix	Data Digits	Suffix
--------	-------------	--------

Suffix characters: Up to 22 ASCII characters may be sent after the data digits.

Preamble/ Postamble characters: They are appended to the data automatically when each barcode is decoded.

Example:

Add a prefix/suffix or preamble/postamble for all symbologies. In this example, you are sending a \$ symbol as a prefix for all symbologies.



Steps:







- 1) Scan **Programming** and **Prefix characters setting** barcode.
- 2) Use the ASCII code table to find the value of \$ which is 2 4.
- 3) Scan **2** and **4** from the barcode on the fold out back page.
- 4) Scan **Finish** from the barcode on the fold out back page.
- 5) Scan **Exit** barcode.



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Program

Option Bar Code	Option	Alphanumeric Entry
 *8AA* Prefix characters setting	None 1-22 characters	00 <input type="checkbox"/> 00-ffH ASCII code
 *8AB* Suffix characters setting	None 1-22 characters	0D <input type="checkbox"/> 00-ffH ASCII code

 *8AC* Preamble characters setting	None 1-22 characters	00□ 00-ffH ASCII code
 *8AD* Postamble characters setting	None 1-22 characters	00□ 00-ffH ASCII code
 *8AE* Insert G1 characters setting	None 1-22 characters	00□ 00-ffH ASCII code
 *8AF* Insert G2 characters setting	None 1-22 characters	00□ 00-ffH ASCII code
 *8AG* Insert G3 characters setting	None 1-22 characters	00□ 00-ffH ASCII code
 *8AH* Insert G4 characters setting	None 1-22 characters	00□ 00-ffH ASCII code



%\$\$\$

Exit

String Settings

Insert G1/G2/G3/G4 character setting: The scanner offers 4 positions and 4 characters for insertion into the text of the decoded the symbol.

Example: Barcode "1 2 3 4 5 6".

Output- Barcode "1 2 A B 3 4 C D 5 6".

Steps:


- 1) Scan **Programming** and **Insert G1 characters setting** barcode.
- 2) Use the ASCII code table to find the value of A which is 4 1 and B, which is 4 2.
- 3) Scan **4 1** and **4 2** from the barcode on the fold out back page.
- 4) Scan **Finish** from the barcode on the fold out back page.
- 5) Repeat the same procedure in **Insert G2 characters setting**.
- 6) Scan **Exit** barcode.
- 7) Insert data group 1-4 position. Please refer to the Chapter **Transmission** for the specific barcode that you want to use.



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Program

Option Bar Code	Option	Alphanumeric Entry
<p>*8AE*</p> <p>Insert G1 characters setting</p>	<p>None</p> <p>1-22 characters</p>	<p>00□</p> <p>00-ffH ASCII code</p>
<p>*8AF*</p> <p>Insert G2 characters setting</p>	<p>None</p> <p>1-22 characters</p>	<p>00□</p> <p>00-ffH ASCII code</p>
<p>*8AG*</p>	<p>None</p> <p>1-22 characters</p>	<p>00□</p> <p>00-ffH ASCII</p>

Insert G3 characters setting		code
 *8AH*	None 1-22 characters	00□ 00-ffH ASCII code
Insert G4 characters setting		



Exit

Transmission

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

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




Insert data group 1-4 position: The scanner offers 4 positions of insertion. The position default value is “00” to indicate no character insertion.

Code ID position: Upon your usage, the transmitting position of Code ID can be placed Before Code Data or After Code Data when it is transmitted.



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Program

Option Bar Code	Option	Alphanumeric Entry
 *6AA* Preamble transmission	Disable Enable	00 <input type="checkbox"/> 01
 *6AB* Postamble transmission	Disable Enable	00 <input type="checkbox"/> 01
 *6AC*	00-63 (00: no insertion)	00-63 00 <input type="checkbox"/>

Insert data group 1 position		
 *6AD* Insert data group 2 position	00-63 (00: no insertion)	00-63 00□
 *6AE* Insert data group 3 position	00-63 (00: no insertion)	00-63 00□
 *6AF* Insert data group 4 position	00-63 (00: no insertion)	00-63 00□
 *6AG* Code ID position	Before code data After code data	00□ 01



Exit

Transmission

Code ID transmission: If your application requires a Code ID, you must set this to a Proprietary ID or the AIM ID.



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



Code name transmission: This function is to show unknown barcode symbologies that include all readable symbologies of the scanner. When Enable is selected, Code Name will be transmitted before code data, so you will know what the symbology is.

Case conversion: You can set this to either upper case or lower case.



Program

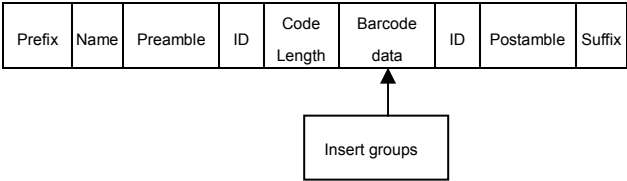
Option Bar Code	Option	Alphanumeric Entry
 *6AH* Code ID transmission	Disable Proprietary ID AIM ID	00 <input type="checkbox"/> 01 02
 *6AI* Code length transmission	Disable Enable	00 <input type="checkbox"/> 01

 *6AJ* Code name transmission	Disable	00 <input type="checkbox"/>
	Enable	01
 *6AK* Case conversion	Disable	00 <input type="checkbox"/>
	Upper case	01
	Lower case	02
	*For barcode data only	



Exit

Format of barcode data transmission:



Barcode Symbol Test Chart

CODABAR * (Not enabled by default)



a154987a

CODE-128



258963

CODE-39



741258

CODE-93 * (Not enabled by default)



951263

EAN-13



7 534539 789813

EAN-8



9456 2156

UPC-E



INTERLEAVED-25



MSI / PLESSEY * *(Not enabled by default)*



UPCA



GS1-128



GS1 DataBar * *(Not enabled by default)*



GS1 DataBar Stacked * *(Not enabled by default)*



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GS1 DataBar Limited * (Not enabled by default)



GS1 DataBar Expanded * (Not enabled by default)



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* This symbology is not enabled by default; refer to the particular symbology section of the manual to enable.

ASCII Code Table

NOTE: Cells this shade  are for function key emulation only.

Note: For Function Key Emulation only.

L \ H	0	1	0	1
0	Null		NUL	DLE
1	Up	F1	SOH	DC1
2	Down	F2	STX	DC2
3	Left	F3	ETX	DC3
4	Right	F4	EOT	DC4
5	PgUp	F5	ENQ	NAK
6	PgDn	F6	ACK	SYN
7		F7	BEL	ETB

L	H	0	1	0	1
8		Bs	F8	BS	CAN
9		Tab	F9	HT	EM
A			F10	LF	SUB
B		Home	Esc	VT	ESC
C		End	F11	FF	FS
D		Enter	F12	CR	GS
E		Insert	Ctrl+	SO	RS
F		Delete	Alt+	SI	US

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

Parameter Setting List



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Program



!BS

Barcode standard parameter setting list

Used to display the current configuration of your scanner over the host terminal/computer.



!BU

Unique parameter list

Used to display the unique parameter setting list.



!SY

System parameter setting list

Displays product information and revision number of your scanner.



String setting list

If you wish to display the string format list, scan the String setting list bar code.



!VR

Firmware version list

If you wish to display the firmware version, scan the Firmware version list.



!IN

WARNING: Default value initialization

If you wish to return to all the factory default settings, scan the Default value initialization bar code.



%\$S\$

Exit

Scanner Specifications	
Operational	
Light Source	660 nm Visible Red LED
Optical System	2048 pixel CCD (Charge-coupled device)
Depth of Scan Field	0-250 mm (CODE 39, PCS=90%, 20mils)
Scanning Width	120 mm
Scan Speed	200 scans/sec
Resolution	0.1mm(4mils) Code39,PCS=90%
Print Contrast	30% or more
Scanning Angle	Front: 60° Rear: 60° Yaw: 75°
Decode Capability	Auto-discriminates all standard barcodes
Beeper Operation	7 tones or no beep
Indicator	Green led
Mechanical	
Length	182 mm
Width-handle	26 mm
Width-head	74 mm
Depth-handle	51 mm
Depth-head	35 mm
Weight	160 g
Cable – K/B wedge	Straight 2.0 m
Cable- USB	Straight 2.0 m
Connector type	RJ-45 connector
Case material	PC
Cushion material	Rubber
Electrical	
Input Voltage	5 VDC \pm 0.25V
Power - Operating	1275 mW
Power - Standby	600 mW
Current - Operating	255 mA @ 5 VDC

Current - Standby	120 mA @ 5 VDC
DC Transformers	Class 2; 5VDC @ 450 mA
Agency listing	UL, FCC Class A, CE
Environmental	
Operating Temperature	0° to 45° (32° to 113°)
Storage	-40° to 60° (-40° to 140°)
Humidity	5% to 90% relative humidity, non-condensing
Light Level	Up to 60000 Lux
Shock	1.5m drop onto concrete
Contaminants	Sealed to resist airborne particles
Ventilation	None required



/0 **0**



/1 **1**



/2 **2**



/3 **3**



/4 **4**



/5 **5**



/6 **6**



/7 **7**



/8 **8**



/9 **9**



/A **A**



/B **B**



/C **C**



/D **D**



/E **E**



/F **F**



/%/% **Finish**

αη