NOTICE:

This equipment has been tested and it complies with

This device complies with Part 15 of the FCC Rules. Operation shall be subject to the following two conditions: (1) This device may not cause harmful interface, and (2) This device must accept any interface received, including interface that may cause undesirable operation.

the limits for a Class a digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide a reasonable protection against harmful interference when the equipment is operated under a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expenses.

***Note**: All brands and trademarks shall belong to their respective owner.*

***Note**: Specification is subject to changes without notice.*

Using the ArgoxScan AS-8150/ 8250 (Rev.B)

The ArgoxScan can automatically scan barcode at a distance. Simply aim and pull the trigger. Code scanning is performed along the center of the light bar emitted from the reading window. This bar must cover the entire code.

Recommended Steps

When the required settings have been configured, all settings are stored in non- volatile memory of the scanner after reading EXIT Label. Recommended steps are as follows.

1) Set the right host interface for your scanner. (The scanner is in factory default shown as bold label)
2) Set interface to optimize protocol of the scanner with your host in interface section.
3) Set system control of the scanner, such as specific adjustments double confirm, indicator and scanning mode which you prefer using in the system control section.
4) Set code options of the scanner for your usage in the code option section. You must make sure to enable the symbology first, then Min./Max. code length, code ID checksum and truncate digits are also converted.
5) Set string format of the scanner, such as preamble, postamble Prefix, suffix, code ID and code name transmission for your application in the string format section.

Note: *If it stil does not work properly. Please contact your dealer for further information.*

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Introduction

Installation RS-232

1) Disconnect power to the terminal/computer.
2) Connect the appropriate interface cable and external power supply (DC adapter) to the scanner.
3) Plug the serial connector into the serial port on the back of your computer/terminal. Tighten the two screws to secure the connector to the port.
4) Plug the power pack into a power source.
5) Once the scanner has been fully connected, turn the terminal/computer power back on.

USB HID (Simulate with keyboard wedge)

1) Connect the USB cable between scanner and PC.
2) Windows will automatically detect the USB device.

USB Com

1) Connect the USB cable between scanner and PC.
2) Windows will automatically detect the USB device.

Note: *If any of the above operations is incorrect, turn off the power immediately and check any improper connections. Go through all above steps again.*

Default setting

For each barcode shown as below:

Code Type	Read Enable	Checksum Verification Enable	Checksum Transmission Enable	Code ID
	3000			
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	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		-	-	i
GS1databar Omnidirectiona		-	-	R4
GS1databar Limited		-	-	RL
GS1databar Expanded		-	-	RX
China Post				t
Italian Pharmacode.				p

ArgoScan 8150 / 8250(Rev.B)	
Specification	Model 8150/8250
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; Other symbologies can be ordered optionally (2D symbologies for 8250 and 8312 only)
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 not included)
Cable – K/B wedge	Straight 2.0 m
Cable – universal type	Straight 2.3 m
Cable- USB	Straight 2.0 m
Connector type	RJ-45 phone jack connector
Case material	PC
Cushion material	Rubber
Electrical	
Input Voltage	5 VDC ± 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	Seals to resist airborne particulate contaminants

Ventilation	None required
Programming	
Programming method	Manual (Reading special barcode) DOS command through RS-232, Windows configuration program
Program upgrade	Enabled by built-in flash memory
Programmable characteristics	Code type selection, check digit selection Decoding option Decoding option Transmitted character delay, Header selection, trailer selection, message suffix, good read beep tone and volume, scanner trigger selection Keyboard emulation type (intermessage delay, keyboard type and keyboard language) Serial interface type (ACK/NAK, Xon/Xoff, RTS/CTS, good read LED control, start/stop bits)

Programming scanners

To program the AS-8150/ 8250 (Rev.B) , you must scan a series of programming barcode in the correct order. On the last page of this manual, you will see a table of alphanumeric barcodes, which are used to program the various options presented.

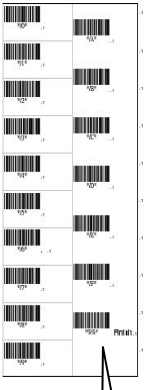
To program each option, you must:

1. Scan the **Program** barcode on the parameter setting part.
2. Enter the option mode by scanning the **Option Bar Code** (also on the Parameter setting part).
3. To the right of the option barcode, the necessary alphanumeric inputs are listed. Scan these alphanumeric entries from the last page . To confirm above steps, you must scan the **Finish** barcode on the last page.
4. Once you have finished programming. Scan the **Exit** barcode, listed on the lower right hand corner of each parameter setting part.

Program

Program Barcode

Option Bar Code	Option	Alphanumeric Entry
1AA	Keyboard Wedge	00
Interface	RS-232	01
selection	Wand emulation	02
	USB	03
	/RS-232	04 *
	Auto detection	



Exit

Option Barcode

Exit Barcode

On the last page

Finish barcode

Interface Selection

This decoder built-in scanner comes in one model and supports interfaces such as RS232 serial and the latest USB interface. In most of the cases, simply selecting an appropriate cable with a device code will work for a specific interface.

Interface selection: You can change factory interface default for another type interface. By plugging different cables, setting right interface, the scanner will change to another interface. However, you must make sure which cable you need.

RS232/ USB HID Auto detection: By setting this function, it will automatically select the RS-232 or /USB HID interface for the user.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Interface selection	RS-232	01
	USB HID	03
	RS232/ USB HID Auto detection	04 *
	USB COM	05

Note: * -Default **Exit**

USB HID Keyboard

USB HID Keyboard Layout: The selecting of keyboard layout supports languages other than USA keyboard layout. First you need to confirm country language that you desire. In DOS, using command “keyb” to select the desirable keyboard layout or in WINDOWS entry “Control” then pops “Keyboard” to select country from the “language” item. For details, please refer to your DOS or WINDOWS user’s manual.

Function Key: Set Enable, scanner can output code as pressing function-key in your application program while the barcode datas contain ASCIIvalues between 01_{16} to $1F_{16}$. Refer to ASCII table.

Numeric Key: The Keypad has to be selected if your application program is only keypad numeric code acceptable. The scanner will output code as you press the numeric keypad when it reads a numeric digit. (The keypad is on the right side of keyboard, and Num Lock control key is also on.) If Alt+Keypad is selected, the data characters will be transmitted as “Alt” + numbers. For example, when sending character “A”, the actual sending will be “Alt”+65. It is also useful when using non-English OS and keyboard layout.

Caps Lock: By selecting Caps lock”ON” or Caps lock”OFF”, scanner can get Caps Lock status.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
	USA	00 *
	Belgium	01
Keyboard layout	Danish	02
	France	03
	Germany	04
	Italian	05
	Portuguese	06
	Spanish	07
	Swedish	08
	Switzerland	09
	UK	10
	Latin American	11
	Japanese	12
	Disable	00
	Enable	01 *
Function key		
	Alphabetic key	00 *
	Numeric keypad	01
Numeric key	(Num lock state	

	only)Alt+Keypad	02
2AF	Caps lock”ON”	00
	Caps lock”OFF”	01 *
Caps lock	Caps lock for Mac	02

%$$

Exit

RS-232

CTS: Clear To Send (Hardware Signal)
RTS: Request To Send (Hardware Signal)
Xon: Transmit On (ASCII Code 11_{16})
Xoff: Transmit Off (ASCII Code13_{16})

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

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

Response delay: This delay is used for serial

communication of the scanner to wait for handshaking acknowledgment from the host computer.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Flow control	None RTS/CTS Xon/Xoff ACK/NAK	00 * 01 02 03
 Inter-character delay	00-99 (msec)	00-99 00 *
 Block transmission delay	00-99 (10 msec)	00-99 00 *
 Response delay	00-99 (100 msec)	00-99 20 *

Exit

Program

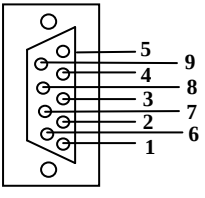
Option Bar Code	***Option***	***Alphanumeric Entry***
 Baud rate	600 BPS 1200 BPS 2400 BPS 4800 BPS 9600 BPS 19200 BPS 38400 BPS 57600BPS 115200BPS	01 02 03 04 05 * 06 07 08 09
 Parity	None Odd Even	00 * 01 02
 Data bit	8 bits 7 bits	00 * 01
 Stop bit	One bit Two bits	00 * 01

Exit

Pin Assignments

RS-232 DB-9F Connector (To Host Side):

Pin	Definition
1	NC
2	TXD
3	RXD
4	NC
5	GND
6	NC
7	CTS
8	RTS
9	VCC (+5V)



Scan

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 reading or no code is decoded after the Stand-by duration elapsed.
Momentary-The trigger button acts as a switch. Press button to activate scanning and release button to stop scanning.
Alternate-The trigger button acts as a toggle switch. Press button to activate or stop scanning.
Timeout off-The trigger button must be pressed to activate scanning, and the scanner stops scanning when no code is decoded after the Stand-by duration has elapsed.
Continue-Scanner always keeps reading, and it does not matter when the trigger button is pressed or duration has elapsed.
Test only-For test of scan performance only. This should not be used to be utilized to check the accuracy of transmitted data.

Double read timeout: The scanner will require several successful decodings to confirm the data when enabled. The more confirm times required, the more inhibitive miss-reading code will be shown. The Multi field scan Enable function won't be able to work if set to Double confirm.

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

Supplement Check Counter: It will be more reliable to read the barcode an extension (supplement) like UPCE/A or EAN-8/13, but it slows down the decoding speed when this counter is set more.

$%+PRO **Program**

Option Bar Code	*Option*	*Alphanumeric Entry*
7AA Scanning mode	Good-read off Momentary Alternate Timeout off Continue (led on) Test only Continue (led off)	00 01 * 02 03 04 05 06
7AB Stand-by duration	01-99 (second)	00-99 06 *
7AC Double read timeout	01-99 (10 msec)	01-99 50 *
7AD Double confirm	00-99 (00: no double confirm)	00-09 00 *
7AE Supplement Check Counter	00-99 (verifications)	00-99 5 *

%$$ **Exit**

Scan

Global min./max. code length: These are to define the min/ max readable code length of all symbologies. Code length less than min. code length or more than max. code length will not be read. In general, you can set the same value for both min. and max. reading length to force the fixed length barcode decoded. The values of setting have no effect on certain symbologies with fixed length. You can specify the settings for individual barcode by the min/max code length setting of each barcode.

Notes 1): Please set the min/max length if you have special demand for individual barcode.

2): Include the Check sum digits if you want to set Global min/max code length.

Inverted image scan: Set Enabled the scanner will scan both black/white barcode with white/black background.

CTS trigger: This operation enables 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 as the scanner's trigger is depressed.

Program

Option Bar Code	*Option*	*Alphanumeric Entry*
 Global min. code length	00-99	00-99 4 *
 Global max. code length	00-99	04-99 99 *
 Inverted image scan	Disable Enable	00 * 01
 CTS trigger	Disable Enable	00 * 01

Exit

Scan

Position indication: If the function is enabled, scan beam will flash as a pointer to help you aim at the bar code prior to scanning. The code will not be scanned until you press the trigger.

Stand mode selection: Normally activated with continuous mode. If it is set as LED “off”, the scanner red beam will turn off automatically if not used, but will turn on again immediately when scanning bar codes.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Position indication	Disable	00 *
	30 second	01
	60 second	02
	90 second	03
	120 second	04
	150 second	05
	180 second	06
	Continue	07

Exit

Indication

Power on alert: After power-on the scanner will generate an alert signal to indicate a successful self-test.

LED indication: After each successful reading, 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, and its Beep loudness, Beep tone freq. and Beep tone duration are adjustable.

Beep loudness/Beep tone freq./Beep tone duration: You can adjust Beep Loudness, Beep tone and Beep duration for a good reading to your preferred setting.

$%+PRO

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
5AA Power on alert	Disable Enable	00 01 *
5AB LED indication	Disable Enable	00 01 *
5AC Beeper indication	Disable Enable	00 01 *
5AD Beep loudness	00-07	00-07 07 *
5AE Beep tone freq.	00-99 (100Hz)	00-99 40 *
5AF Beep tone duration	00-99 (10 msec)	00-99 10 *

%$$

Exit

UPCA

Format

Leading Zero	Data Digits (11 Digits)	Check Digit

Read: Enable or disable the read function.

Check-sum transmission: By setting Enable, checks sum will be transmitted.

Truncate leading/ending: The leading or ending digits of barcode data characters can be truncated when these values are set to non-zero. It will beep instead of reading anything when the truncate value is more than the barcode data digits or the value of Truncate Leading is overlapped with that of the Ending. The maximum value of truncate digits is 15.

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 data begin or end transmitted if the feature is selected. If you want an application to transmit Code ID, you must set Code ID transmission to Enable first. Refer to Code ID transmission.

Program

Option Bar Code	*Option*	*Alphanumeric Entry*
 Read	Disable Enable	00 01 *
 Check-sum transmission	Disable Enable	00 01 *
 Datamagic	Disable Enable	00 * 01
 Truncate leading	0-15	00-15 00 *
 Truncate ending	0-15	00-15 00 *
 Code ID setting	00-ffH ASCII code	00-ffH < A > *

Exit

UPCA

Insertion group number selection: The scanner offers max. two insertion groups for one symbology. By setting one or two digits to indicate which insertion group you want to insert. You may refer to Character insertion. The function is to insert specific characters as a group into the transmitted data of selected symbologies. Enable the group insertion by selecting the group number.

Example: Group 2 → set 02 or 20.
Group 1 and 4 → set 14 or 41.

Notes 1): Group number set to “0” means that no group insertion required.
2): Details about the Insert Group settings please refer to page 98~101, and page 107 ASCII code table.

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

Format

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

$%+PRO

Program

Option Bar Code	*Option*	*Alphanumeric Entry*
NAI Insert group number selection	00-44	00-44 00 *
NAJ Supplement digits	None 2 digits 5 digits 2,5 digits UCC/EAN 128 2, UCC/EAN 128 5, UCC/EAN 128 All	00 * 01 02 03 04 05 06 07

%$$

Exit

UPCA

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

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Truncation/ Expansion	None Truncate leading zero Expand to EAN13	00 01 * 02
 Supplement Check Counter	00-99 (verifications)	00-99 5 *

Exit

UPCE

Read: Format

Leading Zero	Data Digits (6 Digits)	Check Digits

Check-sum transmission: By setting Enable, checks sum will be transmitted.

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

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

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Read	Disable Enable	00 01 *
 Check-sum transmission	Disable Enable	00 01 *
 Datamagic	Disable Enable	00 * 01

OAF Truncate leading	0-15	00-15 00 *
OAG Truncate ending	0-15	00-15 00 *
OAH Code ID setting	00-ffH ASCII code	00-ffH < E > *

%$$ **Exit**

UPCE

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

Supplement digits:

Format

Leading Zero	Data Digits (6 Digits)	Check Digit	Supplement Digits 2 or 5 or UCC/EAN 128

Expansion: The expansion function is used only for UPCE and EAN-8 code reading. It extends to 13-digits with “0” digits when the feature is enabled.

Example: Barcode “0123654”

Output: “0012360000057”

UPCE-1: Enable scanner to read UPCE with leading digit 1.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Insert group number selection	00-44	00-44 00 *
 Supplement digits	None 2 digits 5 digits 2,5 digits UCC/EAN 128	00 * 01 02 03 04

	2, UCC/EAN 128	05
	5, UCC/EAN 128	06
	All	07
 *OAK* Truncation/Expansion	None	00 *
	Truncate leading zero	01
	Expand to EAN13	02
	Expand to UPCA	03
 *OAL* Expansion	Disable	00 *
	Enable	01
 *OAM* UPCE-1	Disable	00 *
	Enable	01
 *7AE* Supplement Check Counter	00-99 (verifications)	00-99 05 *


%$$

Exit

EAN-13

Read: Format

Data Digits (12 Digits)	Check Digits

Check-sum transmission: By setting Enable, checks sum will be transmitted.

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

Truncate leading zero: Refer to Truncation / Expansion of UPCA.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Read	Disable Enable	00 01 *
 Check-sum transmission	Disable Enable	00 01 *
 Datamagic	Disable Enable	00 * 01

 Truncate leading	0-15	00-15 00 *
 Truncate ending	0-15	00-15 00 *

Exit

EAN-13

Code ID setting: Refer to page 30 Insertion group number selection of UPCA.

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

Supplement digits:

Format

Data Digits (12 Digits)	Check Digits	Supplement Digits 2 or 5 or UCC / EAN 128

ISBN/ISSN: The ISBN (International Standard Book Number) and ISSN (International Standard Serial Number) are two kinds of barcode for books and magazines. The ISBN is 10 digits with leading “978” and the ISSN is 8 digits with leading “977” of the “EAN-13” symbology.

Example: Barcode “9789572222720” - Output: “9572222724”
Example: Barcode “9771019248004” - Output: “10192484”

$%+PRO

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
GAH Code ID setting	00-ffH ASCII code	00-ffH < F > *
GAI Insert group number selection	00-44	00-44 00 *

 *GAJ* Supplement digits	None 2 digits 5 digits 2,5 digits UCC/EAN 128 2, UCC/EAN 128 5, UCC/EAN 128 All	00 * 01 02 03 04 05 06 07
 *GAL* ISBN/ISSN conversion	Disable Enable	00 * 01
 *7AE* Supplement Check Counter	00-99 (verifications)	00-99 05 *


%$$

Exit

EAN-8

Read: Format

Data Digits (7 Digits)	Check Digits

Check-sum transmission: By setting Enable, checks sum 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 number selection: Refer to page 30 Insertion group number selection of UPCA.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 *FAA* Read	Disable Enable	00 01 *
 *FAB* Check-sum transmission	Disable Enable	00 01 *
 *FAC* Datamagic	Disable Enable	00 * 01

 *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 number selection	00-44	00-44 00 *


%$$

Exit

EAN-8

Supplement digits: Format

Data Digits (7 Digits)	Check Digits	Supplement Digits 2 or 5 or UCC/EAN 128

Truncation / Expansion: Refer to Truncate Leading zero of UPCE.

Expansion: Refer to Expansion of UPCE.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Supplement digits	None	00 *
	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
 Truncation / Expansion	None	00 *
	Truncate leading zero	01
	Expand to EAN13	02

 Expansion	Disable Enable	00 * 01
 Supplement Check Counter	00-99 (verifications)	00-99 05 *

Exit

Code 39

Read: Format

Start	Data Digits	Checksum	End
“★”	(Variable)	(Optional)	“★”

Check-sum verification: The checksum of Code-39 is optional and made as the sum module 43 of the numerical value of the data digits.

Check-sum transmission: By setting Enable, checksum will be transmitted.

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. Labels 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 otherwise all the labels of the symbology will not be readable. In particular, you can see the same value for both Minimum and Maximum reading length to force the fixed length barcode decoded.

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

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

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Read	Disable Enable	00 01 *

 *BAB* Check-sum transmit /verify	Disable/Disable Disable/Enable Enable /Enable	00 * 01 02
 *BAC* Datamagic	Disable Enable	00 * 01
 *BAD* Max. code length	00-64	00-64 00 *
 *BAE* Min. code length	00-64	00-64 01 *
 *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 < * >


%$$

Exit

Code 39

Insertion group number selection: Refer to page 30 Insertion group number selection of UPCA.

Format: The Full ASCII Code-39 is an enhanced set of Code-39 that is data with a total of 128 characters to represent Full ASCII code. It is combined with one of the digits +, %, $ and/ with one of the alpha digits (A to Z).

Append: This function allows several symbols to be concatenated and treated as one single data entry. The scanner will not transmit the embedded appending code (space for Code-39). If Enable 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: □123456.

Start/end transmission: The start and end characters of Code-39 are"★". You can transmit all data digits including two "★".

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Insert group number selection	00-44	00-44 00 *

 *BAJ* Format	Standard Full ASCII	00 * 01
 *BAK* Append	Disable Enable	00 * 01
 *BAM* Start/end transmission	Disable Enable	00 * 01


%$$

Exit

Interleaved 2 of 5

Read: Format

Data Digits (Variable)	Checksum (Optional)

Check-sum verification: The checksum is made as the sum module 10 of the numerical values of all data digits.
Check-sum transmission: By setting Enable, 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 number selection: Refer to page 30 Insertion group number selection of UPCA.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Read	Disable Enable	00 01 *
 Check-sum transmit/verify	Disable/Disable Disable/Enable Enable /Enable	00 * 01 02

IAC Datamagic	Disable Enable	00 * 01
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 number selection	00-44	00-44 00 *

%$$

Exit

Industrial 2 of 5

Read: Format

Data Digits (Variable)	Checksum (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 number selection: Refer to page 30 Insertion group number selection of UPCA.

Program

Option Bar Code	***Option***	***Alphanumeric Entry***
 Read	Disable Enable	00 * 01
 Datamagic	Disable Enable	00 * 01
 Max. code length	00-64	00-64 00 *

 *HAE* Min. code length	00-64	00-64 00 *
 *HAF* Truncate leading	0-15	00-15 00 *
 *HAG* Truncate ending	0-15	00-15 00 *
 *HAH* Code ID setting	00-ffH ASCII code	00-ffH < i > *
 *HAI* Insert group number selection	00-44	00-44 00 *


%$$

Exit

Matrix 2 of 5 Eur

Read: Format

Data Digits (Variable)	Checksum (Optional)

Checksum Verification: The checksum is made as the sum module 10 of the numerical values of all data digits.
Checksum Transmission: By setting Enable, 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 number selection: Refer to page 30 Insertion group number selection of UPCA.

Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 * 01
 Checksum Transmit/ Verify	Disable/Disable Disable/Enable Enable /Enable	00 * 01 02

 *PAC* Datamagic	Disable Enable	00 * 01
 *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 number selection	00-44	00- 44 00 *


%$$

Exit

Codabar

Read: Format

Start	Data Digits (Variable)	Checksum (Optional)	End

Checksum Verification: The checksum is made as the sum module 16 of the numerical values of all data digits.

Checksum Transmission: By setting Enable, 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.

Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 * 01
 Checksum Transmit/Verifiy	Disable/Disable Disable/Enable Enable /Enable	00 * 01 02

EAC Datamagic	Disable Enable	00 * 01
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 number selection: Refer to Insertion group number selection of UPCA.
Start/End type: The 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.

Program

Option Bar Code	Option	Alphanumeric Entry
 *EAI* Insert group number selection	00-44	00-44 00 *
 *EAJ* Start/End type	ABCD/ABCD abcd/abcd ABCD/TN*E abcd/tn*e	00 * 01 02 03
 *EAK* Start/End transmission	Disable Enable	00 * 01

Exit

Code-128

Read: Format

Data Digits (Variable)	Checksum (Optional)

Checksum Verification: The checksum is made as the sum module 103 of all data digits.

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

Program

Option Bar Code	Option	Alphanumeric Entry
 *DAA* Read	Disable Enable	00 01 *
 *DAB* Checksum Transmit/Verify	Disable/Disable Disable/Enable Enable /Enable	00 * 01 02
 *DAC* Datamagic	Disable Enable	00 * 01

Exit

Code-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 number selection: Refer to Insertion group number selection of UPCA.

Format: The Code-128 can be translated to UCC/EAN-128 format if it starts with a FNC1 character. The first FNC1 will be translated to "]C1",and next to be a field separator code as <GS>($1D_{16}$).

]C1	Data	<GS>	Data	Checksum

Program

Option Bar Code	Option	Alphanumeric Entry
 Max. code length	00-64	00-64 00 *
 Min. code length	00-64	00-64 01 *

 *DAF* Truncate leading	0-15	00-15 00 *
 *DAG* Truncate ending	0-15	00-15 00 *
 *DAH* Code ID setting	00-ffH ASCII code	00-ffH < # > *
 *DAI* Insert group number selection	00-44	00-44 00 *
 *DAJ* Format	Standard UCC/EAN-128	00 * 01


%$$

Exit

Code-128

Append: When this function is enabled, it won't show the data immediately if scanner reads a barcode that includes FNC2 code. It will show all data until it read the barcode, which doesn't have FNC2 code.

UCC/ EAN 128 ID setting: To set the code ID for UCC/EAN-128 output format.

Field separator code: This feature is only used for UCC/EAN-128 format. This Field separator code means you can reassign second or after a FNC1 for your usage. The default of ASCII code is <GS>($1D_{16}$).

Program

Option Bar Code	Option	Alphanumeric Entry
 Append	Disable Enable	00 * 01
 UCC/EAN-128 ID setting	00-ffH ASCII code	00-ffH < # > *
 Field separator code	00-ffH ASCII code	00-ffH 1DH *

Exit

Code-93

Read: Format

Data Digits (Variable)	Checksum1 (Optional)	Checksum2 (Optional)

Checksum Verification: The checksum is made as the sum module 47 of the numerical values of all data digits.
Checksum Transmission: By setting Enable, checksum will be transmitted.

Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 * 01
 Checksum Transmit/Verify	Disable/Disable Disable/Enable Enable /Enable	00 * 01 02
 Datamagic	Disable Enable	00 * 01

Exit

Code-93

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

Program

Option Bar Code	Option	Alphanumeric Entry
 Max. code length	00-64	00-64 00 *
 Min. code length	00-64	00-64 00 *
 Truncate leading	0-15	00-15 00 *
 Truncate ending	0-15	00-15 00 *

CAH Code ID setting	00-ffH ASCII code	00-ffH < & > *
CAI Insert group number selection	00-44	00-44 00 *

%$$
Exit

Code-11

Read: Format

Data Digits (Variable)	Checksum1 (Optional)	Checksum2 (Optional)

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

Checksum Transmission: By setting 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 number selection: Refer to Insertion group number selection of UPCA.

Program

Option Bar Code	Option	Alphanumeric Entry
 *AAA* Read	Disable	00 *
	Enable	01
 *AAB* Checksum Transmit/Verify	Disable/Disable	00
	Disable/One digit	01 *
	Disable/Two digits	02
	Enable/One digit	03
	Enable/Two digits	04

 *AAC* Datamagic	Disable Enable	00 * 01
 *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 number selection	00-44	00-44 00 *


%$$

Exit

MSI/plessey

Read: Format

Data Digits (Variable)	Checksum1 (Optional)	Checksum2 (Optional)

Checksum Verification: The MSI/Plessey has one or two optional checksum digits. The checksum is presented using 3 kinds of 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 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 number selection: Refer to Insertion group number selection of UPCA.

Program

Option Bar Code	Option	Alphanumeric Entry
 *KAA* Read	Disable Enable	00 * 01

 *KAB* Checksum Transmit/Verifiy	N/disable N/MOD 10 N/Mod 10,10 N/mod 11,10 Y/ Mod10 Y/ Mod 10,10 Y/ Mod 11/10	00 * 01 02 03 04 05 06
 *KAC* Datamagic	Disable Enable	00 * 01
 *KAD* Max. code length	00-64	00-64 00 *
 *KAE* Min. code length	00-64	00-64 00 *
 *KAF* Truncate leading	0-15	00-15 00 *
 *KAG* Truncate ending	0-15	00-15 00 *
 *KAH*	00-ffH ASCII code	00-ffH < @ > *

Code ID setting		
KAI Insert group number selection	00-44	00-44 00 *

%$$

Exit

UK/plessey

Read: 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 Enable, 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 number selection: Refer to Insertion group number selection of UPCA.

Program

Option Bar Code	Option	Alphanumeric Entry
 *LAA* Read	Disable Enable	00 * 01
 *LAB* Checksum Transmit/ Verify	Disable/Disable Disable/Enable Enable/Enable	00 01 * 02

 *LAC* Datamagic	Disable Enable	00 * 01
 *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 number selection	00-44	00-44 00 *


%$$

Exit

Telepen

Read: IATA (International Air Transport Association).
Checksum Verification: The checksum is presented as the sum module 10 or 11 of the data digits.
Checksum Transmission: By setting Enable, 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 number selection: Refer to Insertion group number selection of UPCA.

Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 * 01
 Checksum Transmit/Verify	Disable/Disable Disable/Enable Enable /Enable	00 * 01 02
 Datamagic	Disable Enable	00 * 01

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 number selection	00-44	00-44 00 *
MAJ Format	Numeric only Full ASCII only	00 * 01

%$$

Exit

Standard 2 of 5

Read: Format

Data Digits (Variable)	Checksum1 (Optional)

Check-sum verification: The checksum is made as the sum module 10 of the numerical values of all data digits.
Check-sum transmission: By setting Enable, 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 number selection: Refer to Insertion group number selection of UPCA.

Program

Option Bar Code	Option	Alphanumeric Entry
 *JAA* Read	Disable Enable	00 * 01
 Check-sum Transmit/Verifyn	Disable/Disable Disable/Enable Enable /Enable	00 * 01 02

 Datamagic	Disable Enable	00 * 01
 *JAD* Max. code length	00-64	00-64 00 *
 *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 number selection	00-44	00-44 00 *


%$$

Exit

China Post

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

Program

Option Bar Code	Option	Alphanumeric Entry
 *SAA* Read	Disable Enable	00 * 01
 *SAC* Datamagic	Disable Enable	00 * 01
 *SAD* Max. code length	00-64	00-64 11 *

 *SAE* Min. code length	00-64	00-64 11 *
 *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 number selection	00-44	00-44 00 *


%$$

Exit

Italian Pharmacode (Code 32)

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

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

Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 * 01
 Datamagic	Disable Enable	00 * 01

WAD Max. code length	00-64	00-64 12 *
WAE Min. code length	00-64	00-64 09 *
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 number selection	00-44	00-44 00 *
WAJ Leading “A”	Disable Enable	00 * 01

%$$

Exit

GS1 Databar Omnidirectional

Read: Format

Data Digits (Variable)	Checksum1 (Optional)

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

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

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

UCC/EAN 128 emulation: Refer to Transmission, Code ID transmission must be set as AIM ID enable. Then]C1 will be identified as the prefix of barcode data transmission.

Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 * 01

 *TAC* Datamagic	Disable Enable	00 * 01
 *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 number selection	00-44	00-44 00 *
 *TAK* UCC/EAN128 emulation	Disable Enable	00 * 01


%$$

Exit

GS1 Databar Limited

Read: Format

Data Digits (Variable)	Checksum1 (Optional)

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

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

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

UCC/EAN 128 emulation: Refer to UCC/EAN 128 emulation of RSS-14.

Program

Option Bar Code	Option	Alphanumeric Entry
 *UAA* Read	Disable Enable	00 * 01
 *UAC* Datamagic	Disable Enable	00 * 01
 *UAF* Truncate leading	0-15	00-15 00 *

UAG Truncate ending	0-15	00-15 00 *
UAH Code ID setting	00-ffH ASCII code	00-ffH < RL > *
UAI Insert group number selection	00-44	00-44 00 *
UAK UCC/EAN128 emulation	Disable Enable	00 * 01

%$$

Exit

GS1 Databar Expanded

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

UCC/EAN 128 emulation: Refer to UCC/EAN 128 emulation of GS1 Databar Omnidirectional.

Program

Option Bar Code	Option	Alphanumeric Entry
 Read	Disable Enable	00 * 01
 Max. code length	00-99	00-99 99 *

 *VAE* Min. code length	00-99	00-99 01 *
 *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 number selection	00-44	00-44 00 *
 *VAK* UCC/EAN128 emulation	Disable Enable	00 * 01

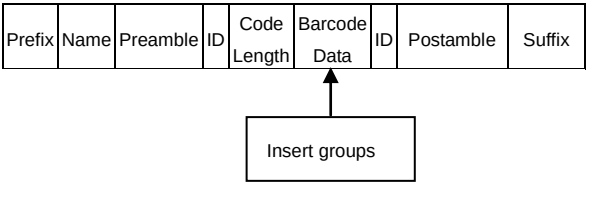

%$$

Exit

String setting / Transmission (Prefix / Suffix)

Prefix / Suffix characters setting: Characters defined as prefix or suffix characters will be transmitted immediately with the scanned data for all symbologies. Up to 22 ASCII characters can be defined as Prefix or Suffix.

Format of barcode data transmission:



.

Program

Option Bar Code	Option	Alphanumeric Entry
 Prefix characters setting	None 1-22 characters	00 * 00-ffH ASCII code
 Suffix characters setting	None 1-22 characters	0D * 00-ffH ASCII code

Exit

String setting / Transmission (Preamble/Postamble)

Preamble/ Postamble characters: Preamble or Postamble characters will be appended to the data automatically for all symbologies. However, the transmission will not activate unless **Preamble / Postamble transmission** is enabled.

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

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

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 $→24.
3) Scan 2 and 4 from the barcode on the fold out back page.
4) Scan Finish from the barcode on the fold out page.
5) Scan Exit barcode.

$%+PRO

Program

Option Bar Code	Option	Alphanumeric Entry
8AC Preamble characters setting	None 1-12characters	00 * 00-ffH ASCII code
8AD Postamble characters setting	None 1-12haracters	00 * 00-ffH ASCII code
6AA Preamble transmission	Disable Enable	00 * 01
6AB Postamble transmission	Disable Enable	00 * 01

%$$

Exit

String setting / Transmission (Insert Group Characters)

Insert G1/G2/G3/G4 character setting: The scanner supports inserting two groups with each group 22 characters into transmitted data of selected symbologies. The two groups can be inserted into scanned data of the selected symbologies or positioned at leading / ending of data. There are a total four groups for utilization.

Insert data group position: To define the position of a group to insert into bar code data. Please notice that the inserting position of a group must not exceed the code length; or the insertion will be positioned at the ending of data.
Notice: Default value “00” indicates the group to be positioned at the leading of data. “64” represents for positioning the group at the ending of data.

Insert data group setting procedure:

i. **Define the characters of groups for insertion.**
ii. **Setup the inserting position of each group in scanned data.**
iii. **Select one or two groups to insert into specific bar codes. Please refer to the setting pages of each bar code.**

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→41,B→ 42.
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 page.

5) Repeat the same procedure in Insert G2 characters setting.

6) Scan Exit barcode.

6) Insert data group 1-4 position. Please refer to Chapter-Transmission, page 65 and to the specific barcode that you want to use.

7) **Insert data group 1-4 position:** The scanner offers 4 positions to insert among the symbols. The position default value is “00” to indicate no character insertion. In addition, make sure insertion positions are not greater than the symbols; otherwise the insertion data is not effective.

Program

Option Bar Code	Option	Alphanumeric Entry
 *8AE* Insert G1 characters setting	None 1-12haracters	00 * 00-ffH ASCII code
 *8AF* Insert G2 characters setting	None 1-12 characters	00 * 00-ffH ASCII code

Exit

String setting / Transmission (Insert Group Characters)

Program

 Insert G3 characters setting	None 1-12 characters	00 * 00-ffH ASCII code
 Insert G4 characters setting	None 1-12 characters	00 * 00-ffH ASCII code
8AI Insert G5 characters setting	None 1-12 characters	00 * 00-ffH ASCII code
8AJ Insert G6 characters setting	None 1-12 characters	00 * 00-ffH ASCII code
8AK Insert G7 characters setting	None 1-12 characters	00 * 00-ffH ASCII code
8AL Insert G8 characters setting	None 1-12 characters	00 * 00-ffH ASCII code

8AM Insert G9 characters setting	None 1-12 characters	00 * 00-ffH ASCII code
8AN Insert G10 characters setting	None 1-12 characters	00 * 00-ffH ASCII code
 *6AC* Insert data group 1 position	00-63 (00: no insertion)	00-63 00 *
 *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 *


%$$

Exit

String setting / Transmission (Others)

Code ID position: Upon using, the transmitting position of Code ID can be selected to place Before Code Data or After Code Data when it is transmitted.

Code ID transmission: If your application is needed to transmit Code ID, you must set this to Proprietary ID or AIM ID.

Code length transmission: A number of data digits can be transmitted before the code data when Enable is selected. The total length of the barcode is the number of barcode data except Truncate Leading/Ending Digits. And 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, to let you know what kind of barcode symbology it is.

Case conversion: Setup the scanned data characters to be transmitted all in upper case or lower case. For example: If upper case is selected, “12aBcDeF” will be converted and transmitted to host as “12ABCDEF”.

Program

Option Bar Code	Option	Alphanumeric Entry

 *6AG* Code ID position	Before code data After code data	00 * 01
 *6AH* Code ID transmission	Disable Proprietary ID AIM ID	00 * 01 02
 *6AI* Code length transmission	Disable Enable	00 * 01
 *6AJ* Code name transmission	Disable Enable	00 * 01
 *6AK* Case conversion	Disable Upper case Lower case *For barcode data only	00 * 01 02


%$$

Exit

Datamagic

DataMagic has eight functions. The Scanner allows a maximum of 10 Rules. Functions are described below.

Each Rule has the following structure:

Leading+RuleNo.+Action+Parameter1+ Parameter2

Leading: 9 indicates DataMagic

RuleNo.: 0~9 indicates Rule No. 0 ~ No.9

RULE1 

RULE2 

RULE3 

RULE4 

RULE5 

RULE6 

RULE7 

RULE8 

RULE9

RULE10

Action: 0~9,

0->Insert Front,

/0

1->Cut Front,

/1

2->Cut Back,

/2

3-> Replace,

/3

4->Keep Front,

/4

5->Keep Back,

/5

6-> Find & Cut Front,

7-> Find & Cut Back.

8->Insert Back,

9->Erase

Parameter1: Each function is indicated differently.

Parameter2: Each function is indicated differently.

To erase all of the DataMagic setting values, just scan the barcode below.

To display all of the current related setting results, scan:

Program

OR

(DataMagic settings) (Inserted Group settings)

Example Data

Original Barcode Data: ARGOX89121121

Insert Group 1: ARGOX

Insert Group 2: argox

Insert Group 3: GOX

Insert Group 4: Tel:

Insert Front: In the original data, insert a group at a specified position from the front. Para1 specifies the insert position (starting from position 0). Para2 specifies the group to insert.

Example:

Program	RuleNo	Action	Para1		Para2		Exit
	RULE1	Insert Front	0	5	0	4	

RULE1 (Rule No.) Insert Front (Action) -- at the 5th position from the front (Para1) insert Group 4 (Para2).

Data : ARGOX89121121

Result: ARGOXTel:89121121

Programming for the example above:

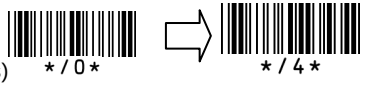
Program

RULE1

Insert Front

Para1 (Two digits)

Para2 (Two digits)



Finish

Exit

Test Chart (Bar code samples marked with symbol "*" are enabled initially.)

CODABAR

CODE-11

CODE-128 *

CODE-39 *

CODE-93

EAN-13 *

STANDRAD-25

EAN-8 *

INDUSTRIAL-25

UPCE *

INTERLEAVED-25 *

MATRIX 25

MSI/PLESSEY

UPCA *

UK/PLESSEY

GS1 dat bar

ASCII Code Table *Note:* ■ *For keyboard wedge 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
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

Program

Barcode standard parameter setting list

If you wish to display the current configuration of your AS-8150/ 8250 (REV.B) , scanner over the host terminal/computer, scan the Barcode standard parameter setting list bar code.

Unique parameter list

If you wish to display the unique parameter setting list, scan the unique parameter list bar code

System parameter setting list

If you wish to display the product information and revision number for your AS-8110/8120/8150/8250/8310/8312 scanner over the host terminal/computer, scan the System parameter setting list bar code.

String setting list

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

Exit

Query Datamagic Setting

Program

Firmware version list

If you wish to display the Datamagic setting , scan the “Query Datamagic Setting ” barcode.

Exit

Query present scanner firmware version

Program

Firmware version list

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

Exit

Reset scanner to factory default settings

Program

WARNING: Default value initialization

If you wish to return the AS-8150/ 8250 (REV.B) to all the factory default settings, scan the Default value initialization bar code.

0

1

2

3

4

5

6

7

8

9

A

B

C

D

E

F

Finish