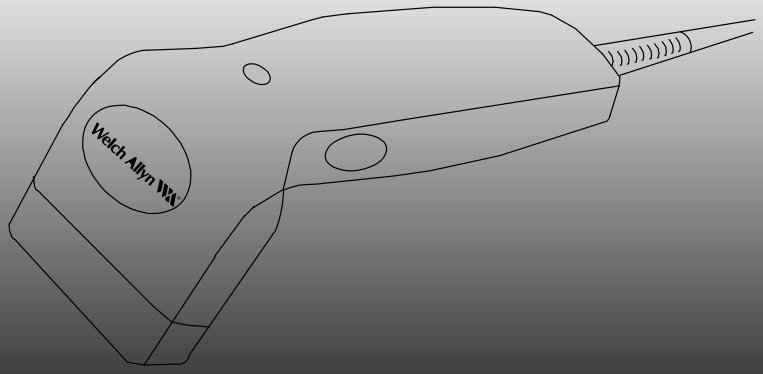
Welch Allyn® VALUETEAM 3060/3080



User's Guide

Disclaimer

Welch Allyn® reserves the right to make changes in specifications and other information contained in this document without prior notice, and the reader should in all cases consult Welch Allyn to determine whether any such changes have been made. The information in this publication does not represent a commitment on the part of Welch Allyn.

Welch Allyn shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from the furnishing, performance, or use of this material.

This document contains proprietary information which is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated into another language without the prior written consent of Welch Allyn, Incorporated.

© **1998 Welch Allyn, Inc. All rights reserved.**

Data Collection Web Addresss: http://dcd.welchallyn.com

Statement of Agency Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Class A Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in 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 expense.

Caution: Any changes or modifications made to this device that are not expressly approved by Welch Allyn, Inc. may void the user's authority to operate the equipment.

Note: To maintain compliance with FCC Rules and Regulations, cables connected to this device must be *shielded* cables, in which the cable shield wire(s) have been grounded (tied) to the connector shell.

Canadian Notice

This equipment does not exceed the Class A limits for radio noise emissions as described in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la classe A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

CE

The CE mark on the product indicates that the system has been tested to and conforms with the provisions noted within the 89/336/EEC Electromagnetic Compatibility Directive.

European Contact: European Regulatory Manager
Welch Allyn Ltd.
28 Sandyford Office Park
Foxrock, Dublin 18
Ireland

Table of Contents

Disclaimer
Statement of Agency Compliance

Section 1 Getting Started

Section *Page*
About This Manual . . . . . 1 - 1
Unpacking the Scanner . . . . . 1 - 2
Scanner Identification . . . . . 1 - 3
Connecting the Scanner When Powered by Host (Keyboard Wedge) . . . . . 1 - 4
Connecting the Scanner When Externally Powered (RS-232) . . . . . 1 - 5
Programming the VALUETEAM 3060/3080 . . . . . 1 - 6

Section 2 Terminal Selections

Section *Page*
Terminal . . . . . 2 - 3

Section 3 Tailoring the Interface

Section *Page*
Interface Options . . . . . 3 - 1
Tailoring the Keyboard Wedge Interface . . . . . 3 - 3
Keyboard Wedge Defaults . . . . . 3 - 3
Function Key Emulation . . . . . 3 - 5

Section 3 Tailoring the Interface (continued)

Section	*Page*
Output Style	3 - 5
Upper/Lower Case	3 - 5
Numeric Keypad Mode	3 - 5
Keyboard Layout	3 - 7
Tailoring the RS-232 Interface	**3 - 9**
RS-232 Defaults	3 - 9
Word Length/Parity	3 - 11
Baud Rate	3 - 13
Handshaking Protocol	3 - 13
Time Out Control	3 - 15
Tailoring the Wand Emulation Interface	**3 - 16**
Wand Emulation Defaults	3 - 16
Output Polarity	3 - 19
Initial Signal State	3 - 19
Margin Time	3 - 19
Module Time	3 - 21
Narrow/Wide Ratio	3 - 21
Code 39 Emulation	3 - 21

Section 4 Scanner Set Up

Section	*Page*
Scanner Set Up Defaults	4 - 3
Beeper Volume	4 - 5
Scan Voting	4 - 5
Autotrigger Pulse Rate	4 - 7
Scanning Tolerance	4 - 9
Low Power Trigger Delay	4 - 9
Reread Delay	4 - 11

Section 5 Building the Message String

Section	*Page*
Building the Keyboard Wedge Message String:	**5 - 2**
Keyboard Wedge Message String Defaults	5 - 3
Prefix	5 - 5
Suffix	5 - 5
Record Suffix	5 - 5
Hex to ASCII Conversion Chart	5 - 7
Intercharacter Delay	5 - 9
Intermessage Delay	5 - 9
Interfunction Delay	5 - 9

Section 5 Building the Message String (continued)

Section	*Page*
Building the RS-232 Message String	**5 - 10**
STX/ETX	5 - 13
Record Suffix	5 - 13
Prefix/Suffix Code ID Bar Code: 2 characters	5 - 15
Code ID Transmission	5 - 15
Prefix/Suffix Code ID Bar Code: 1 character	5 - 17

Section 6 Data Editor

Section	*Page*
Data Editor	**6 - 3**
Data Editor Defaults	6 - 3
Editor Control	6 - 5
1st Insertion	6 - 5
2nd Insertion	6 - 5
3rd Insertion	6 - 5
4th Insertion	6 - 5
Data Editor Control Descriptions	**6 - 6**
Symbology Control	6 - 7
Check Data Length	6 - 7
1st Check Character	6 - 7
2nd Check Character	6 - 7

Section 7 Symbologies

Section	*Page*
Symbology Defaults	7 - 2
Enable Symbologies	7 - 3
Code 39	7 - 5
Code 39 Minimum Length	7 - 7
Code 39 Maximum Length	7 - 7
Codabar	7 - 11
Codabar Minimum Length	7 - 13
Codabar Maximum Length	7 - 13
UPC	7 - 15
EAN/CAN/JAN	7 - 17
Code 2 of 5	7 - 19
Code 2 of 5 Minimum Length	7 - 21
Code 2 of 5 Maximum Length	7 - 21
IATA	7 - 23
Code 11	7 - 25
Code 11 Minimum Length	7 - 25
Code 11 Maximum Length	7 - 25
Code 93	7 - 27
Code 93 Minimum Length	7 - 27
Code 93 Maximum Length	7 - 27

Section 7 Symbologies (continued)

Section	*Page*
MSI/Plessey	7 - 29
MSI/Plessey Minimum Length	7 - 29
MSI/Plessey Maximum Length	7 - 29
UK/Plessey	7 - 31
UK/Plessey Minimum Length	7 - 31
UK/Plessey Maximum Length	7 - 31
UCC/EAN-128	7 - 33
UCC/EAN-128 Minimum Length	7 - 33
UCC/EAN-128 Maximum Length	7 - 33
MSI/Plessey	7 - 29
MSI/Plessey Minimum Length	7 - 29
MSI/Plessey Maximum Length	7 - 29
UK/Plessey	7 - 31
UK/Plessey Minimum Length	7 - 31
UK/Plessey Maximum Length	7 - 31
UCC/EAN-128	7 - 33
UCC/EAN-128 Minimum Length	7 - 33
UCC/EAN-128 Maximum Length	7 - 33

Section 8 Customer Support and Specifications

Section	*Page*
Obtaining Factory Service	8 - 1
Help Desk	8 - 2
Limited Warranty	8 - 3
Specifications	8 - 4

Appendix

Section	*Page*
Beeping Indications	A - 2
Keyboard Function Code Table	A - 3
Master Default	A - 4
Configuration List	A - 4
System Information	A - 4

Getting Started

VALUETEAM 3060 or 3080 Hand held CCD scanners are the ideal entry level bar code readers. They offer excellent reading performance with the most commonly used interfaces. The VALUETEAM 3060 and 3080 scanners:

- provide superior first read rate
- read 4 mil code on contact

About This Manual

This User's Guide provides installation and programming instructions for the VALUETEAM 3060/3080. Product specifications, dimensions, warranty and customer support information are also included.

Welch Allyn bar code scanners are factory programmed for the most common terminal and communications settings. If you need to change these settings, programming is accomplished by scanning the bar codes in this Guide.

Chapter 1 - Getting Started
Use this chapter to unpack the 3060/3080 and familiarize yourself with your scanner, this manual, and the methods by which the scanner is programmed for operation.

Chapter 2 - Terminal Selection
Chapter 2 lists the terminals the 3060/3080 can connect to, and provides bar codes which program the scanner to communicate with your terminal or computer.

Chapter 3 - Tailoring the Interface
Chapter 3 allows you to fine tune the interface between the scanner and your computer by reprogramming any of the defaulted settings.

Chapter 4 - Scanner Set Up
The Scanner Set Up selections allow you to change the way your scanner operates. For example, you can adjust the beeper volume, alter the length of time required between scans, or change from manual to auto triggering.

Chapter 5 - Building the Message String
The selections in Chapter 5 are used to define the information you wish to attach to the bar code data as it is transmitted to your terminal.

Chapter 6 - Data Editor
The Data Editor selections are used to edit the scanned data. For example, you can use the Data Editor to transmit some characters and omit others.

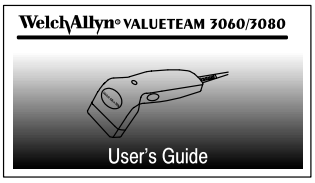
Chapter 7 - Symbologies
Chapter 7 lists the bar code symbologies which can be read by the 3060/3080, and allows you to enable or disable these symbologies.

Chapter 8 - Customer Support
This chapter lists warranty, repair, and service information.

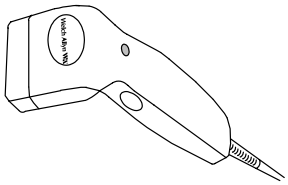
Appendix
The Appendix lists the beeping indications and keyboard function code table for the 3060/3080.

Unpacking the Scanner

Open the carton. The shipping carton should contain:



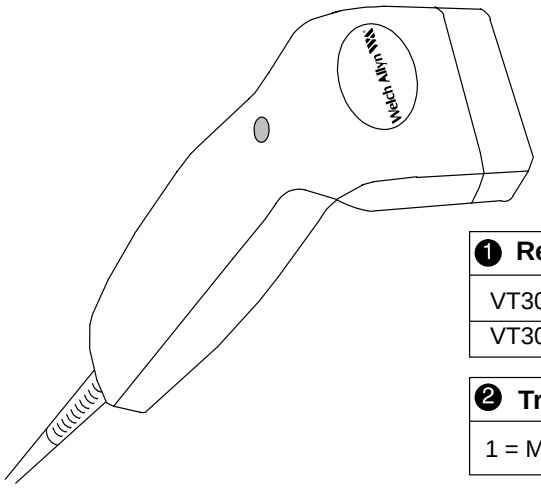
VALUETEAM 3060/3080
User's Guide



VALUETEAM
3060
or 3080 Scanner

- Check to make sure everything you ordered is present.
- Check for damage during shipment. Report damage immediately to the carrier who delivered the carton.

Scanner Identification



VT3060 – 12
❶ ❷❸

❶ Reading Width		
VT3060	60mm	2.3”
VT3080	80 mm	3.1”

❷ Trigger
1 = Manual Trigger

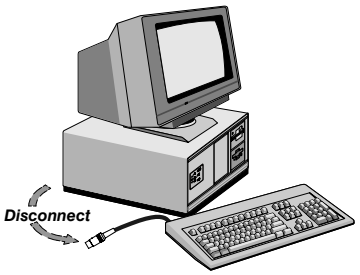
❸ Interface				
#	Keyboards	PC Wedge	RS-232	Wand Emulation
2	U.S. and European	Yes	Yes	Yes

VALUETEAM 3060/3080 Identification Label

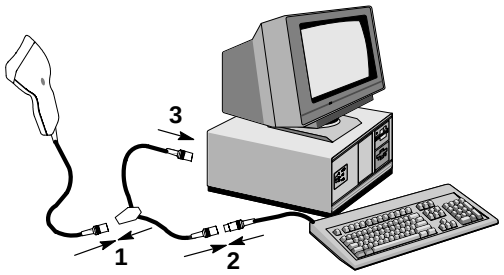
Connecting the Scanner When Powered by Host (Keyboard Wedge)

① Disconnect power to your terminal/computer by turning the power switch to the “OFF” position.

② Disconnect the keyboard cable from the back of the terminal/computer, as shown below.



③ Connect the appropriate interface cable to the scanner and to the terminal/computer, as shown below.



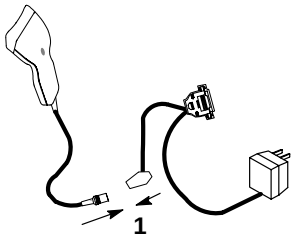
Note: For the 3060/3080 to work properly, you must have the correct cable for your type of terminal/computer.

④ Once the scanner has been fully connected, restore power to your terminal/computer by turning the power switch to the “ON” position.

Connecting the Scanner When Externally Powered (RS-232)

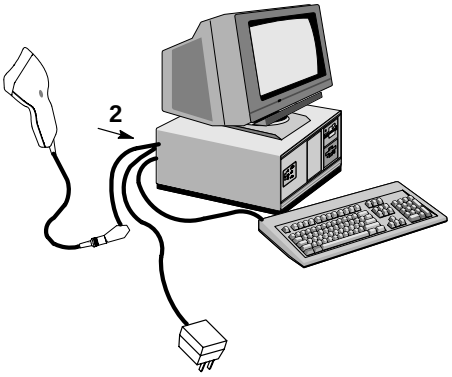
① Disconnect power to your terminal/computer by turning the power switch to the “OFF” position.

② Connect the appropriate interface cable to the scanner, as shown below.



Note: For the 3060/3080 to work properly, you must have the correct cable for your type of terminal/computer.

③ Plug the serial connector into the serial port on the back of your computer/terminal, as shown below. Tighten the two screws to secure the connector to the port.



(Cable, Keyboard, and Terminal will vary)

④ Plug the power pack into a power source.

⑤ Once the scanner has been fully connected, restore power to your terminal/computer by turning the power switch to the “ON” position.

Programming the VALUETEAM 3060/3080

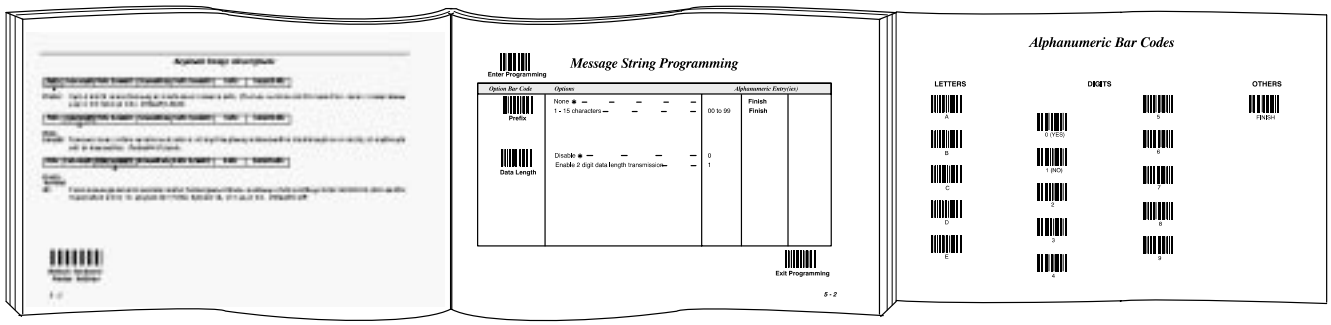
To program the 3060/3080, you must scan a series of programming bar codes in the correct order. Descriptions of each programming option are shown on the left hand Description pages. The programming options and programming bar codes are listed on the right hand Programming pages.

Fold out the back cover of this manual. You will see a table of alphanumeric bar codes which are used to program the various options presented. To program the 3060/3080 scanner, move from left to right, across the Description and Programming pages, then to the fold out back cover to program the option codes.

To exit the programming mode, move back to the Programming page and scan the **Exit Programming** bar code.

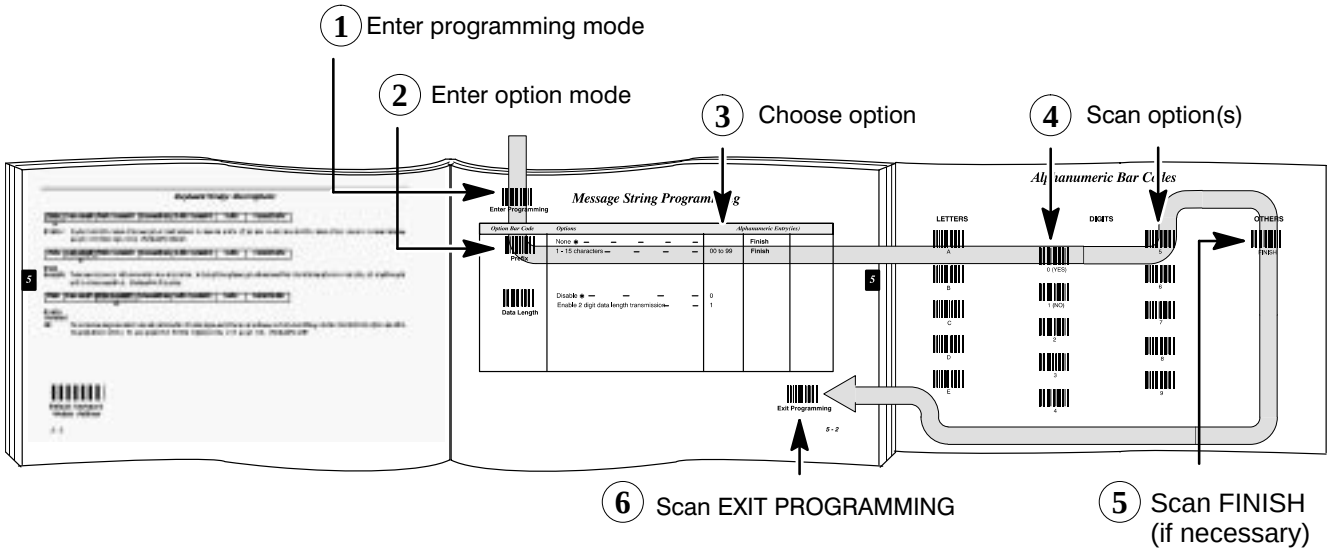
This programming sequence is diagrammed on the following page.

Description Page **Programming Page** **Fold Out Back Cover**



To program each option, you must:

1. Scan the **Enter Programming** bar code on the Programming page.
2. Enter the option mode by scanning the Option bar code (also on the Programming page).
3. To the right of the option bar code, the necessary alphanumeric inputs are listed. Scan these alphanumeric entries from the back fold out page. If required, scan the **Finish** bar code on the back fold out page.
4.
5.
6. Once you have finished programming, scan the **Exit Programming** bar code, listed on the lower right hand corner of each Programming page.



Terminal Selections

This chapter lists the terminals the 3060/3080 can connect to, and provides bar codes which program the scanner to communicate with your terminal or computer.

Terminal Selection Descriptions

To program the scanner for your terminal/computer:

- Scan the **Enter Programming** bar code at the top of page 2 - 3.
- Scan the **Terminal** bar code to enter the option mode.
- Scan the appropriate two digit alphanumeric entry code from the chart on the fold out back cover of this manual.
- Scan the **Exit Programming** bar code at the bottom of page 2 - 3.

Note: For the 3060/3080 to work properly, you must have the correct cable for your type of terminal/computer.

If you program a different Terminal Selection, and later wish to reset the scanner to the defaulted terminal, scan the **Default Terminal** bar code below. This will reset the scanner to the default terminal, noted on page 2 - 3 by an asterisk (✶) beside each terminal type.

Default Terminal

Enter Programming

Terminal Selection Options

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
 **Terminal**	Standard/TTL RS-232 peer to peer interface	00
	IBM PC/XT, 286/XT keyboard wedge	01
	IBM PS/2 25 - 30 series keyboard wedge	02
	IBM PC/AT, PS/1, PS/VP, series keyboard wedge ✶	03
	IBM PS/2 30 (286), 35 - 120 series keyboard wedge ✶	03
	COMPAQ 386/486 series keyboard wedge ✶	03
	HP Vectra series PC keyboard wedge ✶	03
	General Notebook PC keyboard wedge (PC/AT, PS/2 Compatibles) ✶	03
	APPLE ADB keyboard wedge	49
	Wand emulation	61
	Serial Wedge (RS–232)	50
	OCIA (special order model)	52

Exit Programming

Tailoring the Interface

Interface Options

Once you have programmed your Terminal Selection, you can fine tune, or tailor the interface. There are 3 basic interfaces:

- **Keyboard Wedge** (page 3 - 3)
- **RS-232** (page 3 - 9)
- **Wand Emulation** (page 3 - 16)

It is not necessary to tailor the interface. When you programmed your Terminal Selection, a set of defaults for your interface was also programmed. The selections in this chapter are only used if you wish to alter the default settings. These defaults are noted at the beginning of each Interface section, as well as on the Programming pages by an asterisk (✶) beside each default value.

Tailoring the Keyboard Wedge Interface

Keyboard Wedge Defaults

Option	***Default***
Output Style	Regular
Upper/Lower Case	Normal Case
Numeric Keypad Mode	Numeric Keypad Mode Off
Function Key Emulation	Disable ASCII 00-31 Code Output
Keyboard Layout	USA

If you program changes to any Keyboard Wedge Interface options, and later wish to reset the scanner to the defaulted values, scan the **Default Keyboard Wedge Settings** bar code below. This will reset the scanner to *all* the defaulted values for the Keyboard Wedge Interface.

Default Keyboard Wedge Settings

Keyboard Wedge Descriptions

Output Style: *Regular* is used when you normally have the Caps Lock key off.

Caps Lock On is used when you normally have the Caps Lock key on.

Caps Lock Auto Detect is used when you normally have the Shift Lock key on. (Not common to U.S. keyboards.)

Note: Output Style is only available for IBM PC/AT, PS/VP and PS/2 series personal computers and compatibles.

Upper/Lower Case: *Normal* does not change any characters.
Inverse Case sends upper case characters as lower case, and lower case characters as upper.
All Upper Case sends all characters as upper case.
All Lower Case sends all characters as lower case.

Numeric Keypad Mode: Selecting Numeric Keypad Mode On sends numeric characters as if entered from a numeric keypad.

Note: Key Pad Emulation is only available for IBM PC/AT, PS/VP and PS/2 series personal computers and compatibles.

Function Key Emulation: ASCII values of 00 through 31 in bar code can be transmitted as function key output or control key output.

Keyboard Wedge Programming

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
 **Output Style**	Regular ✶	0
	Caps Lock On	1
	Caps Lock Auto Detect	2
 **Upper/Lower Case**	Normal Case ✶	0
	Inverse Case	1
	All Upper Case	2
	All Lower Case	3
 **Numeric Keypad Mode**	Numeric Keypad Mode Off ✶	0
	Numeric Keypad Mode On	1
 **Function Key Emulation**	ASCII values 00-31 sent as function key output ✶	0
	ASCII values 00-31 sent as control key output	1

Exit Programming

Keyboard Wedge Descriptions

Keyboard Layout: This selection allows you to map the scanned data to the keyboard in use.

Keyboard Wedge Programming

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Keyboard Layout	USA ✶	00
	Belgium	01
	Sweden/Finland	02
	France	03
	Germany	04
	Italy	05
	Switzerland-Germany	06
	United Kingdom - UK	07

Exit Programming

Tailoring the RS-232 Interface

RS-232 Defaults

Option	***Default***	
Word Length/Parity	Data Bits	8
	Parity:	None
	Stop Bits:	1
Baud Rate	9600	
Handshaking Protocol	None	
Time Out Control	None	

If you program changes to any RS-232 Interface options, and later wish to reset the scanner to the defaulted values, scan the **Default RS-232 Settings** bar code below. This will reset the scanner to *all* the defaulted values for the RS-232 Interface.

Default RS-232 Settings

RS-232 Descriptions

Word Length/Parity: This selection allows you to set the RS-232 word length at seven or eight bits of data per character. The number of start and stop bits is fixed at one each. If an application requires only ASCII Hex characters 0 through 7F decimal (text, digits, and punctuation), select 7 data bits. For applications requiring use of the full ASCII set, select 8 data bits per character.

This selection also provides a means of checking character bit patterns for validity. The scanner can be configured to operate under Even, Odd, Mark / None, or Space parity options. The host terminal must be set up for the same parity as the scanner, to ensure reliable communication.

RS-232 Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Word Length/ Parity	8, None, 1 ✶	0
	8, Odd, 1	1
	8, Even, 1	2
	8, Space, 1	3
	8, Mark, 1	4
	8, None, 2	5
	7, Odd, 1	6
	7, Even, 1	7
	7, Space, 1	8
	7, Mark, 1	9
	7, None, 2	A
	7, Odd, 2	B
	7, Even, 2	C
	7, Space, 2	D
	7, Mark, 2	E

RS-232 Descriptions

Baud Rate: This selection sets the baud rate (the speed at which data is sent from the scanner to the host) from 300 bits per second to 38,400 bits per second. The host terminal must be set up for the same baud rate as the scanner.

Handshaking Protocol:

None (free running mode): In free running mode, the 3060/3080 sends data as soon as it is scanned *with or without* 2-way communication with the host computer.

RTS/CTS (standard modem protocol): Under this protocol, the scanner sends an RTS (request to send) and waits for a CTS (clear to send) signal from the host computer. If there is no reply CTS signal from the host computer, the scanner issues 1 long warning beep.

ACK/NAK (software): When the ACK/NAK protocol is used, the scanner waits for an ACK (acknowledge) or NAK (not acknowledge) from the host computer after data transmission, and will resend in response to a NAK. If the scanner buffer is full, the 3060/3080 issues 4 long warning beeps, and stops scanning data.

We recommend adding a Record Suffix to the scanned data when using the ACK/NAK protocol. This helps identify multiple data records in each transmission.

Note: The ACK/NAK and Xon/Xoff modes are not available for Manual Trigger, Low Power operation. See page NO TAG for information about Manual Trigger, Low Power operation.

Xon/Xoff: When the Xon/Xoff protocol is used, the 3060/300 unconditionally transmits scanned data to the host computer. If the host computer issues a **Ctrl-S** to declare a busy condition, the 3060/3080 temporarily stores the scanned data in its memory buffer and stop transmitting data until it receives a **Ctrl-Q** from the host computer. It is possible to scan too much data before a **Ctrl-Q** from the host computer, which fills the scanner's memory buffer. If this occurs, the 3060/3080 issues 4 long warning beeps to indicate the memory buffer is full, and it stops scanning data.

We recommend adding a Record Suffix to the scanned data when using the Xon/Xoff protocol. This helps identify multiple data records in each transmission.

RS-232 Programming

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Baud Rate	38,400 BPS	0
	19,200 BPS	1
	9600 BPS ✶	2
	4800 BPS	3
	2400 BPS	4
	1200 BPS	5
	600 BPS	6
	300 BPS	7
Handshaking Protocol	None (free running mode) ✶	0
	RTS/CTS (standard modem protocol)	1
	ACK/NAK	2
	Xon/Xoff	3

Exit Programming

RS-232 Descriptions

Time Out Control: This allows you to set a pre-defined delay time for the scanner to wait for handshaking, acknowledgment or non-acknowledgment from the host computer. When the time out occurs, the 3060/3080 issues 2 long warning beeps. This feature is particularly useful for applications in which the host computer takes a longer time to respond with a matchable signal.

Option Bar Code	Options	Alphanumeric Entry(ies)	
Time Out Control	None ✶	0	
	200 mseconds	1	
	500 mseconds	2	
	1 second	3	
	2 seconds	4	
	5 seconds	5	
	User defined value (in seconds)	6	2 digits

Tailoring the Wand Emulation Interface

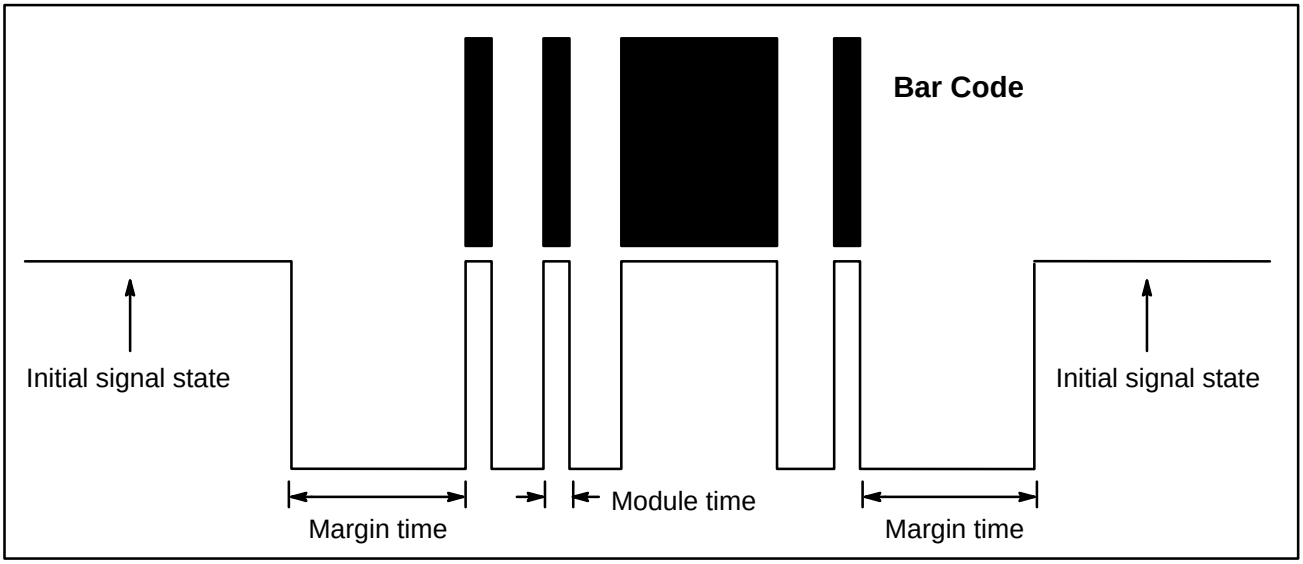
Wand Emulation Defaults

Option	***Default***
Output Polarity	Bar: High (5vdc), Space: Low (0 vdc)
Initial Signal State	High (5vdc)
Margin Time	20 mseconds
Module Time	500 useconds
Narrow/Wide Ratio	1:2
Code 39 Emulation	Disable

If you program changes to any Wand Emulation Interface options, and later wish to reset the scanner to the defaulted values, scan the **Default Wand Emulation Settings** bar code below. This will reset the scanner to *all* the defaulted values for the Wand Emulation Interface.

Default Wand Emulation Settings

Wand Emulation Output Diagram



Example: Initial signal state: High
Polarity: Bar High, Space Low

Wand Emulation Descriptions

Output Polarity: Wand Emulation output can be sent as standard with bars (black) high, or reversed with bars (black) low.

Initial Signal State: Wand Emulation output can be set for a high or a low signal state.

Margin Time: You can use this selection to program a delay before and after the data transmission.

Enter Programming

Wand Emulation Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
 **Output Polarity**	Bar: High (5vdc), Space: Low (0vdc) ✶	0
	Bar: Low (0vdc), Space: High (5vdc)	1
 **Initial Signal State**	High level (5VDC) ✶	0
	Low level (0VDC)	1
 **Margin Time**	10 mseconds	0
	15 mseconds	1
	20 mseconds ✶	2
	25 mseconds	3
	30 mseconds	4
	50 mseconds	5
	100 mseconds	6

Exit Programming

Wand Emulation Descriptions

Module Time: This selection programs the time of the minimum bar. Increase the module time if the 3060/3080 is not receiving data correctly.

Narrow/Wide Ratio: This selection programs the time ratio of narrow bars to wide bars. Increase the module time if the 3060/3080 is not receiving data correctly.

Code 39 Emulation: Some decoders are programmed to accept only standard Code 39 characters. The scanner may be programmed to skip or replace non-standard Code 39 characters.

Disable: Characters are transmitted without change.

Code 39 Translate or Skip: All standard characters are transmitted as Code 39. Lower case characters are translated to upper case Code 39. Any other characters are skipped.

Code 39 Translate or Send Space: All standard characters are transmitted as Code 39. Lower case characters are translated to upper case Code 39. Any other characters are transmitted as a space.

Enter Programming

Wand Emulation Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
 **Module Time**	200 useconds	0
	300 useconds	1
	500 useconds ✶	2
	1.0 msecond	3
	2.0 mseconds	4
	3.0 mseconds	5
 **Narrow/Wide Ratio**	1:2 ✶	0
	1:2.5	1
	1:3	2
 **Code 39 Emulation**	Disable standard Code 39 emulation ✶	0
	Code 39 Translate or Skip	1
	Code 39 Translate or Send Space	2

Exit Programming

Scanner Set Up

The Scanner Set Up selections allow you to change the way your scanner operates. For example, you can adjust the beeper volume, alter the length of time required between scans, or set the trigger mode.

It is not necessary to set up the scanner; it is already programmed for a set of operational defaults. The selections in this chapter are only used if you wish to alter the scanner's default settings. These defaults are noted on the Programming pages by an asterisk (✶) beside each default value.

Scanner Set Up Defaults

Scanner Set Up Defaults

Option	***Default***
Beeper Tone	Medium
Trigger Mode	Manual Trigger
Autotrigger Pulse Rate	$^1/_2$ Rate
Low Power Trigger Delay	None
Scanning Tolerance	Standard printing quality
Reread Delay	Short time out duration
Scan Voting	2 times

If you program changes to any Scanner Set Up options, and later wish to reset the scanner to the defaulted values, scan the **Default Scanner Set Up Settings** bar code below. This will reset the scanner to *all* the defaulted values for the Scanner Set Up.

Default Scanner Set Up Settings

Scanner Set Up Descriptions

Beeper Tone: This selection allows you to adjust the tone of the scanner's beeper.

Scan Voting: This sets the number of times the same bar code has to be read before it is transmitted to the terminal. This feature is useful when reading bar code labels with poor definition.

Note: The Scan Voting feature will not work if you have programmed the scanner for ***Manual Trigger, Low Power****, or* ***Manual Trigger****.*

Enter Programming

Scanner Set Up Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Beeper Tone	Off	0
	Low	1
	Medium ✶	2
	High	3
	Very High	4
Scan Voting	None	0
	1 Time	1
	2 Times ✶	2
	3 Times	3
	4 Times	4
	5 Times	5

Exit Programming

Scanner Set Up Descriptions

Trigger Mode

Manual Trigger, Low Power : In Manual Trigger, Low Power mode, the 3060/3080 will go into low power mode after scanning a bar code. The trigger must be pressed to wake up the CCD for operation. While the CCD is in low power mode, the maximum standby current is 500uA. Keep a minimum 120 milliseconds Low Power Trigger Delay time (see page 4 - 8) to stabilize the power transition.

Manual Trigger: In this mode, press the 3060/3080 trigger to scan. When not scanning, idle power is maintained.

Autotrigger, Pulse: This selection cycles the scanner on and off. In this mode, you must also set the Autotrigger Pulse Rate (see below).

Autotrigger, Full On: The scanner is on continuously.

Autotrigger, Toggle On/Off: Press the trigger to start autotrigger mode. Press the trigger again to stop autotrigger mode.

Autotrigger Pulse Rate: When the scanner is set to Autotrigger, Pulse, this selection sets the pulse rate.

Enter Programming

Scanner Set Up Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
 **Trigger Mode**	Manual Trigger, Low Power	0
	Manual Trigger ✶	1
	Autotrigger, Pulse	4
	Autotrigger, Full On	5
	Autotrigger, Toggle On/Off	6
 **Autotrigger Pulse Rate**	$^{1}/_{2}$ Rate ✶	0
	$^{2}/_{3}$ Rate	1
	$^{3}/_{4}$ Rate	2
	$^{4}/_{5}$ Rate	3

Exit Programming

Scanner Set Up Descriptions

Low Power Trigger Delay: When the scanner is set for Manual Trigger, Low Power (see page 4 - 6), change the delay to 120 mseconds to stabilize the scanner in low power mode.

Scanning Tolerance: The 3060/3080 can accept up to +/–200% tolerance of an image distortion. If you are using bar codes with poor print, or over printed bar code labels, you can enlarge the tolerance acceptance.

*Note: If you select **Poor Printing Quality**, you should limit the bar code symbologies being read, and the **Minimum**/**Maximum Length** of each symbology to avoid errors. See Section 7 - Symbologies for further information.*

Scanner Set Up Programming

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Low Power Trigger Delay	None ✶	0
	20 mseconds	1
	50 mseconds	2
	100 mseconds	3
	120 mseconds (best selection for Manual Trigger, Low Power)	4
	150 mseconds	5
	200 mseconds	6
	250 mseconds	7
Scanning Tolerance	Standard Printing Quality ✶	0
	Poor Printing Quality	1

Exit Programming

Scanner Set Up Descriptions

Reread Delay: This selection allows you to set a time period that must pass before the scanner can read the *same* bar code again. Setting a reread delay protects against accidental rereads of the same bar code. Longer delays are effective in minimizing accidental rereads at POS (point of sale) terminals. Use shorter delays in applications where repetitive bar code scanning is required. If you select the **No Reread** option, the 3060/3080 will not read the same bar code twice.

Note: The Reread Delay feature will not work if you have programmed the scanner for ***Manual Trigger, Low Power****, or* ***Manual Trigger****.*

Option Bar Code	Options	Alphanumeric Entry(ies)
Reread Delay	Disable	0
	Immediate Time Out	1
	Short Time Out ✶	2
	Medium Time Out	3
	Long Time Out	4
	No Reread	5

Building the Message String

When a bar code is scanned, additional information is sent to the host computer along with the bar code data. This group of bar code data and additional, user-defined data is called a “message string.” The selections in this chapter are used to build the user-defined data into the message string.

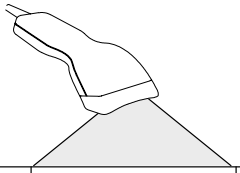
This chapter is broken down into 3 sections. On pages 5 - 2 through 5 - 9 , you’ll find the message string selections for a keyboard wedge interface. On pages 5 - 10 through 5 - 13, you’ll find the selections for an RS-232 interface. On pages 5 - 14 through 5 - 16 , are the Prefix Code I.D. and Suffix Code I.D. selections, which are used with both the keyboard wedge and RS-232 interfaces.

It is not necessary to build a message string. When you programmed your Terminal Selection, a set of defaults for the message string was also programmed. The selections in this chapter are only used if you wish to alter the default settings. These defaults are noted at the beginning of each Interface section, as well as on the Programming pages by an asterisk (✶) beside each default value.

Building the Keyboard Wedge Message String

The following diagram illustrates the breakdown of the keyboard wedge message string:

The Keyboard Wedge Message String:



Prefix	Prefix Code ID	Scanned Data	Suffix Code ID	Suffix	Record Suffix
1-15 characters	1 or 2 characters	variable length	1 or 2 characters	1-15 characters	1 character

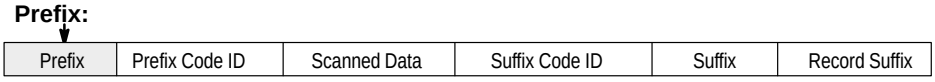
Message String Defaults

Keyboard Wedge Message String Defaults

Option	*Default*
Prefix	None
Prefix Code ID	Off
Suffix Code ID	Off
Suffix	None
Record Suffix	Return (Enter)

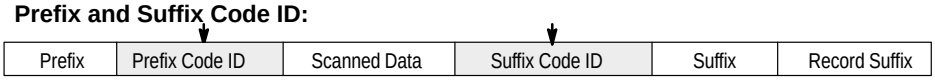
Message String Descriptions

Prefix:



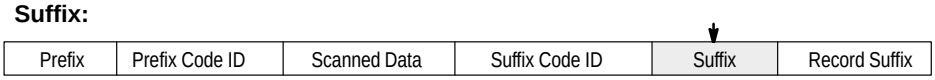
Up to 15 ASCII characters may be sent before scanned data. (See page 5 - 6 for an example of adding a prefix or suffix, and page 5 - 7 for a Hex to ASCII conversion chart.)

Prefix and Suffix Code ID:



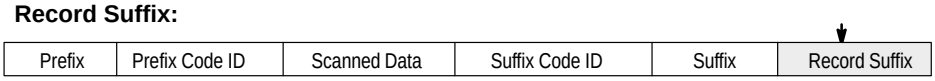
The scanner can be programmed to send characters that identify the symbology being scanned. These characters are programmed in the Prefix and/or Suffix Code ID. For further information about programming the Prefix or Suffix Code ID, see page 5 - 16.

Suffix:



Up to 15 ASCII characters may be sent after scanned data. The scanner will translate characters 00–1F (keyboard function codes) into keyboard function keys. (The assigned translation is dependent upon the terminal being used.) See page NO TAG for the Keyboard Function Code Table, and page 5 - 7 for a Hex to ASCII conversion chart.

Record Suffix:



The Record Suffix selection is used to program commonly used suffix characters, e.g., Enter, Tab, or Space.

Message String Programming

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*	
Prefix	None ✶	**Finish**	
	1 - 15 characters	00 to 7F	**Finish**
Suffix	None ✶	**Finish**	
	1-15 characters	00 to 7F	**Finish**
Record Suffix	None	0	
	Return (Enter) ✶	1	
	Tab	2	
	Space	3	
	Enter (on number pad)	4	
	User defined character	5	1 character

Exit Programming

Message String Descriptions

Example: Add a prefix or suffix for all symbologies. In this example, you are sending an @ symbol as a prefix for all symbologies.

1. On page 5 - 5, scan **Enter Programming**.
2. Scan **Prefix**.
3. Use the Hex to ASCII Conversion Chart on page 5 - 7 to find the hex value of @ (40).
4. Scan **4** from the bar codes on the fold out back cover.
5. Scan **0** from the bar codes on the fold out back cover.
6. Scan **Finish** from the bar codes on the fold out back cover.
7. Scan **Exit Programming** on page 5 - 5.

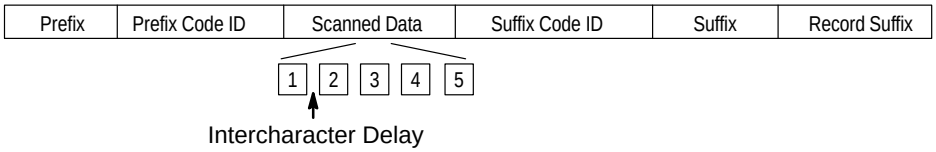
Hex to ASCII Conversion Chart

ASCII	Hex	ASCII	Hex	ASCII	Hex	ASCII	Hex	ASCII	Hex	ASCII	Hex	ASCII	Hex
NUL	00	DLE	10	SP	20	0	30	@	40	P	50	‘	60	p	70
SOH	01	DC1	11	!	21	1	31	A	41	Q	51	a	61	q	71
STX	02	DC2	12	”	22	2	32	B	42	R	52	b	62	r	72
ETX	03	DC3	13	#	23	3	33	C	43	S	53	c	63	s	73
EOT	04	DC4	14	$	24	4	34	D	44	T	54	d	64	t	74
ENQ	05	NAK	15	%	25	5	35	E	45	U	55	e	65	u	75
ACK	06	SYM	16	&	26	6	36	F	46	V	56	f	66	v	76
BEL	07	ETB	17	’	27	7	37	G	47	W	57	g	67	w	77
BS	08	CAN	18	(	28	8	38	H	48	X	58	h	68	x	78
HT	09	EM	19	)	29	9	39	I	49	Y	59	i	69	y	79
LF	0A	SUB	1A	*	2A	:	3A	J	4A	Z	5A	j	6A	z	7A
VT	0B	ESC	1B	+	2B	;	3B	K	4B	[	5B	k	6B	{	7B
FF	0C	FS	1C	,	2C	<	3C	L	4C	\	5C	l	6C	|	7C
CR	0D	GS	1D	–	2D	=	3D	M	4D	]	5D	m	6D	}	7D
SO	0E	RS	1E	.	2E	>	3E	N	4E	^	5E	n	6E	~	7E
SI	0F	US	1F	/	2F	?	3F	O	4F	_	5F	o	6F	DEL	7F

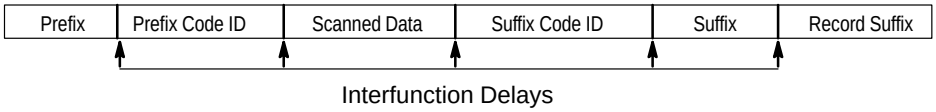
Message String Descriptions

Some terminals drop information (characters) if data comes through too quickly. Intercharacter, interfunction, and intermessage delays slow the transmission of data, which increases data integrity.

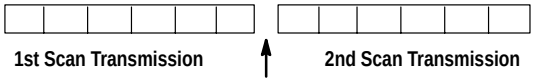
Intercharacter Delay:
An intercharacter delay is a delay of up to 99 milliseconds which is placed between the transmission of each character of scanned data.



Interfunction Delay:
An interfunction delay is a delay of up to 495 milliseconds (in multiples of 5) which is placed between the transmission of each segment of the message string.



Intermessage Delay:
An intermessage delay is a delay of up to 495 milliseconds (in multiples of 5) which is placed between each scan transmission.



Enter Programming

Message String Programming

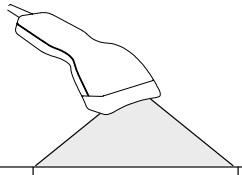
Option Bar Code	*Options*	*Alphanumeric Entry(ies)*	
 **Intercharacter Delay**	No delay (00) ✶ . . . . . . 01 - 99 milliseconds	**Finish** 01 to 99	
 **Interfunction Delay**	No delay (00) ✶ . . . . . . 01 - 99 (x5) milliseconds	**Finish** 01 to 99	
 **Intermessage Delay**	No delay (00) ✶ . . . . . . 01 - 99 (x5) milliseconds	**Finish** 01 to 99	

Exit Programming

Building the RS-232 Message String

The following diagram illustrates the breakdown of the RS-232 message string:

The RS-232 Message String:



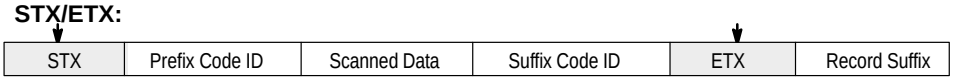
STX	Prefix Code ID	Scanned Data	Suffix Code ID	ETX	Record Suffix
1 character	1 or 2 characters	variable length	1 or 2 characters	1 character	1 character

RS-232 Message String Defaults

Option	***Default***
STX	Disable
Prefix Code ID	Off
Suffix Code ID	Off
ETX	Disable
Record Suffix	Return (Enter)

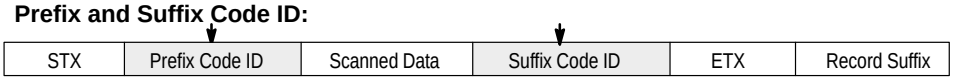
Message String Descriptions

STX/ETX:



Data flow control of Start of Transmission (STX) and End of Transmission (ETX) must be set to match the host terminal.

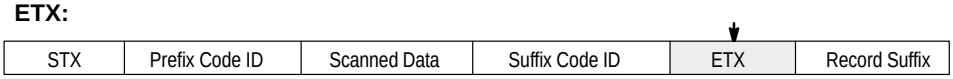
Prefix and Suffix Code ID:



The scanner can be programmed to send characters that identify the symbology being scanned. These characters are programmed in the Prefix and/or Suffix Code ID. For further information about programming the Prefix or Suffix Code ID, see page 5 - 16.

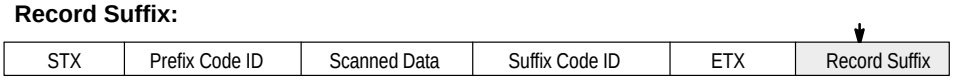
5

ETX:



Data flow control of End of Transmission (ETX) and Start of Transmission (STX) must be set to match the host terminal.

Record Suffix:



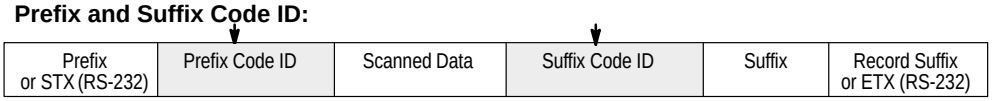
The Record Suffix selection is used to send commonly used suffix characters, e.g., Enter, Tab, or Space, to the host terminal. (See page 5 - 7 for a Hex to ASCII conversion chart.)

Message String Programming

Option Bar Code	*Options*		*Alphanumeric Entry(ies)*
STX/ETX	Disable STX/ETX transmission ✶	0	
	Enable STX/ETX transmission	1	
Record Suffix	None	0	
	Carriage Return (0DH) ✶	1	
	Line Feed (0AH)	2	
	Carriage Return Line Feed (0D0AH)	3	
	Tab (09H)	4	
	Space (20H)	5	
	EOT (04H)	6	
	User Defined Character	7	1 character

Prefix/Suffix Code ID Description

Prefix and Suffix Code ID:



Code ID Transmission: This selection allows you to send characters that identify a particular symbology. Once the scanner is programmed for a Prefix Code ID, Suffix Code ID, or both, you must select the symbology which will use the identifier. This is done by programming with either the Prefix Suffix Symbol ID Bar Code: 2 Characters (page 5 - 15) or the Prefix Suffix Symbol ID Bar Code: 1 Character (page 5 - 17). You can send the default character for the symbology (listed after the symbology name), or send your own character.

Prefix/Suffix Code ID

Bar Code: 2 characters: Once the scanner is programmed for a Code ID Transmission, you must select the symbology which will use the identifier. You can send the default character for the symbology (listed after the symbology name), or send your own character.

To send the default Code ID:
1.) Scan the **Enter Programming** bar code on page 5 - 15.
2.) Scan **Prefix/Suffix Code ID**.
3.) Scan the 2 character entry to indicate the symbology.
4.) Scan the single character you wish to send with that symbology.
5.) Scan **Finish**.
6.) Scan **Exit Programming**

For example, if you wish to send an “EO” (the default) with UPC-E symbology, scan **0**, **0**, **Finish**, and **Exit Programming**.
If you wished to send an “AE” with UPC-E symbology, you would scan **0**, **0**, **A**, **E**, **Finish**, and **Exit Programming**. (See page 5 - 7 for a Hex to ASCII conversion chart.)

Enter Programming

Prefix/Suffix ID Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*		
 **Code ID Transmission**	Disable Code ID Transmission ✶	0		
	Enable Prefix Code ID transmission	1		
	Enable Suffix Code ID transmission	2		
	Enable both Prefix and Suffix Code ID transmission	3		
 **Prefix/Suffix Code ID Bar Code: 2 characters**	UPC-E (default = E0)	00	1-2 characters	**Finish**
	EAN-8 (default = FF)	01	1-2 characters	**Finish**

Exit Programming

Prefix/Suffix Code ID Description

Prefix/Suffix Code ID

Bar Code: 1 Character: Once the scanner is programmed for a Code ID Transmission, you must select the symbology which will use the identifier. You can send the default character for the symbology (listed after the symbology name), or send your own character.

To send the default Code ID:
1.) Scan the **Enter Programming** bar code on page 5 - 17.
2.) Scan **Prefix/Suffix Code ID**.
3.) Scan the 2 character entry to indicate the symbology.
4.) Scan the single character you wish to send with that symbology.
5.) Scan **Finish**.
6.) Scan **Exit Programming**

For example, if you wish to send a “B” (the default) with Code 128 symbology, scan **0**, **0**, **Finish**, and **Exit Programming**. If you wished to send a “C” with Code 128 symbology, you would scan **0**, **0**, **C**, **Finish**, and **Exit Programming**. (See page 5 - 7 for a Hex to ASCII conversion chart.)

Enter Programming

Prefix/Suffix ID Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*		
 **Prefix/Suffix Code ID Bar Code: 1 character**	Code 128 (default = B)	00	1 character	**Finish**
	UPC/EAN-128 (default = C)	01	1 character	**Finish**
	UPC-A (default = A)	02	1 character	**Finish**
	EAN/JAN/CAN-13 (default = F)	03	1 character	**Finish**
	Codabar/NW-7 (default = D)	04	1 character	**Finish**
	Code 39/Code 32 (default = G)	05	1 character	**Finish**
	Code 93 (default = H)	06	1 character	**Finish**
	Standard/Industrial 2 of 5 (default = I)	07	1 character	**Finish**
	Interleaved 2 of 5 (default = J)	08	1 character	**Finish**
	Matrix 2 of 5 (default = K)	09	1 character	**Finish**
	Chinese Postal Code (default = L)	10	1 character	**Finish**
	German Postal Code (default = M)	11	1 character	**Finish**
	IATA (default = N)	12	1 character	**Finish**
	Code 11 (default = O)	13	1 character	**Finish**
	MSI/Plessey (default = P)	14	1 character	**Finish**
	UK/Plessey (default = Q)	15	1 character	**Finish**

Exit Programming

Data Editor

The Data Editor selections are used to edit the scanned data. For example, you can use the Data Editor to insert characters at certain points in the bar code data as it is scanned.

It is not necessary to use the Data Editor. When you programmed your Terminal Selection, a set of defaults for the data format was also programmed. The selections in this chapter are only used if you wish to alter the default settings. These defaults are noted on page 6 - 3, as well as on the Programming pages by an asterisk (✶) beside each default value.

Data Editor

Data Editor Defaults

Option	*Default*
Editor Control	Disable
1st Insertion	Disable
2nd Insertion	Disable
3rd Insertion	Disable
4th Insertion	Disable
Symbology Control	Disable
Check Data Length	Disable
1st Check Character	Disable
2nd Check Character	Disable

If you program changes to any Data Editor options, and later wish to reset the scanner to the defaulted values, scan the **Default Data Editor Settings** bar code below. This will reset the scanner to *all* the defaulted values for the Data Editor.

Default Data Editor Settings

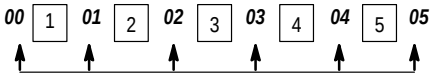
Data Editor Descriptions

The Data Editor is used to edit pure, scanned data prior to transmitting the data to the host computer. It allows you to select desired bar code symbologies for editing, and to insert up to four characters in specific positions, between data characters. While the data editor is enabled, it arranges only *scanned* data without prefix, suffix, STX, ETX, data length, prefix/suffix symbol IDs, or record suffixes. These parameters (prefix, suffix, STX, ETX, data length, prefix/suffix symbol IDs, and record suffix) perform the same function, depending on your settings.

Editor Control: You may select one or all bar code symbologies to which you want to apply data editing. If you scan "00" to select all symbologies, the 3060/3080 arranges all incoming data to pass your pre-defined format. If you want to select a single symbology, scan the 2 digit code for the appropriate symbology below:

Code 128/EAN 128:	**01**	Code 2 of 5	**08**
UPC-A	**02**	Code 93	**09**
UPC-E	**03**	Code 11	**10**
EAN-13	**04**	MSI/Plessey	**11**
EAN-8	**05**	UK/Plessey	**12**
Codabar/NW-7	**06**	IBM Delta	**13**
Code 39/Code 32	**07**	Telepen	**14**

1st through 4th Insertion: These settings indicate where you wish to insert the character(s) in the scanned data. The following diagram indicates the 2 digit insertion position between data characters:



2 digit position number for insertions

Data Editor Programming

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*		
Editor Control	Disable ✶ . . . . . **Finish** Select one bar code symbology . . . . . 2 digits Select all bar code symbologies 00			
1st Insertion	Disable ✶ . . . . . **Finish** Enable . . . . . 2 digits	1-3 characters	**Finish**	
2nd Insertion	Disable ✶ . . . . . **Finish** Enable . . . . . 2 digits	1-3 characters	**Finish**	
3rd Insertion	Disable ✶ . . . . . **Finish** Enable . . . . . 2 digits	1-3 characters	**Finish**	
4th Insertion	Disable ✶ . . . . . **Finish** Enable . . . . . 2 digits	1-3 characters	**Finish**	

Exit Programming

Data Editor Control Descriptions

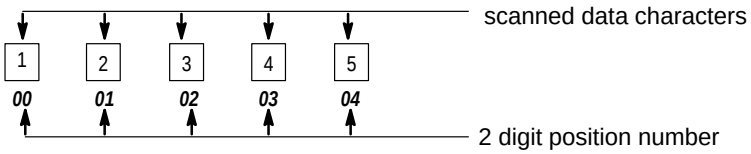
The Data Editor Control checks scanned data before editing. All data must conform to an identified bar code symbology, the Check Length, and one or two Check Characters in the checking position. If the data does not match, the scanner will not transmit the data, and will emit 3 long beeps. If the Data Editor Control is disabled, no checks are made before editing.

Symbology Control: You may select one or all bar code symbologies to which you want to apply data control. If you scan "00" to select all symbologies, the 3060/3080 arranges all incoming data to pass your pre-defined checkpoints. If you want to select a single symbology, scan the 2 digit code for the appropriate symbology below:

Code 128/EAN 128:	**01**	Code 39/Code 32	**07**
UPC-A	**02**	Code 2 of 5	**08**
UPC-E	**03**	Code 93	**09**
EAN-13	**04**	Code 11	**10**
EAN-8	**05**	MSI/Plessey	**11**
Codabar/NW-7	**06**	UK/Plessey	**12**
		IBM Delta	**13**

Check Length: If this feature is enabled, the scanned data must match the length specified. Scan the 2 digit data length, for example, "05" for a 5 character bar code.

1st and 2nd Check Character: If this feature is enabled, the data character must match the check character specified, as well as its position. Program this entry by scanning the 2 digit position, then scanning the check character you wish to use. The following diagram indicates the 2 digit position number:



Enter Programming

Data Editor Control Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*	
 **Symbology Control**	Disable ✶ . . . . . Select one bar code symbology or MSR format Select all bar code symbologies and MSR formats	**Finish** 2 digits 00	
 **Check Data Length**	Disable ✶ . . . . . Enable	**Finish** 2 digits	
 **1st Check Character**	Disable ✶ . . . . . Enable	**Finish** 2 digits	1 character
 **2nd Check Character**	Disable ✶ . . . . . Enable	**Finish** 2 digits	1 character

Exit Programming

Symbologies

This chapter lists the symbologies which can be read by the 3060/3080, and allows you to enable or disable them. Once you have selected the symbologies to be read by the scanner, you can then specify the detail settings for each symbology.

It is not necessary to set the Symbologies. The 3060/3080 defaults to read all symbologies, with a set of default settings for each symbology. The selections in this chapter are only used if you wish to restrict the symbologies which will be read, or to alter the default settings of a symbology. These defaults are noted on the Programming pages by an asterisk (✶) beside each default value.

Enable Symbologies

The 3060/3080 scanner is preset to read all symbologies (Automatic Discrimination). If you want to restrict the symbologies which will be read, you must individually scan each symbology you want enabled.

Symbology Defaults

If you program changes to any Symbology options, and later wish to reset the scanner to the defaulted values, scan the **Default Symbology Settings** bar code below. This will reset the scanner to read *all* symbologies, with their defaulted settings.

Default Symbology Settings

Symbology Programming

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*	
Enable Symbologies	Automatic Discrimination ✶	00	
	Code 128, UCC/EAN-128	01	**Finish**
	UPC-A	02	**Finish**
	UPC-E	03	**Finish**
	EAN/CAN/JAN-13	04	**Finish**
	EAN/CAN/JAN-8	05	**Finish**
	Codabar/NW-7	06	**Finish**
	Code 39/Code 32, HIBC	07	**Finish**
	Code 25 Family, IATA	08	**Finish**
	Code 93	09	**Finish**
	Code 11	10	**Finish**
	MSI/Plessey	11	**Finish**
	UK/Plessey	12	**Finish**

Exit Programming

Code 39 Settings

Standard Code 39: The standard Code 39 symbology is a bar code with 42 data characters, including the digits 0 through 9, the capital letters A through Z, plus the symbol . - $ / + %. It's also one of the most popular bar code symbologies.

Full ASCII Code 39 format: This format is for a bar code with a total of 128 characters to represent full ASCII code.

Code 32 (Italian Pharmaceutical) format: This format is for a bar code with the digits 0 through 9.

Start/Stop Symbol Transmission: Start/Stop characters identify the leading and trailing ends of the bar code.

Code 32 Leading A Transmission: This is an optional leading character which may be enabled or disabled.

MOD 43 Check Digit Verification: The Code 39 symbology uses a MOD 43 algorithm for check digit verification. You can enable this option if your Code 39 bar code has a MOD 43 check digit.

Note: Most Code 39 bar codes don't use a check digit. If you enable this option to scan Code 39 bar codes without a check digit, the 3060/3080 will not read the scanned bar code label.

Check Digit Transmission: This selection disables or enables check digit transmission.

Programming - Code 39 Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Code 39	Select Standard Code 39 as primary format ✶	0
	Select Full ASCII Code 39 as primary format	1
	Select Code 32 (Italian Pharmaceutical) as primary format	2
	Disable start/stop symbol transmission ✶	3
	Enable start/stop symbol transmission	4
	Disable Code 32 leading A transmission ✶	5
	Enable Code 32 leading A transmission	6
	Disable MOD 43 check digit verification ✶	7
	Enable MOD 43 check digit verification	8
	Disable check digit transmission	9
	Enable check digit transmission ✶	A

Exit Programming

Code 39 Settings

Code 39 Minimum and Maximum Length: This selection is used to set the valid reading length of the bar code. If the data length of the scanned bar code doesn't match the valid reading length, the 3060/3080 will issue a long error beep. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length bar code data. This helps reduce the chances of a misread.

Programming - Code 39 Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Code 39 Minimum Length	Default (01) ✶ . . . . . **Finish** 01 - Maximum 01-98	
Code 39 Maximum Length	Default (98) ✶ . . . . . **Finish** 98 - Minimum 98-01	

Exit Programming

Codabar Settings

Standard Codabar: The standard Codabar bar code has 16 data characters, including the digits 0 through 9, plus the $ – + . / and : symbols. There are four types of start and stop symbols, represented as:

A, a, T, or t;
B, b, N, or n
C, c, or * (twice)
D, d, E, or e.

Codabar ABC format: The Codabar ABC code consists of two bar codes, which are decoded in one cycle (single scan).

For the first bar code, there are three types of start symbols: A, a, T, or t/B, b, N, or n/C, c, or * (twice) and one type of stop symbol: D, d, E, or e.

For the second bar code, there is one type of start symbol: D, d, E, or e and three types of stop symbols: A, a, T, or t/B, b, N, or n/C, c, or * (twice).

Codabar CLSI format: This is a fixed 14 character Codabar code which must follow the pre-defined format to transmit to the host computer. The start and stop symbols are the same as the standard format.

Codabar CX format: The Codabar CX code consists of two bar codes, which are decoded in one cycle (single scan).

For the first bar code, there are three types of start symbols: A, a, T, or t/B, b, N, or n/C, c, or * (twice) and one type of stop symbol: C, c, or * (twice).

For the second bar code, there is one type of start symbol: B, b, N, or n and three types of stop symbols: A, a, T, or t/B, b, N, or n/C, c, or * (twice).

Start/Stop Symbol Transmission: Start/Stop characters identify the leading and trailing ends of the bar code.

Codabar Settings

Check Digit Verification: When this feature is enabled, the 3060/3080 will not read a Codabar code printed without the check digit.

Check Digit Transmission: When this feature is enabled, the 3060/3080 will transmit the bar code check digit at the end of the scanned data.

Programming - Codabar Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Codabar	Select Codabar standard format ✶	0
	Select Codabar ABC format	1
	Select Codabar CLSI format	2
	Select Codabar CX format	3
	Disable start/stop symbol transmission ✶	4
	Enable ABCD/ABCD start/stop symbol transmission	5
	Enable abcd/abcd start/stop symbol transmission	6
	Enable ABCD/TN*E start/stop symbol transmission	7
	Enable abdc/tn*e start/stop symbol transmission	8
	Disable check digit verification ✶	9
	Enable check digit verification	A
	Disable check digit transmission	B
	Enable check digit transmission ✶	C

Exit Programming

Codabar Settings

Codabar Minimum and Maximum Length: This selection is used to set the valid reading length of the bar code. If the data length of the scanned bar code doesn't match the valid reading length, the 3060/3080 will issue a long error beep. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length bar code data. This helps reduce the chances of a misread.

Programming - Codabar Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Codabar Minimum Length	Default (01) ✶ . . . . . **Finish** 01 - Maximum 01-98	
Codabar Maximum Length	Default (98) ✶ . . . . . **Finish** 98 - Minimum 98-01	

Exit Programming

UPC Settings

UPC Addenda: This feature is used if your application needs a 2 or 5 digit addenda to the UPC code.

UPC-E Expansion: This function expands a 7 digit UPC-E code to a 12 digit UPC-A format.

UPC Standardization: This selection expands a 7 digit UPC-E code to an 8 digit EAN-8 format with 1 zero insertion, and expands a 12 digit UPC-A code to the 13 digit EAN-13 format with 1 zero insertion.

UPC Numeric System: The numeric system digit of a UPC symbol is normally transmitted, but the scanner can be programmed to disable it.

UPC Check Digit Transmission: This selection disables or enables check digit transmission.

UPC Number System 1: Most UPC bar codes lead with the 0 number system. If you want to read codes which lead with the 1 number system, enable this option.

Programming - UPC Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
UPC	Select UPC without addenda ✶	0
	Select UPC with 2 digit addenda	1
	Select UPC with 5 digit addenda	2
	Select UPC with 2/5 digit addenda	3
	Disable UPC-E expansion ✶	4
	Enable UPC-E expansion	5
	Disable UPC standardization ✶	6
	Enable UPC standardization	7
	Disable UPC numeric system	8
	Enable UPC numeric system ✶	9
	Disable UPC-A check digit transmission	A
	Enable UPC-A check digit transmission ✶	B
	Disable UPC-E check digit transmission	C
	Enable UPC-E check digit transmission ✶	D
	Disable UPC number system 1 ✶	E
	Enable UPC number system 1	F

Exit Programming

EAN/CAN/JAN Settings

EAN Addenda: This feature is used if your application needs a 2 or 5 digit addenda to the EAN code.

EAN-8 Expansion: This function expands an 8 digit EAN-8 code to a 13 digit EAN-13 format.

EAN Check Digit Transmission: This selection disables or enables check digit transmission.

Bookland Reading Check: Then this function is enabled, an EAN-13 with leading "978" code must have **5 supplemental digits** for reading checks. Otherwise, the scanner will issue a long error beep.

Programming - EAN/CAN/JAN Settings

Enter Programming

Option Bar Code	Options	Alphanumeric Entry(ies)
EAN/CAN/JAN	Select EAN without addenda ✶	0
	Select EAN with 2 digit addenda	1
	Select EAN with 5 digit addenda	2
	Select EAN with 2/5 digit addenda	3
	Disable EAN-8 expansion ✶	4
	Enable EAN-8 expansion	5
	Disable EAN-13 check digit transmission	6
	Enable EAN-13 check digit transmission ✶	7
	Disable EAN-8 check digit transmission	8
	Enable EAN-8 check digit transmission ✶	9
	Enable Bookland reading check ✶	A
	Disable Bookland reading check	B

Exit Programming

Code 2 of 5 Settings

Code 2 of 5: The 3060/3080 can decode almost all Code 2 of 5 symbologies automatically. However, to decrease the error rate, we recommend you select only one kind of Code 2 of 5 for reading, or set limited maximum and minimum lengths. The Code 2 of 5 encoding algorithm is weak, so setting the scanner to decode all Code 2 of 5 automatically, or to read variable length Code 2 of 5 bar codes will increase the reading error rate.

Check Digit Verification: When this feature is enabled, the 3060/3080 will not read a Code 2 of 5 code printed without the check digit.

Check Digit Transmission: When this feature is enabled, the 3060/3080 will transmit the bar code check digit at the end of the scanned data.

Programming - Code 2 of 5 Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Code 2 of 5	Select any Code 2 of 5 ✶	0
	Select Standard/Industrial 2 of 5 only	1
	Select Matrix 2 of 5 only	2
	Select Interleaved 2 of 5 only	3
	Select Interleaved 2 of 5 “S” Code only	4
	Select IATA only	5
	Select Chinese Postal Code only	6
	Disable check digit verification ✶	7
	Enable check digit verification	8
	Disable check digit transmission	9
	Enable check digit transmission ✶	A

Exit Programming

Code 2 of 5 Settings

Code 2 of 5 Minimum and Maximum Length: This selection is used to set the valid reading length of the bar code. If the data length of the scanned bar code doesn't match the valid reading length, the 3060/3080 will issue a long error beep. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length bar code data. This helps reduce the chances of a misread.

Programming - Code 2 of 5 Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Code 2 of 5 Minimum Length	Default (06) ✶ . . . . . **Finish** 02 - Maximum 02-98	
Code 2 of 5 Maximum Length	Default (98) ✶ . . . . . **Finish** 02 - 98 02-98	

Exit Programming

IATA Settings

IATA Setting: The IATA is a Code 2 of 5 format in a 15 digit, fixed length bar code which is widely used for airlines.

Variable Length IATA: This function is used to read IATA codes which do not have a 15 digit length. We recommend disabling the check digit verification, and setting the same value for Code 2 of 5 minimum and maximum length to read fixed length IATA code in order to reduce the reading error rate.

Check Digit Verification: The check digit verification selections allow you to program the scanner to check the serial number, coupon, or airline code.

Start/Stop Symbol Transmission: Start/Stop characters identify the leading and trailing ends of the bar code.

Check Digit Transmission: This selection disables or enables check digit transmission.

Programming - IATA Settings

Enter Programming

Option Bar Code	Options	Alphanumeric Entry(ies)
IATA	Select 15 digit fixed length IATA checking ✶	0
	Select variable length IATA	1
	Disable check digit verification ✶	2
	Enable check digit verification	3
	Enable S/N check digit verification only	4
	Enable CPN check digit verification only	5
	Enable CPN, Airline, and S/N check digit verification	6
	Disable start/stop symbol transmission ✶	7
	Enable start/stop symbol transmission	8
	Disable check digit transmission	9
	Enable check digit transmission ✶	A

Exit Programming

Code 11 Settings

Code 11: Generally, the Code 11 format uses 2 check digits for added protection. You must specify the number of check digits the scanner should recognize. The 3060/3080 calculates the check digits to confirm their validity, but transmission of the check digits to the host computer is dependent on the check digit transmission selection you make.

Code 11 Minimum and Maximum Length: This selection is used to set the valid reading length of the bar code. If the data length of the scanned bar code doesn't match the valid reading length, the 3060/3080 will issue a long error beep. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length bar code data. This helps reduce the chances of a misread.

Programming - Code 11 Settings

Enter Programming

Option Bar Code	Options	Alphanumeric Entry(ies)
Code 11	Select 1 check digit verification	0
	Select 2 check digit verification ✶	1
	Disable check digit transmission ✶	2
	Enable 1 check digit transmission	3
	Disable 2 check digit transmission	4
Code 11 Minimum Length	Default (04) ✶	**Finish**
	04 - Maximum	04-98
Code 11 Maximum Length	Default (98) ✶	**Finish**
	98 - Minimum	98-04

Exit Programming

Code 93 Settings

Code 93: Code 93 was designed to drop into applications that use Code 39. Code 93 can be used to represent all 128 ASCII characters like Code 39's Full ASCII mode, however, Code 93 has special shift characters which distinguish full ASCII combinations from the standard alphanumeric set. There is no need to enable full ASCII decoding.

Code 93 Minimum and Maximum Length: This selection is used to set the valid reading length of the bar code. If the data length of the scanned bar code doesn't match the valid reading length, the 3060/3080 will issue a long error beep. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length bar code data. This helps reduce the chances of a misread.

Programming - Code 93 Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
Code 93	Disable check digit transmission ✶	0
	Enable check digit transmission	1
Code 93 Minimum Length	Default (03) ✶	**Finish**
	03 - Maximum	03-98
Code 93 Maximum Length	Default (98) ✶	**Finish**
	98 - Minimum	98-03

Exit Programming

MSI/Plessey Settings

MSI/Plessey: One or two check digits are used for the MSI/Plessey code to improve its coding accuracy. When 1 check digit is used, the scanner calculates in MOD-10 arithmetic. For 2 check digit code, the first one may be calculated in either MOD 11 or MOD 10 arithmetic, while the second one is always calculated in MOD-10 arithmetic. If you have to read MSI/Plessey code, you must further program the 3060/3080 to define the number of check digits, how to calculate them, and whether to transmit them to the host computer.

MSI/Plessey Minimum and Maximum Length: This selection is used to set the valid reading length of the bar code. If the data length of the scanned bar code doesn't match the valid reading length, the 3060/3080 will issue a long error beep. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length bar code data. This helps reduce the chances of a misread.

Programming - MSI/Plessey Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
MSI/Plessey	Select MOD 10 check digit ✶	0
	Select MOD 10-10 check digit	1
	Select MOD 11-10 check digit	2
	Disable check digit transmission	3
	Enable 1 check digit transmission	4
	Enable 2 check digit transmission ✶	5
MSI/Plessey Minimum Length	Default (04) ✶	**Finish**
	04 - Maximum	04-98
MSI/Plessey Maximum Length	Default (98) ✶	**Finish**
	98 - Minimum	98-04

Exit Programming

UK/Plessey Settings

UK/Plessey: The UK/Plessey bar code has 16 data characters, including the digits 0 through 9, and the capital letters A through F. Furthermore, you can program the scanner to transmit a check digit to the host computer.

UK/Plessey Minimum and Maximum Length: This selection is used to set the valid reading length of the bar code. If the data length of the scanned bar code doesn't match the valid reading length, the 3060/3080 will issue a long error beep. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length bar code data. This helps reduce the chances of a misread.

Programming - UK/Plessey Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
UK/Plessey	Standard output format ✶	0
	CLSI format	1
	Disable conversion from “0-9” to “A-F” ✶	2
	Enable conversion from “0-9” to “A-F”	3
	Disable check digit transmission ✶	4
	Enable check digit transmission	5
UK/Plessey Minimum Length	Default (04) ✶	**Finish**
	04 - Maximum	04-98
UK/Plessey Maximum Length	Default (98) ✶	**Finish**
	98 - Minimum	98-04

Exit Programming

UCC/EAN-128 Settings

UCC/EAN-128: The UCC/EAN-128 code is a subset of Code 128 symbology. The UCC/EAN-128 code can be recognized by the function character 1 (FNC1) after the start symbol. If the UCC/EAN-128 function code conversion is enabled, the 3060/3080 transmits the converted function code to the host computer. For example, the FNC1 transmits as]C1.

UCC/EAN-128 Minimum and Maximum Length: This selection is used to set the valid reading length of the bar code. If the data length of the scanned bar code doesn't match the valid reading length, the 3060/3080 will issue a long error beep. You may wish to set the same value for minimum and maximum length to force the scanner to read fixed length bar code data. This helps reduce the chances of a misread.

Programming - UCC/EAN-128 Settings

Enter Programming

Option Bar Code	*Options*	*Alphanumeric Entry(ies)*
UCC/EAN-128	Disable function code conversion ✶	0
	Enable function code conversion	1
UCC/EAN-128 Minimum Length	Default (01) ✶	**Finish**
	01 - Maximum	01-98
UCC/EAN-128 Maximum Length	Default (98) ✶	**Finish**
	98 - Minimum	98-01

Exit Programming

Obtaining Factory Service

Welch Allyn provides service for its scanner products through its UK and Hong Kong service centers as well as its manufacturing and service facilities in Skaneateles, New York. To obtain warranty service you should return the unit to Welch Allyn, Inc., postage paid. A copy of the dated purchase record must be attached.

The VALUETEAM 3060/3080 carries a 1 year warranty (from the date of shipment). Warranty service may be obtained by contacting the Welch Allyn Product Service Group. (Refer to the next page for addresses and phone numbers.) The warranty statement is located on page 8 - 4.

The following information is required to process an RMA for the product and should be available for the Service Representative handling your inquiry. The information is located on the manufacturer's label attached to the bottom of the VALUETEAM 3060/3080.

Model Number

Serial Number

Date of Manufacture

Note: *The Welch Allyn Product Service Group cannot accept materials that are returned without an RMA number.*

In the United States, please contact Welch Allyn, Inc. at the address or telephone number listed below to obtain a return material authorization number (RMA number):

Welch Allyn, Inc.
Data Collection Division
Product Service Department
4619 Jordan Road
P.O. Box 187
Skaneateles Falls, New York 13153–0187

Product Service Department
Telephone: (315) 685–4278 or 685–4360
Fax: (315) 685–4156

For service in Europe, please contact your Welch Allyn representative (at address below) or your local distributor.

Welch Allyn, Ltd.
1 Bracken Office Park
Sandyford
Co. Dublin
Ireland

Telephone: +353 (0)1 216–0070
Fax: +353 (0)1 295–6353

U. K. Offices
Dallam Court
Dallam Lane
Warrington
Cheshire WA2 7LT
United Kingdom

Telephone: +44 (0)1 925 240055
Fax: +44 (0)1 925 631280

For service in Asia, please contact your Welch Allyn representative (at address below) or your local distributor.

Welch Allyn, Asia/Pacific Office
10/F Tung Sun Commercial Centre
194–200 Lockhart Road
Wanchai, Hong Kong

Telephone: Int+852–2511–3050 *or* 2511–3132
Fax: Int+852–2511–3557

For service in Japan, please contact your Welch Allyn representative (at address below) or your local distributor.

Japan Office
Welch Allyn, Ltd.
Bon Marusan 8F
3-5-1 Kanda-Jinbocho
Chiyoda-ku
Tokyo 101, Japan

Telephone: Int+81–3–5212–7352
Fax: Int+81–3–3261–7372

For service in Latin America, please contact your Welch Allyn representative (at address below) or your local distributor.

Latin America Office
Welch Allyn, Ltd.
5150 North Tamiami Trail
Suite 302
Naples, FL 34103-2821

Telephone: (941) 263–7600
Fax: (941) 263–9689

Help Desk

If you need assistance installing or troubleshooting the device, please call your Distributor or the Welch Allyn Help Desk:

Telephone: (315) 685-2476 (8 am to 5 pm EST)

Web Site: dcd.welchallyn.com
E–Mail: dcd_techsupt@mail.welchallyn.com

Limited Warranty

Welch Allyn, Inc., hereby warrants its products to be functional and free from manufacturing defects at the time of delivery. Welch Allyn, Inc. further warrants that it will replace or repair, at its option, any unit that fails to perform according to Welch Allyn's published specifications during a period of one (1) year from the time of shipment by Welch Allyn, Inc. to the user at the time it is purchased from any of Welch Allyn Inc.'s Authorized Distributors. Any attempt on the part of the user to disassemble or service the equipment shall void the warranty.

The warranty does not apply to product which have been damaged by improper handling, shipping, or misuse. The warranty does not apply, if, in the sole opinion of Welch Allyn, Inc., the unit has been damaged by accident, misuse, neglect, improper shipping and handling. Since the unit is sensitive to static, the responsibility to protect it from static damage is solely that of the user. The warranty is valid only if the unit or scanner has not been tampered with or serviced by any party unauthorized by Welch Allyn, Inc. as a repair facility.

THE WARRANTIES SET FORTH HEREIN ARE IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE BUYER ACKNOWLEDGES THAT NO OTHER REPRESENTATIONS WERE MADE OR RELIED UPON WITH RESPECT TO THE QUALITY AND FUNCTION OF THE BOARD AND SCANNER HEREIN SOLD.

In no event shall Welch Allyn, Inc. or its resellers be liable for any loss, inconvenience or damage whether direct, incidental, consequential or otherwise, and whether caused by negligence or other fault resulting from the breach of any express warranty except as set forth herein. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state or country to country.

Specifications

Environmental Specifications

Operating Temp.:	0° to 40° C
Storage Temp.:	–10° to 55° C
Humidity:	25% to 85% RH non-condensing
Mechanical Shock:	Functional after (4) 1 meter drops
ESD Sensitivity:	Functional after 10kV charging voltage
Ambient Illumination:	Fluorescent: 1500 lux Direct Sun: 800 lux

Electrical Specifications

Operating Voltage:	5 VDC +–5%
Current Draw:	3060-12: 115mA 3080-12: 120mA
Standby Current:	30mA
Power Supply Noise Rejection:	50mV max.

Scanner Performance

Minimum Reflective Difference:	37.5%
Scan Rate:	100 scans per second
Min. Reading Width on Contact:	3060-12: 54 mm 3080-12: 74 mm
Illumination:	660 nm visible red LED
Working Distance:	0 to 20mm
Resolution:	4 mil. code density min.

Appendix

The Appendix lists the beeping indications and keyboard function code table for the 3060/3080. The Master Default, Configuration List, and System Information bar codes are on page A - 4.

Beeping Indications

No.	Description	Beeping	Buzzer Tone
01	Internal or operational memory error	Repeated beeps	medium
02	Internal fatal error	Repeated beeps	medium
03	Beginning normal operation	2 short beeps	high, low
04	Entering programming mode	3 short beeps	high, low, low
05	Exiting programming mode	1 short beep	medium
06	Parameter storage into non-volatile memory completed	3 short beeps	low, medium, high
07	Starting a master or group default	4 short beeps	high, medium, high, medium
08	Completing a master or group default	3 short beeps	low, high, low
09	Completing the system information listing	3 short beeps	medium, high, medium
10	Completing the existing configurations listing	3 short beeps	high, low, high
11	Good read	1 short beep	adjustable tone
12	Programming error	1 long beep	medium
13	Finishing the programming selection by scanning **Finish**	2 short beeps	medium, medium
14	Finishing the programming selection automatically	2 short beeps	medium, medium
15	Data verifier checking error	3 long beeps	medium, medium, medium
16	Memory buffer full	4 long beeps	medium, medium, medium, medium
17	Time Out warning	2 long beeps	medium, medium
18	No CTS signal warning	1 long beep	medium
19	Over record size warning	1 long beep	low

Keyboard Function Code Table

The Keyboard Function Code Table is for IBM PC/XT/AT, 5550, PS/55, PS/2, PS/VP, COMPAQ 386/486, HP Vectra PC, Notebook PC and APPLE ADB, WYSE PC Enhanced, or fully compatible machines.

ANSI	ASCII	Key Function
NUL	00	RESERVED
SOH	01	CTRL
STX	02	ALT
ETX	03	SHIFT
EOT	04	CAPS LOCK
ENQ	05	NUM LOCK
ACK	06	ESC
BEL	07	F1
BS	08	BS (Back Space)
HT	09	TAB
LF	0A	F2
VT	0B	F3
FF	0C	F4
CR	0D	ENTER (Carriage Return)
SO	0E	F5
SI	0F	F6

ANSI	ASCII	Key Function
DC2	12	F9
DC3	13	F10
DC4	14	F11
NAK	15	F12
SYN	16	INS (Insert)
ETB	17	DEL (Delete)
CAN	18	HOME
EM	19	END
SUB	1A	PAGE UP
ESC	1B	PAGE DOWN
FS	1C	UP
GS	1D	DOWN
RS	1E	LEFT
US	1F	RIGHT
DLE	10	F7
DCI	11	F8

Master Default, Configuration List, and System Information

If you wish to return the 3060/3080 to all the factory default settings, scan the Master Default bar code, below.

MASTER DEFAULT

If you wish to display the current configuration of your 3060/3080 scanner over the host terminal/computer, scan the Configuration List bar code, below. (For diagnostic purposes, the configuration list output appears in hex form.)

CONFIGURATION LIST

If you wish to display the product information and revision number for your 3060/3080 scanner over the host terminal/computer, scan the System Information bar code, below.

SYSTEM INFORMATION

Alphanumeric Bar Codes

LETTERS

A

B

C

D

E

F

DIGITS

0 (YES)

1 (NO)

2

3

4

5

6

7

8

9

OTHERS

FINISH

3060/80/UG Rev C

Welch Allyn®

Data Collection Division
4619 Jordan Road
P.O. Box 187
Skaneateles Falls, New York 13153-0187