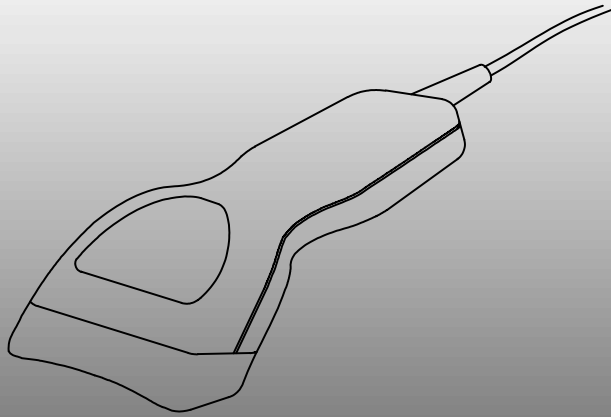


SCANTEAM[®]

3000/DO

Decoded Output




PROGRAMMING MENU



Welch Allyn

The SCANTEAM 3000/DO Programming Menu is used to program the 3000 Decoded Output CCD scanner.

The SAMPLE BAR CODES page (near the end of the programming menu) contains bar code symbols that you may use to verify that you have programmed your SCANTEAM 3000 correctly.

Input Power Voltage Requirements	
<u>Model</u>	<u>Input Power Voltage</u>
3000-X1 3000-X3	5 Volt or 12 Volt
3000-X2 3000-X4	5 Volt ONLY 

Disclaimer

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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.

Automatic Set Up ("Plug and Play")

The Plug and Play operation provides a method to automatically set up certain programmable options (including terminal I.D., data formatter, preambles and postambles) specific to the desired terminal interface. Using the Plug and Play single bar codes to set up the 3000 makes programming faster and easier. The programmable options may be changed using the programming menu in the usual manner, thereby retaining programming flexibility.

Programming the SCANTEAM 3000 scanner for Plug and Play operation involves scanning the appropriate bar code (on the following pages) that identifies the desired terminal interface to be installed. To install and set up the scanner for Plug and Play, follow the steps below:

- 1) Disconnect power to the terminal/host device by turning the host system power switch to the "OFF" position.
- 2) Connect the appropriate interface cable to the scanner.
- 3) Connect the interface cable to the terminal/host device. (This may involve disconnecting a keyboard plug to the terminal, reconnecting the keyboard plug to the mating connector on the interface cable, then connecting the mating connector on the interface cable to the terminal.)
- 4) Once the scanner has been fully connected, restore power to the terminal/host device by turning the host system power switch to the "ON" position.
- 5) Scan the appropriate Plug and Play single bar code (on the following pages) for the terminal/host device interface desired. The Plug and Play bar codes are grouped in the following order on the next four pages:
 - IBM PC Interfaces
 - IBM 4683 Ports 5B, 9B and 17
 - OCIA Interfaces
 - OCR, RS232 and Wand Emulation Interfaces.

Other Programming Options

Not all terminals are Plug and Play programmable using a single bar code. Following the SINGLE BAR CODE pages is a section called TERMINAL I.D. SETUP. This section provides a bar code ("Terminal I.D. Settings") that may be used to set up **any** of the supported terminal interfaces for the desired interface, plus a carriage return (CR) postamble, by scanning the terminal I.D.

Using the TERMINAL I.D. SETUP makes programming faster and easier (fewer programming scans) for simple terminal interface installations. Refer to the TERMINAL ID SETUP programming page for instructions on programming terminal interfaces other than the four most popular groupings listed above.

All of the supported terminal interfaces may be programmed in the usual manner for more complex or unique application requirements using the Terminal Selection, Output Parameters, Code Selection, and Data Formatter programming menu pages. Refer to these programming pages for all the programming features available in the SCANTEAM 3000.

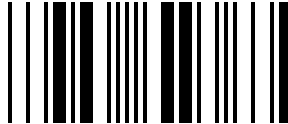
**SINGLE BAR CODE
PROGRAMMING MENU
"PLUG AND PLAY"**

Welch Allyn [®]
SCANTEAM 3000/DO Programming Menu
For 3000-X1, X2

❖ IBM PC Interface Selection ❖

IBM PC, XT Interface

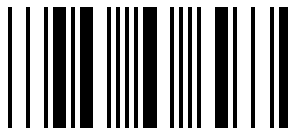
Scan the bar code below to enable the IBM PC, XT Interface.



IBM PC, XT

IBM PS/2, 25, 30, 55SX, 70 Interface

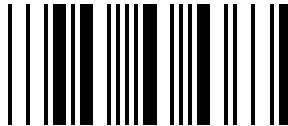
Scan the bar code below to enable the IBM PS/2 Interface.



IBM PS/2

IBM PC, AT; PS/2 MOD30 (286) 50, 60, 70, 80 Interface

Scan the bar code below to enable the IBM PC, AT Interface.



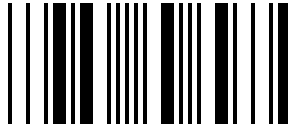
IBM PC, AT and Compatibles

IBM PC Interface Cables Used	
IBM AT/XT and Compatibles	42204061-03
IBM PS/2 Series	42204062-01
IBM AT/XT/PS2 Series Combo	42204868-09

❖ **IBM 4683 Ports 5B, 9B and 17 Interface Selection** ❖

IBM Port 5B Interface

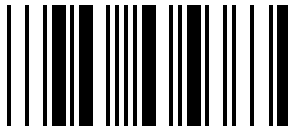
Scan the bar code below to enable the IBM Port 5B Interface.



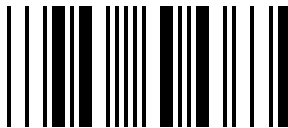
IBM 4683 Port 5B

IBM Port 9B Interface

Scan the bar code below to enable the IBM Port 9B Interface.



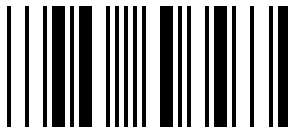
IBM 4683 Port 9B HHBCR-1



IBM 4683 Port 9B HHBCR-2

IBM Port 17 Interface

Scan the bar code below to enable the IBM Port 17 Interface.



IBM 4683 Port 17

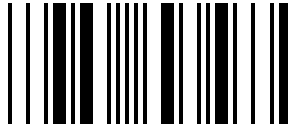
IBM 4683 Ports 5B, 9B and 17 Interface Cables Used	
IBM 4683, 4684 Port 5B	42203761-01
IBM 4683, 4684 Port 9B	42203762-01
IBM 4683, 4684 Port 17	42203771-01

IBM 4680 Postambles			
UPC-A	0D	EAN 13	16
UPC-E	0A	EAN 8	0C
Code 3 of 9	00 0A 0B	1 2 of 5	00 0D 0B
Code 128	00 0A 0B		

❖ **OCIA Interface Selection** ❖

Spectra-Physics OCIA Interface

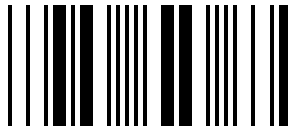
Scan the bar code below to enable the Spectra-Physics OCIA Interface.



Spectra-Physics OCIA

NCR OCIA Eight Bit (Short Format) Interface

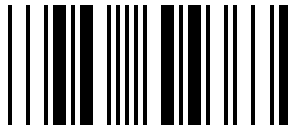
Scan the bar code below to enable the NCR OCIA (short format) Interface.



NCR OCIA Short Format

NCR OCIA Nine Bit (Long Format) Interface

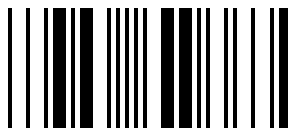
Scan the bar code below to enable the NCR OCIA (long format) Interface.



NCR OCIA Long Format

Nixdorf OCIA Interface

Scan the bar code below to enable the Nixdorf OCIA Interface.



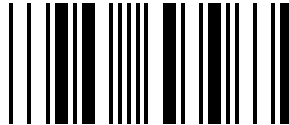
Nixdorf OCIA

OCIA Interface Cables Used	
NCR 2123, 2126, 7058 OCIA	42204217-01
NCR 2152 OCIA	42203766-01
NCR 7052, 7150 OCIA	42204090-01
Nixdorf 8812 OCIA	42203767-01
Omron 8500 Series OCIA	42204582-01

❖ **OCR, RS-232 and Wand Emulation Interface Selection** ❖

Fujitsu OCR Interface

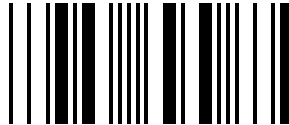
Scan the bar code below to enable the Fujitsu OCR Interface.



Fujitsu OCR

IBM OCR (Port 21) Interface

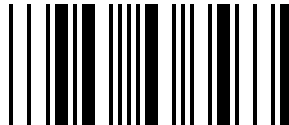
Scan the bar code below to enable the IBM OCR (Port 21) Interface.



IBM OCR (Port 21)

RS-232 Interface

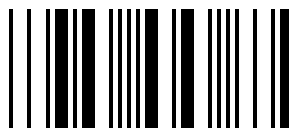
Scan the bar code below to enable the RS-232 Interface.



RS-232

Wand Emulation (Code 3 of 9 Format) Interface

Scan the bar code below to enable the Wand Emulation (Code 3 of 9) Interface.



Wand Emulation (Code 3 of 9)

OCR, RS-233 and Wand Emulation Interface Cables Used	
IBM 4683 OCR (Port 21)	42204213-01 EP
Fujitsu 7770, 7990 OCR	42204099-01/4098-01 EP
Fujitsu 87S OCR	42204097-01 EP
Fujitsu 9000 OCR	42204096-01 EP

Note: EP = Requires external power. Refer to Welch Allyn Product Matrix for various RS-232 and Wand Emulation cables.

TERMINAL I.D. SETUP PROGRAMMING MENU "PLUG AND PLAY"

Welch Allyn [®]
SCANTEAM 3000/DO Programming Menu
For 3000-X1, X2

Terminal I.D. Automatic Set Up ("Plug and Play")

The Terminal I.D. Setup provides a "Plug and Play" method to automatically install **any** SCANTEAM 3000 supported terminal interface for the desired interface, plus a carriage return (CR) postamble. Using the TERMINAL I.D. SETUP makes programming faster and easier (fewer programming scans) for simple terminal interface installations.

Programming the 3000 for Terminal I.D. Plug and Play operation involves, first scanning the "Terminal I.D. Settings" bar code (on the facing page), then scanning the terminal I.D. digits that identify the desired terminal interface to be installed. To install and set up the scanner for Terminal I.D. Plug and Play, follow the steps below:

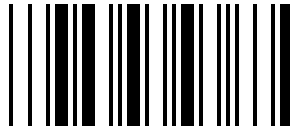
- 1) Disconnect power to the terminal/host device by turning the host system power switch to the "OFF" position.
- 2) Connect the appropriate interface cable to the scanner.
- 3) Connect the interface cable to the terminal/host device. (This may involve disconnecting a keyboard plug to the terminal, reconnecting the keyboard plug to the mating connector on the interface cable, then connecting the mating connector on the interface cable to the terminal.)
- 4) Once the scanner has been fully connected, restore power to the terminal/host device by turning the host system power switch to the "ON" position.
- 5) Scan the "Terminal I.D. Settings" bar code (on the opposite page).
- 6) Refer to the Terminal Selection programming pages for the two digit Terminal I.D. of the terminal interface you wish to install. (Terminal I.D.s may be found in the shaded "variables: scan" column down the right sides of the pages. *For example: an ADI terminal, model 1496, has a Terminal I.D. of 72.*)
- 7) Once the Terminal I.D. has been determined, scan the appropriate bar codes (on the opposite page) for those two digits.

The desired terminal interface, plus a carriage return (CR) postamble, should be installed for your application requirements.

Note: *All of the supported terminal interfaces may be programmed in the usual manner for more complex or unique application requirements using the Terminal Selection, Output Parameters, Code Selection, and Data Formatter programming menu pages. Refer to these programming pages for all the programming features available in the SCANTEAM 3000.*

Terminal I.D. Automatic Set Up ("Plug and Play")

- 1) Scan the "Terminal I.D. Settings" bar code below to install and set up the scanner for Terminal I.D. Plug and Play.



Terminal I.D. Settings

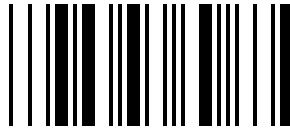
- 2) Scan the two terminal I.D. digits that identify the desired terminal interface to be installed (see TERMINAL SELECTION programming pages for 2-digit terminal IDs).

Digits



To Reset Factory Settings

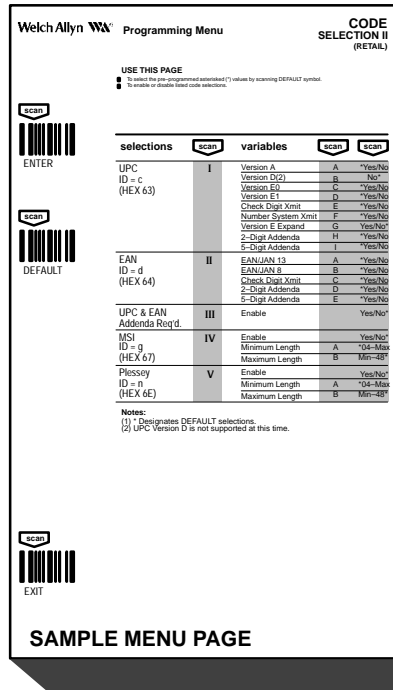
To reset the SCANTEAM 3000 scanner to the factory settings, scan the bar code below. The factory settings are indicated by “*” (asterisks) on programming menu pages (Terminal Selection, Output Parameters, Code Selection, Data Formatter, etc.) in the shaded “variables: scan” column down the right sides of the pages.




Factory Default Settings

USE THIS PAGE

■ As a general overview of the programming menu. The programming menu consists of two basic components as shown below.




Welch Allyn  Programming Menu


CODE SELECTION II (RETAIL)


USE THIS PAGE
 ■ To select the pre-programmed selection(s) (*) by using the scanning DEFAULT symbol.
 ■ To enable or disable listed code selections.

selections	scan	variables	scan	scan
UPC ID = c (HEX 43)	I	Version A	A	*Yes/No
		Version D(2)	B	No*
		Version G4	C	*Yes/No
		Version E1	D	*Yes/No
		Check Digit Xmit	E	*Yes/No
		Number System Xmit	F	*Yes/No
		Version E Expand	G	*Yes/No*
		2-Digit Addenda	H	*Yes/No
		5-Digit Addenda	I	*Yes/No
EAN ID = d (HEX 64)	II	EAN/JAN 13	A	*Yes/No
		EAN/JAN 8	B	*Yes/No
		Check Digit Xmit	C	*Yes/No
		2-Digit Addenda	D	*Yes/No
		5-Digit Addenda	E	*Yes/No
UPC & EAN Addenda Req'd.	III	Enable		Yes/No*
MSI ID = g (HEX 67)	IV	Enable		*Yes/No*
		Minimum Length	A	*04-Max
		Maximum Length	B	Min-48*
Plessey ID = h (HEX 6E)	V	Enable		*Yes/No*
		Minimum Length	A	*04-Max
		Maximum Length	B	Min-48*

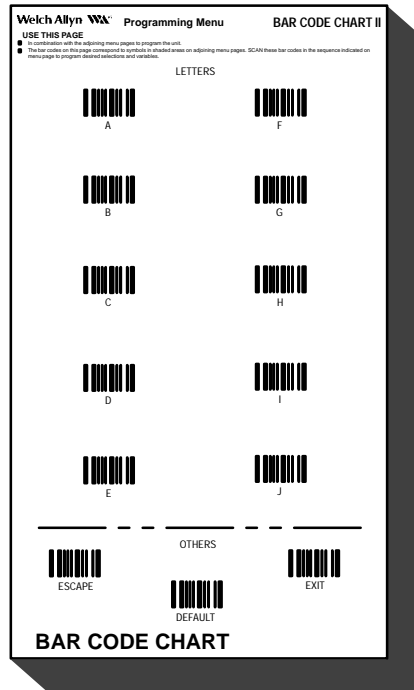
Notes:
 (1) * Designates DEFAULT selections.
 (2) UPC Version D is not supported at this time.


ENTER 

DEFAULT 

EXIT 

SAMPLE MENU PAGE







Welch Allyn  Programming Menu



BAR CODE CHART II



USE THIS PAGE
 ■ In combination with the adjoining menu pages to program the unit.
 ■ The bar codes on this page correspond to symbols in shaded areas on adjoining menu pages. SCAN these bar codes in the sequence indicated on menu page to program desired selections and variables.



LETTERS

A  F 



B  G 


C  H 

D  I 

E  J 

OTHERS

ESCAPE  EXIT 

DEFAULT 

BAR CODE CHART

MENU PAGE

- Each menu page represents one section of the programming menu. Use individual menu pages in combination with the bar code chart on the back page foldout to program the decoder.
- **USE THIS PAGE** – is a summary of the programming options (parameters) of each menu page.
- **ENTER** – Each menu page has its own unique ENTER bar code; scan this bar code to activate desired menu page.
- **DEFAULT** – Most menu pages have a DEFAULT bar code which allows the user to independently default menu pages to asterisk (*) values without affecting, in any way, the rest of the programming menu. Default values can be easily selected from the desired menu pages by scanning the bar code sequence ENTER, DEFAULT, EXIT. Individual defaults for a specific selection can be made by scanning ENTER, ROMAN NUMERAL, DEFAULT, EXIT.
- **EXIT** – To move from one menu page to another, scan the EXIT bar code. This bar code must be scanned to end programming selection on each menu page before beginning to program on a different menu page.
- **SELECTIONS/VARIABLES** – Lists all of the options available on each menu page. Following each option are symbols in shaded areas. These symbols correspond to bar codes on the adjoining bar code chart.
- **NOTES** – are provided to call out any unusual situations and/or refer you to necessary information or examples elsewhere in the menu or manual.

MENU PAGE FACING (Not Shown)

- The page facing the menu is often used to supplement or clarify the material presented on the front of each menu page. The information and examples found here are specific to the individual menu page and contain, in some cases, charts and diagrams that must be used in order to determine the correct programming sequence.

BAR CODE DATA CHART

- The bar codes on this chart are assigned to a ROMAN NUMERAL, DIGIT, LETTER OR YES/NO symbol. These bar codes correspond to the symbols in shaded areas on the menu pages and are scanned in various combinations to enter programming sequences to the decoder. Bar codes on this page are meaningless unless an ENTER bar code from one of the menu pages is first scanned. When an ENTER bar code is scanned, the bar code chart becomes specific to that menu page and remains so until the EXIT bar code is scanned or another menu page is selected.

ESCAPE

- Use this bar code to cancel current programming sequence. All parameters remain as they were. Scan ESCAPE.

USE THIS PAGE

■ To program the 3000 for operation with one of the terminals listed below.



scan	selections	variables	scan
I	ADI (7)	1496	72
	APPLE DESKTOP BUS ADB (3)	MAC Classic, SE SE30, II (All)	49
	BULL	BDS-7 (HDS-7)	35
	BURROUGHS (7)	B25	75
	DECISION DATA	DDC3596, 3597	30
	DEC (4)	VT-220, 320, 330, 340 420	04
	ESPRIT	200, 400	05
	FALCO (7)	5220	47
	HEATH ZENITH	PC	90
	HP	700/92, 700/94, 700/96, 700/98	20
		700/44	96
		700/60 (7)	79
		Vectra QS-16	03
	IBM	PC, XT	01
		PS/2, 25, 30, 55SX, 70	02
		AT, PS/2 30-286, 50, 55SX, 60, 70, 70-061, 70-121, 80	03
		4683, 4684	51
		102 key	3151, 3161, 3162, 3163, 3191, 3192, 3196, 3197, 3471, 3472, 3476, 3477	06
	122 key	3179-1, 3191, 3192, 3471, 3472, 3194	07
		3196, 3197, 3476, 3477, 3486, 3488, 3482	08
		3180	24
	ICL (7)	300	77
	ITT	9271	07
	LEE DATA	IIS	07
	LINK	MC-5	18
	OCIA		52
	OCR		53
OLIVETTI	M19, M24, M28	01	
OLIVETTI	M200, 240, 250, 290, 380, P500	03	



Notes:

- (1) IMPORTANT — the appropriate cable must be used when interfacing the selected terminal. See facing page for cable/part number listing.
- (2) No default setting exists for this page.
- (3) Not in standard 3000 software. Must order via special 6 digit part number. Contact your Welch Allyn Sales Coordinator for 3000 part number.
- (4) Only supported by board 3000-X3.
- (5) Only supported by board 3000-X1 or 3000-X2.
- (6) Televideo 955 supported by board 3000-X1 only.
- (7) Only supported by board 3000-X2.

USE THIS PAGE

- To program the 3000 for operation with one of the terminals listed below.
- To program the 3000 for dual interface mode.



scan	selections	variables	scan		
I	QUME	ANSI	QVT 61, 62, 70, 191, 321, 322	82	
		ASCII	QVT 31, 51, 61, 62, 70, 191	74	
		Enhanced PC	QVT 61, 62, 70, 82, 191, Qx15	38	
		RS232 TRUE (4)		00	
		RS232 TTL		00	
		SERIAL WEDGE (4)		50	
		SIEMENS 9758	(German Only)	34	
		STRATUS	V103	14	
		TELEVIDEO	955 (6), 965	36	
		TELEX	88 key	078A, 078, 79, 80, 191, 196, 1191, 1192, 1471, 1472, 1476	25
			102 key	078A, 078, 79, 80, 191, 196, 1191, 1192, 1471, 1472, 1476	45
			122 key	078A, 078, 79, 80, 191, 196, 1191, 1192, 1471, 1472, 1476	46
		WAND EMULATION (5)		61	
		WYSE	WY-30	13	
			WY-85/185	16	
			ANSI	WY 60, 120, 150, 160	15
			ASCII	WY 60, 120, 150, 160, 99GT	14
			Enhanced PC	WY 60, 120, 150, 160	18
II	DUAL INTERFACE	Decoded Output ONLY		A*	
		Laser Compatible and Terminal Selected		B	
		For Future Use		C	
		For Future Use		D	



Notes:

- (1) IMPORTANT — the appropriate cable must be used when interfacing the selected terminal. See facing page for cable/part number listing.
- (2) No default setting exists for this page.
- (3) Not in standard 3000 software. Must order via special 6 digit part number. Contact your Welch Allyn Sales Coordinator for 3000 part number.
- (4) Only supported by board 3000-X3.
- (5) Only supported by board 3000-X1 or 3000-X2.
- (6) Televideo 955 supported by board 3000-X1 only.
- (7) Only supported by board 3000-X2.

OUTPUT PARAMETERS For 3000-X1, X2

BEEPER

This programming selection provides control of the beeper in the scanner. Beeper Volume & Tone controls the loudness and pitch of the beeper. More information on the volume & tone settings may be found in the SCANTEAM 3000 Technical Manual. When Beep on Power Up is enabled, the beeper will beep twice each time the system is reset. If Beep on Good Read is enabled, the beeper in the scanner will beep once following a scan when the data has been accepted by the Host.

KEYBOARD STYLE

(If terminal is not listed, then no secondary type keyboard is supported.)

Terminal	Primary	Secondary	Tertiary	Quaternary	Quinquenary
IBM PC, PC/XT	XT	CAPS LOCK	SHIFT LOCK	"CTRL" + ASCII*	Gr DOS SHIFT LOCK
IBM PC/AT	AT	CAPS LOCK	SHIFT LOCK	"CTRL" + ASCII*	Gr DOS SHIFT LOCK
IBM PS2 (50-80)	NORM	CAPS LOCK	SHIFT LOCK	"CTRL" + ASCII*	Gr DOS SHIFT LOCK
HDS 2000, 3200	T/W	"CTRL +"			
IBM 3180 (122 Key)	T/W	D/E			
COMTERM 6178	T/W	D/E			
TELEX (88 Key)	T/W	D/E			
SIEMENS 9758	NORM	CAPS LOCK			
NCR 7052	34 Key	56 Key	122 Key Caps On	122 Key Caps Off	

* ASCII function codes (00-1F) are sent to the terminal via a "CTRL+" sequence (i.e. 'CR'=CTRL+M)

SYMBOLGY CHART

SYMBOLGY	Primary	ALT-A	ALT-B	ALT-C	CODE ID
UPC-A	63	83	A3	C3	c
EAN	64	84	A4	C4	d
MSI	67	87	A7	C7	g
PLESSEY	6E	8E	AE	CE	n
AMES	6B	8B	AB	CB	k
CODABAR	61	81	A1	C1	a
CODE-39	62	82	A2	C2	b
I 2 of 5	65	85	A5	C5	e
CODE 2 of 5	66	86	A6	C6	f
MATRIX 2 of 5	6D	8D	AD	CD	m
CODE-11	68	88	A8	C8	h
CODE-93	69	89	A9	C9	i
CODE 128	6A	8A	AC	CA	j
UNIVERSAL	99	Preamble/Postamble ONLY			

INTERCHARACTER DELAY INTERFUNCTION DELAY INTERMESSAGE DELAY

Intercharacter delay is the time delay (x5ms) between data characters output by the 3000.

Interfunction delay is the time delay (x5ms) between "function key" characters output by the 3000.

Intermessage delay is the time delay (x5ms) between records output by the 3000.

EXAMPLE: 3000 programmed as follows:

Intercharacter delay=10ms Interfunction delay=50ms Postamble=field exit and transmit.

When a bar code symbol containing the characters 123 is scanned, the 3000 will output to the terminal as follows:

1	2	3	Field Exit	50ms	Transmit
10ms	10ms	10ms		delay	
delay	delay	delay			

PREAMBLE/POSTAMBLE

Preambles and postambles are characters added by the 3000 to barcode data. Preambles and postambles are assigned according to the barcode symbology using the symbology chart above. Use the HEX-ASCII chart on page 16 to find the ASCII value to be used for programming a particular preamble or postamble.

NOTE: The 3000 will translate characters 00-1F (keyboard function codes) into keyboard "function keys." The assigned translation is dependent upon the terminal being used. Refer to the 3000 Technical Manual to determine the assigned translation.

EXAMPLE: 1) To program a carriage return postamble for UPC-A symbology only, scan:

ENTER, XI, 6, 3, 0, D, F, F, EXIT

Where: ENTER (Output Parameter Page) enters programming mode.

XI enters postamble programming.

63 selects UPC symbology (see Symbology Chart, above).

0D designates Carriage Return (see 3000 Technical Manual/Hex-ASCII chart page 16).

FF terminates postamble programming.

EXIT leaves programming mode.

EXAMPLE: 2) To program a carriage return postamble for ALL symbologies, scan:

ENTER, XI, 9, 9, 0, D, F, F, EXIT

Where: ENTER (Output Parameter Page) enters programming mode.

XI enters postamble programming.

99 selects ALL symbologies (see Symbology Chart, above).

0D designates Carriage Return (see 3000 Technical Manual/Hex-ASCII chart page 16).

FF terminates postamble programming.

EXIT leaves programming mode.

OUTPUT PARAMETERS For 3000-X1, X2

SCANTEAM 3000/DO Information and Examples

Required Pre/Postambles for Particular Terminals:

NCR 'S' OCIA PREAMBLES

UPC-A OA EAN 8 OF OF
UPC-E OE EAN 13 OF

IBM OCR POSTAMBLES

UPC-A OD EAN 8 OC Code 128 1D
UPC-E OA EAN 13 16

FUJITSU OCR POSTAMBLES

UPC-A 17 EAN 8 17
UPC-E 17 EAN 13 17
1 2 OF 5 03
(Application Dependent)

NCR 'F' OCIA PREAMBLES

UPC-A 41 Code 3/9 42 31
UPC-E 45 1 2 of 5 42 32
EAN-8 46 46 Code 128 42 33
EAN-13 46

NIXDORF OCIA PREAMBLES

UPC/EAN w/ Addenda 44 4B
Code 3/9 44 49
1 2 of 5 44 48
2 of 5 44 47
Code 93 44 4A

IBM 4680 PORT 5B POSTAMBLE

UPC-A OD EAN 8 OC Code 3 of 9 00 0A 0B
UPC-D EAN 13 16 1 2 of 5 00 0D 0B
UPC-E OA Code 128 00 18 0B

Note: The IBM 4680 5B Port label format tables currently support only those symbologies listed above. Symbologies not supported such as Code 128 can be supported by assigning unused postambles. Example: Code 128, 00 0A 0B for Code 3 of 9 or 00 0D 0B for 1 2 of 5.

HEX – ASCII CHART

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	SYN 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

OUTPUT MODES

Buffer Scans

Yes – allows buffering of scanned data while outputting to the terminal.
No – will causes the 3000 to read and output one data record at a time.

Function Code Transmit

YES – SCANTEAM 3000 translates characters 00–1F (keyboard function codes) that may be contained within records into "function keys." These function keys will be sent to the terminal along with the other characters in the record.

NO – The 3000 does not translate characters 00–1F into keyboard "function keys." Instead, characters 00–1F are stripped from the record.

NOTE: Keyboard function codes that are programmed in the postamble and preamble remain active at all times.

Decoding ("Laser") Redundancy

When this selection is enabled, the 3000 must see three (3) identical scans before data will be accepted.

BAUD RATE

The baud rate is programmable from 300 bits per second to 38,400 bits per second. Programming the 3000 to the desired baud rate causes the data to be sent at the specified rate.

PARITY

Parity provides a means of checking data bit patterns for validity. The five choices are None, Mark, space, Odd, and Even. The parity should be programmed to match the parity of the terminal being used. If the parity is not set correctly, the resulting data may be incorrect.

COUNTRY CODE

The 3000 aligns the keyboard layout based on the Country Code selected here.

WAND EMULATION (3000-X1 or 3000-X2 ONLY)



Transmission Rate

3000 will output data in inches per second according to the selected transmission rate.



**OUTPUT
PARAMETERS**
For 3000-X1, X2
continued

USE THIS PAGE

- To default this page to asterisked (*) values.
- To program baud rate, parity and country code selections.
- To program wand emulation selections.

selections		variables	
BAUD RATE (3)	XIII	300	A
		600	B
		1200	C
		2400	D
		4800	E
		9600	F*
		19200	G
		38400	H
PARITY (3)	XIV	None	A
		Mark	B
		Space	C
		Odd	D
		Even	E*
DATA FORMAT	XV	7 Data, Parity, 1 Stop (8 Bit Data)	A*
		7 Data, Parity, 2 Stop (8 Bit Data)	B
		8 Data, Parity, 1 Stop (9 Bit Data)	C
CTS HANDSHAKE (3)	XVI		Yes/No*
RESERVED - Future Use	XVII		
COUNTRY CODE	XVIII	United States	00*
		Belgium	01
		Denmark (2)	02
		Finland	
		Norway (2)	
		Sweden	
		France	03
		Germany/Austria	04
		Italy	05
		Switzerland	06
United Kingdom	07		
Denmark (WYSE)	08		
Norway (WYSE)	09		

WAND EMULATION (3000-X1 or 3000-X2)

TRANSMISSION RATE (inches per second)		variables	
	XIX	10	A
		20	B*
		30	C
		50	D
		70	E
		100	F
		120	G





EXIT

Notes:

- (1) * Designates DEFAULT selections.
- (2) Use special Wyse selection when using Wyse terminals.
- (3) These selections apply only when in serial mode (RS-232, TTL or True).

OUTPUT PARAMETERS For 3000-X3

SCANTEAM 3000/DO Information and Examples

BEEPER

This programming selection provides control of the beeper in the scanner. Beeper Volume & Tone controls the loudness and pitch of the beeper. More information on the volume & tone settings may be found in the SCANTEAM 3000 Technical Manual. When Beep on Power Up is enabled, the beeper will beep twice each time the system is reset. If Beep on Good Read is enabled, the beeper in the scanner will beep once following a scan when the data has been accepted by the Host.

KEYBOARD STYLE

(If terminal is not listed, then no secondary type keyboard is supported.)

Terminal	Primary	Secondary	Tertiary	Quaternary
DEC VT	NORM	"CTRL" + ASCII	MAKE/BREAK	MAKE/BREAK "CTRL"+

* ASCII function codes (00-1F) are sent to the terminal via a "CTRL+" sequence (i.e. 'CR'=CTRL+M)

SYMBOLGY CHART

SYMBOLGY	Primary	ALT-A	ALT-B	ALT-C	CODE ID
UPC-A	63	83	A3	C3	c
EAN	64	84	A4	C4	d
MSI	67	87	A7	C7	g
PLESSEY	6E	8E	AE	CE	n
AMES	6B	8B	AB	CB	k
CODABAR	61	81	A1	C1	a
CODE-39	62	82	A2	C2	b
I 2 of 5	65	85	A5	C5	e
CODE 2 of 5	66	86	A6	C6	f
MATRIX 2 of 5	6D	8D	AD	CD	m
CODE-11	68	88	A8	C8	h
CODE-93	69	89	A9	C9	i
CODE 128	6A	8A	AC	CA	j
UNIVERSAL	99	Preamble/Postamble ONLY			

INTERCHARACTER DELAY INTERFUNCTION DELAY INTERMESSAGE DELAY

Intercharacter delay is the time delay (x5ms) between data characters output by the 3000.

Interfunction delay is the time delay (x5ms) between "function key" characters output by the 3000.

Intermessage delay is the time delay (x5ms) between records output by the 3000.

EXAMPLE: 3000 programmed as follows:

Intercharacter delay=10ms Interfunction delay=50ms Postamble=field exit and transmit.

When a bar code symbol containing the characters 123 is scanned, the 3000 will output to the terminal as follows:

1	2	3	Field Exit	Transmit
10ms delay	10ms delay	10ms delay	50ms delay	

PREAMBLE/POSTAMBLE

Preambles and postambles are characters added by the 3000 to barcode data. Preambles and postambles are assigned according to the barcode symbology using the symbology chart above. Use the HEX-ASCII chart on page 20 to find the ASCII value to be used for programming a particular preamble or postamble.

NOTE: The 3000 will translate characters 00-1F (keyboard function codes) into keyboard "function keys." The assigned translation is dependent upon the terminal being used. Refer to the 3000 Technical Manual to determine the assigned translation.

EXAMPLE: 1) To program a carriage return postamble for UPC-A symbology only, scan:

ENTER, VII, 6, 3, 0, D, F, F, EXIT

Where: ENTER (Output Parameter Page) enters programming mode.

XI enters postamble programming.

63 selects UPC symbology (see Symbology Chart, above).

0D designates Carriage Return (see 3000 Technical Manual/Hex-ASCII chart page 20).

FF terminates postamble programming.

EXIT leaves programming mode.

EXAMPLE: 2) To program a carriage return postamble for ALL symbologies, scan:

ENTER, VII, 9, 9, 0, D, F, F, EXIT

Where: ENTER (Output Parameter Page) enters programming mode.

XI enters postamble programming.

99 selects ALL symbologies (see Symbology Chart, above).

0D designates Carriage Return (see 3000 Technical Manual/Hex-ASCII chart page 20).

FF terminates postamble programming.

EXIT leaves programming mode.

OUTPUT PARAMETERS For 3000-X3

USE THIS PAGE

- To default this page to asterisked (*) values.
- To set beeper parameters.
- To program keyboard style.
- To program delay functions.
- To program preamble, postamble, output mode and country code selections.

scan



ENTER

scan



DEFAULT

selections	scan	variables	scan	scan
BEEPER	I	Beeper Volume & Tone (2)	A	0000-FFFF *(1919)
		Beep on Power Up	B	*Yes/No
		Beep on Good Read	C	*Yes/No
KEYBOARD STYLE	II	Primary		A*
		Secondary		B
		Tertiary		C
		Quaternary		D
INTERCHARACTER DELAY	III	x5ms		*0000-9999
INTERFUNCTION DELAY (6)	IV	x5ms		*0000-9999
INTERMESSAGE DELAY (6)	V	x5ms		*0000-9999
PREAMBLE	VI	Symbology or 99 Universal (ALL)		(Symbology Chart pg 18) (Pre/Postamble pg 18)
		Preamble(s) (3, 4, 5)	*00-7F	FF
POSTAMBLE	VII	Symbology or 99 Universal (ALL)		(Symbology Chart pg 18) (Pre/Postamble pg 18)
		Postamble(s) (3, 4, 5)	*00-7F	FF
OUTPUT MODES	VIII	Buffer Scans	A	*Yes/No
		Function Code Transmit	B	*Yes/No
		Decoding ("Laser") Redundancy	C	*Yes/No
		Code ID Transmit	D	Yes/No*
		AIM ID Transmit	E	Yes/No*
COUNTRY CODE	IX	United States		00*
		Belgium		01
		Denmark Finland Norway Sweden		02
		France		03
		Germany/Austria		04
		Italy		05
		Switzerland		06
		United Kingdom		07

Notes:

- (1) * Designates DEFAULT selections for Decoded Output and Laser Compatible 3000.
- (2) The following are suggested Beeper Volume/Tone settings:

High	Low	Medium	Off
1919	0C0C	4949	0000
- (3) Scan FF to terminate a pre/postamble.
- (4) To clear a pre/postamble of a particular symbology, scan ENTER, the Symbology, and FF.
- (5) Default clears all pre/postambles of all symbologies.
- (6) For DEC Interface ONLY.

OUTPUT PARAMETERS For 3000-X3

SCANTEAM 3000/DO Information and Examples

HEX – ASCII CHART

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	SYN 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

OUTPUT MODES

Buffer Scans

Yes – allows buffering of scanned data while outputting to the terminal.

No – will cause the 3000 to read and output one data record at a time.

Function Code Transmit

YES – SCANTEAM 3000 translates characters 00–1F (keyboard function codes) that may be contained within records into "function keys." These function keys will be sent to the terminal along with the other characters in the record.

NO – The 3000 does not translate characters 00–1F into keyboard "function keys." Instead, characters 00–1F are stripped from the record.

NOTE: Keyboard function codes that are programmed in the postamble and preamble remain active at all times.

Decoding ("Laser") Redundancy

When this selection is enabled, the 3000 must see three (3) identical scans before data will be accepted.

COUNTRY CODE

The 3000 aligns the keyboard layout based on the Country Code selected here.

BAUD RATE

The baud rate is programmable from 300 bits per second to 38,400 bits per second. Programming the 3000 to the desired baud rate causes the data to be sent at the specified rate.

PARITY

Parity provides a means of checking data bit patterns for validity. The five choices are None, Mark, space, Odd, and Even. The parity should be programmed to match the parity of the terminal being used. If the parity is not set correctly, the resulting data may be incorrect.

DATA FORMAT

Provides a means to set data word length. The scanner can be programmed for 7 or 8 Data Bits.

PROTOCOLS

A set of rules governing the exchange of data between communications devices. See **SCANTEAM 3000 Technical Manual** for a description of supported protocols.

SERIAL WEDGE

OPERATING MODE OUTPUT DIRECTION

This selection does not support Protocols. Use Preamble/Postamble for framing and End of Record characters.

**OUTPUT
PARAMETERS**
For 3000-X3
continued

USE THIS PAGE

- To default this page to asterisked (*) values.
- To program baud rate and parity selections.
- To program data format and protocol selections.

selections	scan	variables	scan
BAUD RATE (2)	X	300	A
		600	B
		1200	C
		2400	D
		4800	E
		9600	F*
		19200	G
		38400	H
		PARITY (2)	XI	None	A
Mark	B		
Space	C		
Odd	D		
Even	E*		
DATA FORMAT	XII	7 Data, Parity, 1 Stop (8 Bit Data)	A*
		7 Data, Parity, 2 Stop (8 Bit Data)	B
		8 Data, Parity, 1 Stop (9 Bit Data)	C
CTS HANDSHAKE (2)	XIII		Yes/No*
PROTOCOLS (3)	XIV	Record	A*
		XON-XOFF	B
		ACK/NAK	C
SERIAL WEDGE (4)			
OPERATING MODE OUTPUT DIRECTION (5)	XV	To P1	A*
		To P2	B
		To P1 & P2	C



EXIT

Notes:

- (1) * Designates DEFAULT selections.
- (2) These selections apply only when in serial mode (RS-232, TTL or True).
- (3) Protocols are not supported in Serial Wedge Operation.
- (4) This selection does not support Protocols.
- (5) P1 & P2 are serial wedge designations printed on the serial wedge cable.

CODES INDUSTRIAL

SCANTEAM 3000/DO Information and Examples

INDUSTRIAL CODE OUTPUT FORMATS

CODABAR	aSX ... XCS
Code 3 of 9	bSXX .. XXCS
INTERLEAVED 2 of 5	eXX ... XXC
2 of 5	fXX XX
Code 11	hXX ... XXCC
Code 93	iXX XX
Code 128	jXX XX
Matrix 2 of 5	mXX ... XX

Where: a = CODABAR Code ID
 b = Code 3 of 9 ID
 e = INTERLEAVED 2 of 5 ID
 f = 2 of 5 ID
 h = Code 11 ID
 i = Code 93 ID
 j = Code 128 ID
 m = Matrix 2 of 5 ID
 S = Start/Stop Character
 X = Data Character
 C = Checksum Character

NOTE: Appropriate code identification must be programmed in a preamble. Proper parameters must be enabled for Start/stop and Checksum characters to be transmitted. **For maximum data security, disable the Codes not used.**

FULL ASCII CODE 3 OF 9 CHARACTERS

If full ASCII Code 3 of 9 decoding is enabled, certain character pairs within the bar code symbol will be interpreted as a single character. For example: \$V will be decoded as the ASCII character SYN, and /C will be decoded as the ASCII character #.

FULL ASCII CODE 3 OF 9 CHART

NUL %U	DLE \$P	SP SPACE	0 0	@ %V	P P	' %W	p +P
SOH \$A	DC1 \$Q	! /A	1 1	A A	Q Q	a +A	q +Q
STX \$B	DC2 \$R	" /B	2 2	B B	R R	b +B	r +R
ETX \$C	DC3 \$S	# /C	3 3	C C	S S	c +C	s +S
EOT \$D	DC4 \$T	\$ /D	4 4	D D	T T	d +D	t +T
ENQ \$E	NAK \$U	% /E	5 5	E E	U U	e +E	u +U
ACK \$F	SYN \$V	& /F	6 6	F F	V V	f +F	v +V
BEL \$G	ETB \$W	' /G	7 7	G G	W W	g +G	w +W
BS \$H	CAN \$X	(/H	8 8	H H	X X	h +H	x +X
HT \$I	EM \$Y	) /I	9 9	I I	Y Y	i +I	y +Y
LF \$J	SUB \$Z	* /J	: /Z	J J	Z Z	j +J	z +Z
VT \$K	ESC %A	+ /K	; %F	K K	[%K	k +K	{ %P
FF \$L	FS %B	, /L	< %G	L L	\ %L	l +L	| %Q
CR \$M	GS %C	- /M	= %H	M M	] %M	m +M	} %R
SO \$N	RS %D	. /N	> %I	N N	^ %N	n +N	~ %S
SI \$O	US %E	/ /O	? %J	O O	_ %O	o +O	DEL %T

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

MIN/MAX LENGTH

These variables are used to require that bar code symbols contain a character count within a certain range. Bar codes with counts outside this range will not be decoded.

EXAMPLE: Decode only those bar codes with a count of 9–20 characters.

Min. length = 09

Max. length = 20

EXAMPLE: Decode only those bar codes with a count of 15 characters.

Min. length = 15

Max. length = 15

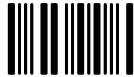
CODE SELECTION I (INDUSTRIAL)

USE THIS PAGE

- To select the pre-programmed asterisk (*) values by scanning DEFAULT symbol.
- To enable or disable listed code selections.



ENTER



DEFAULT

selections		scan	variables	scan	scan
CODABAR	ID = a (HEX 61)	I	Enable		*Yes/No
			Minimum Length	A	*01–Max
			Maximum Length	B	Min–60*
			S/S Xmit	C	Yes/No*
			Check Char. Req'd	D	Yes/No*
			Xmit Check Char.	E	Yes/No*
			Concatenation	F	*Yes/No
			Concatenation Req'd	G	Yes/No*
CODE 39	ID = b (HEX 62)	II	Enable		*Yes/No
			Minimum Length	A	*00–Max
			Maximum Length	B	Min–48*
			S/S Xmit	C	Yes/No*
			Check Char. Req'd	D	Yes/No*
			Xmit Check Char.	E	Yes/No*
			Full ASCII	F	*Yes/No
			Append Option	G	Yes/No*
INTERLEAVED 2 OF 5	ID = e (HEX 65)	III	Enable		*Yes/No
			Minimum Length (2)	A	02–Max
			Maximum Length	B	Min–80*
			6, 14 & 16 Only (3)	C	No*
			Check Digit Req'd	D	Yes/No*
			Xmit Check Digit	E	Yes/No*
CODE 2 OF 5	ID = f (HEX 66)	IV	Enable		*Yes/No
			Minimum Length (2)	A	01–Max
			Maximum Length	B	Min–48*
MATRIX 2 OF 5	ID = m (HEX 6D)	V	Enable		*Yes/No
			Minimum Length (2)	A	01–Max
			Maximum Length	B	Min–80*
CODE 11	ID = h (HEX 68)	VI	Enable		*Yes/No
			Minimum Length (2)	A	01–Max
			Maximum Length	B	Min–80*
			2 Check Digits (N=1)	C	*Yes/No
CODE 93	ID = i (HEX 69)	VII	Enable		*Yes/No
			Minimum Length	A	*00–Max
			Maximum Length	B	Min–64*
CODE 128	ID = j (HEX 6A)	VIII	Enable		*Yes/No
			Minimum Length	A	*00–Max
			Maximum Length	B	Min–80*
DISABLE ALL CODES (4)	XIX		Are you sure?		Yes/No*



EXIT

Notes:

- (1) * Designates DEFAULT selections.
- (2) The DEFAULT Minimum Length for these codes is 4 characters.
- (3) This option will be available in a future software release.
- (4) This option includes all retail symbologies.

CODES RETAIL

SCANTEAM 3000/DO Information and Examples

RETAIL CODE OUTPUT FORMATS

Non-Zero Suppressed UPC-A and UPC-E Output Format

UPC-A	cXXXXXXXXXXC
UPC-A with 2 digit addenda	cXXXXXXXXXXC-AA
UPC-A with 5 digit addenda	cXXXXXXXXXXC-AAAAA
UPC-E	cXXXXXXXXXXC
UPC-E with 2 digit addenda	cXXXXXXXXXXC-AA
UPC-E with 5 digit addenda	cXXXXXXXXXXC-AAAAA

Zero Suppressed UPC-A and UPC-E Output Format

UPC-A	cXXXXXXXXXXC
UPC-A with 2 digit addenda	cXXXXXXXXXXC-AA
UPC-A with 5 digit addenda	cXXXXXXXXXXC-AAAAA
UPC-E	cXXXXXXXXXXC
UPC-E with 2 digit addenda	cXXXXXXXXXXC-AA
UPC-E with 5 digit addenda	cXXXXXXXXXXC-AAAAA

EAN/JAN Output Format

EAN/JAN-13	dffXXXXXXXXXXC
EAN/JAN-13 with 2 digit addenda	dffXXXXXXXXXXC-AA
EAN/JAN-13 with 5 digit addenda	dffXXXXXXXXXXC-AAAAA
EAN/JAN-8	dffXXXXXXC
EAN/JAN-8 with 2 digit addenda	dffXXXXXXC-AA
EAN/JAN-8 with 5 digit addenda	dffXXXXXXC-AAAAA

Where: c = UPC Code ID
d = EAN/JAN Code ID
k = AMES ID
N = Number System Character
f = Identification Flag
X = Data Character
C = Checksum Character
- = Space
A = Addenda Character

NOTE: Appropriate code identification must be programmed in a preamble. Proper parameters must be enabled for number system, checksum, and addenda characters to be transmitted. **For maximum data security, disable the Codes not used.**

UPC/EAN LENGTH CHART

selections	Basic Length	W/out Ck. Digit	W/out Sys. Digit	W/2 Digit Addendum	W/5 Digit Addendum	TOTAL
UPCA	12	-01	-01	+02	+05	
UPCE [w/0's suppressed]	8	-01	-01	+02	+05	
UPCE [expanded]	12	-01	-01	+02	+05	
UPCD1	14	-01	-01	+02	+05	
UPCD2	20	-02	-01	+02	+05	
UPCD3	24	-02	-01	+02	+05	
UPCD4	28	-03	-01	+02	+05	
UPCD5	32	-03	-01	+02	+05	
EAN8	8	-01	N/A	+02	+05	
EAN13	13	-01	N/A	+02	+05	

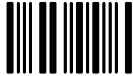
CODE SELECTION II (RETAIL)

USE THIS PAGE

- To select the pre-programmed asterisk (*) values by scanning DEFAULT symbol.
- To enable or disable listed code selections.

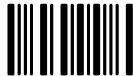


ENTER



DEFAULT

selections		scan	variables	scan	scan
UPC	ID = c (HEX 63)	I	Version A	A	*Yes/No
			Version D(2)	B	No*
			Version E0	C	*Yes/No
			Version E1	D	*Yes/No
			Check Digit Xmit	E	*Yes/No
			Number System Xmit	F	*Yes/No
			Version E Expand	G	Yes/No*
			2-Digit Addenda	H	*Yes/No
			5-Digit Addenda	I	*Yes/No
EAN	ID = d (HEX 64)	II	EAN/JAN 13	A	*Yes/No
			EAN/JAN 8	B	*Yes/No
			Check Digit Xmit	C	*Yes/No
			2-Digit Addenda	D	*Yes/No
			5-Digit Addenda	E	*Yes/No
			ISBN Enable (4)	F	Yes/No*
UPC & EAN ADDENDA REQ'D.		III	Enable		Yes/No*
MSI	ID = g (HEX 67)	IV	Enable		Yes/No*
			Minimum Length	A	*04-Max
			Maximum Length	B	Min-48*
PLESSEY	ID = n (HEX 6E)	V	Enable		Yes/No*
			Minimum Length	A	*04-Max
			Maximum Length	B	Min-48*
DISABLE ALL CODES (3)		XIX	Are you sure?		Yes/No*



EXIT

Notes:

- (1) * Designates DEFAULT selections.
- (2) UPC Version D is not supported at this time.
- (3) This option includes all industrial symbologies.
- (4) Only supported by board 3000-X2, X3.

DATA FORMATTING EDITOR COMMANDS



SCANTEAM 3000/DO Information and Examples

COMMAND	ACTION
F1	Send all characters followed by "XX" key or function code, starting from current cursor position. ** Syntax = F1XX XX = HEX ASCII character or function code 00–FE HEX
F2	Send "NN" characters followed by "XX" key or function code, starting from current cursor position. ** Syntax = F2NNXX NN = No. of Characters 00–99 DEC. XX = HEX ASCII character or function code 00–EF HEX
F3	Send up to but not including "SS" character, (** Search and Send**) Starting from current cursor position, leaving cursor pointing to "SS" Char. followed by "XX" key or function code. ** Syntax = F3SSXX SS = HEX ASCII Character 00–7F HEX. XX = HEX ASCII character 00–7F HEX.
F4	Send "XX" character "NN" times, (**INSERT**) Leaving cursor in current cursor position. ** Syntax = F4XXNN XX = HEX ASCII character 00–7F HEX NN = No. of characters 00–99 DEC.
F5	Move cursor ahead "NN" characters from current cursor position. ** Syntax = F5NN NN = No. of characters 00–99 DEC.
F6	Move cursor back "NN" characters from current cursor position. ** Syntax = F6NN NN = No. of characters 00–99 DEC.
F7	Move cursor to the beginning of the data string. ** Syntax = F7
F8	Search ahead for "XX" character from current cursor position, leaving cursor pointing to "XX" char. ** Syntax = F8XX XX = HEX ASCII character 00–7F.
F9	Search back for "XX" character from current cursor position, leaving cursor pointing to "XX" char. ** Syntax = F9XX XX = HEX ASCII character 00–7F.
FA	Leading zero suppress on Suppress leading zeroes from current cursor position until 1st non-zero char. ** Syntax = FA
FB	Suppress "XX" character(s) up to 3 starting from current cursor position until suppress disable command "FC" or end of format. ** Syntax = FBXXFB, FBXXXXFB, FBXXXXXXFB XX = ASCII Char 00–7F.
FC	Disable suppress filter and clear all suppressed characters. ** Syntax = FC
FD	DCA mode ON/OFF (Toggle) Convert characters to DCA starting from current cursor position until next "FD" command or end of format. ** Syntax = FD
FE	Compare character in current cursor position to the character "XX." If characters are equal, increment cursor. If characters are not equal, no format match. ** Syntax = FEXX XX = HEX ASCII Character 00 –7F






USE THIS PAGE



■ To program the 3000 for data formatting selections.



selections		variables	
FORMAT REQUIRED?	I		Yes/No*
FORMAT EDITING	II	Continue making your formatting selections below.	



FORMAT EDITING SELECTIONS (continued from above)					
	Terminal Type	Code ID	Length	Editor Command Sequences	End Format
	(*)	()	(*)	()	(FF)
* You may use Universal Number of 99.					

selections		variables	
DELETE ALL FORMATS	XX	Are You Sure?	Yes/No

Notes:

- (1) * Designates DEFAULT selections.
- (2) 3000-X5 does not support Data Formatter features.
- (2) The 3000 compares the scanned bar code to the programmed formats.
 When "Format Required" is programmed to "Yes," the 3000 will compare the bar code scanned to the formats selected to see if there is a match. If there is a match, the bar code is formatted and output to your terminal. If there is no match, the 3000 will triple beep and the bar code is not output.
 When "Format Required" is programmed to "No," the 3000 will compare the bar code scanned to the formats selected to see if there is a match. If there is a match, the bar code is formatted and output to your terminal. If there is no match, the 3000 will output the bar code without being formatted.



DATA FORMATTING EDITOR

SCANTEAM 3000/DO Examples

Bar Code Example

Scenario: You need to read a 6–digit bar code printed in Interleaved 2 of 5. Only the first five digits of the code will be transmitted. You want the transmitted code terminated with a vertical tab and a horizontal tab.

Solution: On the Data Formatter Page of this menu:

Step 1: Scan ENTER.

Step 2: Scan I and Yes (enables data formatting)

Step 3: Scan XX and Yes (clears previous formats)

Step 4: Scan II (**Enter Data Formatting Parameters**)

Scan 03 for terminal type (PC)

Scan 65 for Code I 2 of 5 Symbology (Primary from Symbology chart on page NO TAG of this menu).

Scan 06 for length (fixed length code)

Format Parameters: (Sequence to be scanned for label format from the Bar Code Chart in the back of this menu.)

F2 05 0B F4 09 01 FF

Scan each character separately (i.e., scan F, scan 2, scan 0, etc.)

F2 05 0B: F2 is the send xx number of characters followed by a function code. Send the first five characters of the label followed by a vertical tab. (Hex 0B)

F4 09 01: Append one hex 09 (a horizontal tab) at the end of the label.

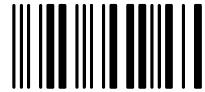
FF: Termination character for the end of the format.

Scan EXIT

Try scanning the bar code labels below to check your data formatting.



12/5 056876



12/5 087987

CCD PROGRAMMING PARAMETERS

SCANTEAM 3000/DO Information and Examples

SCAN RATE

Indicates the number of scans per second (50, 100, 200) that the SCANTEAM 3000 performs. 100 is default.

OUTPUT POLARITY

Defines the output logic convention for the digital output. (White High, Black High). Default is White High.

TRIGGER MODE

Programs the scanner to work in auto-trigger, manual trigger, or manual trigger (switched power) mode.

Auto-Trigger – The unit is in standby mode until positioned in near contact with a bar code symbol. When the scanner sees a bar code, the trigger is activated and the scanning process begins. To scan another bar code symbol, lift scanner from the symbol and position it over another symbol or move scanner to a place without a bar code.

Manual Trigger – Scanner switch must be pressed to activate the LEDs. As long as the switch is depressed, the scanner remains on. The scanner, however, has power to it even if the LEDs are not on.

Manual Trigger (Switched Power) – Scanner switch must be pressed to activate the LEDs. As long as the switch is depressed, the scanner remains on. The scanner, however, has no power when the switch is released. Manual Trigger (Switched Power) is for Laser Compatible Mode only.

GOOD READ DELAY

Indicates the time delay (0, .5, 1, or 1.5 seconds) between a good read and the next time the trigger can be activated. The default is 0 seconds. During this time delay, illumination of the LEDs is turned off.

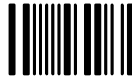
DOT MATRIX SCANNING

Causes the digitizer to ignore extremely narrow bars and spaces which might occur in some poorer quality bar code symbols.

USE THIS PAGE

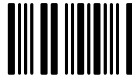
■ To default this page to asterisked (*) values.

scan



ENTER

scan



DEFAULT

selections	scan	variables	scan
SCAN RATE	I	50 Scans per Second	A
		100 Scans per Second	B*
		200 Scans per Second	C
OUTPUT POLARITY (3)	II	White High ("Laser")	A*
		Black High	B
TRIGGER MODE (4)	III	Auto-Trigger	A
		Manual Trigger	B*
		Manual Trigger – Switched Power (2)	C
GOOD READ DELAY	IV	0 Seconds	A*
		.5 Seconds	B
		1 Second	C
		1.5 Seconds	D
DOT MATRIX SCANNING	V	Enable	Yes/No*

scan



EXIT

Notes:

- (1) * Designates DEFAULT selections.
- (2) The following configurations may be used with switched power:
RS232: 3000-11, -12, -13, -21, -22
HHLC, Wandem: 3000-21, -22.
- (3) In Wand Emulation mode the default output polarity is black high.
- (4) The 3000-01, -02, and -03 have no trigger and will default to Auto-Trigger mode.

STATUS CHECK

SCANTEAM 3000/DO Information and Examples

When a Status Check of the 3000 programmed parameters is requested, it will be presented in the following format. The "Show Formats" printout lists the existing formats (one format per line). The "Show Software Revision" displays the software revision number, 3960XXXX for retail terminals and 3960-XX Rev. X.X for non-retail terminals, where XXXX, -XX and X.X stand for the version level. See the examples for the Status Check selections below.

Show Formats Example

Using the Data Formatting Editor example on page 28; if the bar code format example (bottom of page) is programmed into the 3000, a status check of the format ("Show Formats" – selection I on the facing page) would show the following:

F2050BF40901 <CR>

Note: <CR> is not displayed, but merely indicates the presence of the carriage return.

Show Software Revision Example

A status check of the software revision for a retail terminal ("Show Software Revision" – selection II on the facing page) would show the following:

36900110

Note: On the Terminal Selection menu page, retail terminals generally have terminal IDs of 51–60.

A status check of the software revision for a non-retail terminal ("Show Software Revision" – selection II on the facing page) would show the following:

3690-01 Rev. 1.0

USE THIS PAGE

■ To output the current programming status of menu pages to the terminal interface.

scan



ENTER

selections

scan

SHOW FORMATS

I

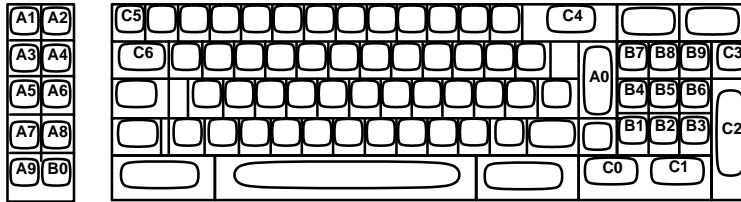
SHOW SOFTWARE REVISION

II

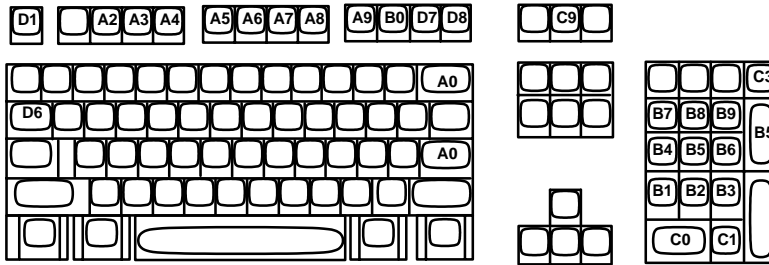
scan



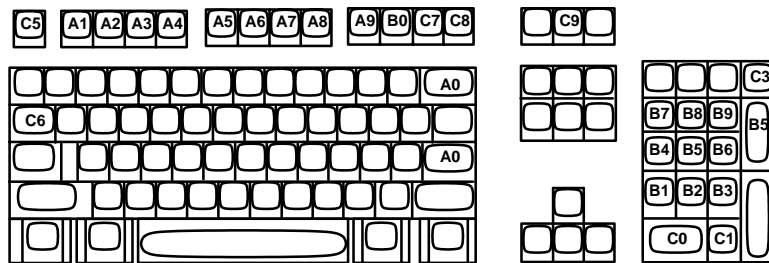
EXIT



IBM XT Keyboard



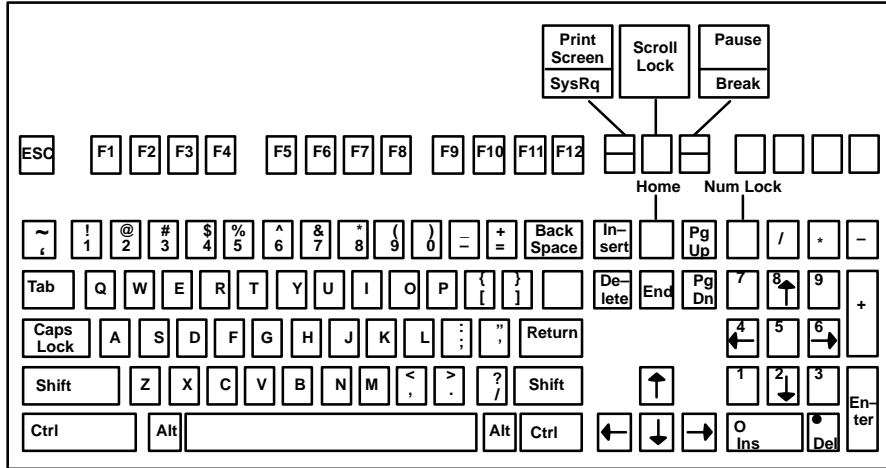
IBM PC/AT Keyboard



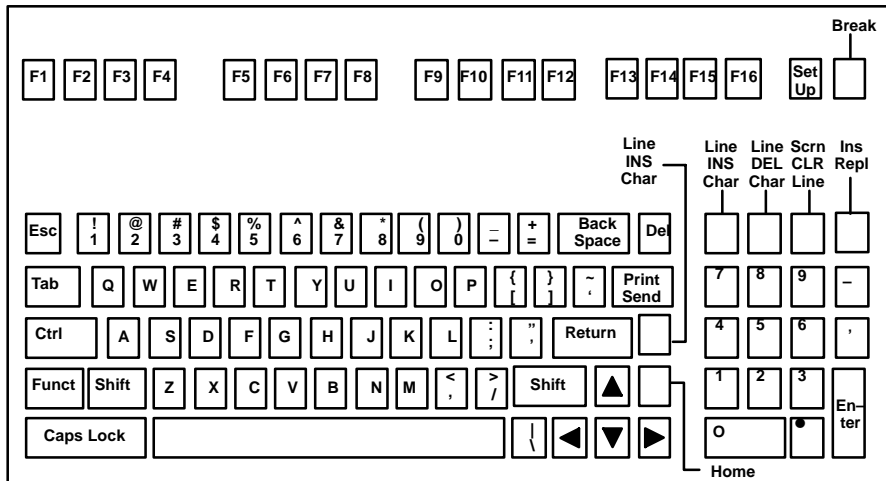
IBM PS2-30 Keyboard

KEYBOARD LAYOUTS

Continued



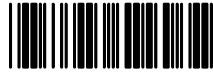
Enhanced PC Style WYSE ID=18



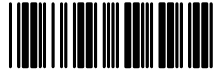
**General Purpose ASCII/ANSI Style
WYSE 60/120, 150 ASCII = 14 ANSI = 15**

USE THIS PAGE

■ For transmitting functions using function record codes.



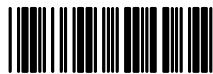
/C05



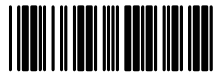
/C00



/C11



/C06



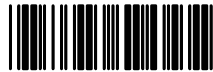
/C01



/C12



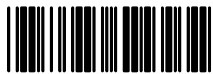
/C07



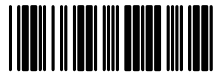
/C02



/C13



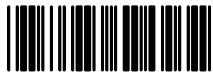
/C08



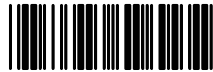
/C03



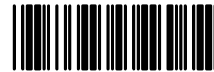
/C14



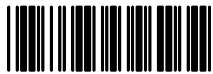
/C09



/C04



/C15



/C10

USE THIS PAGE

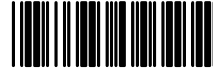
■ For transmitting functions using function record codes.



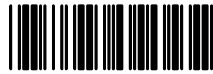
/C21



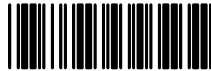
/C16



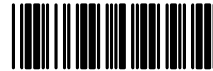
/C27



/C22



/C17



/C28



/C23



/C18



/C29



/C24



/C19



/C30



/C25



/C20



/C31



/C26

USE THIS PAGE

- In combination with the adjoining menu pages to program the 3000.
- The bar codes on this page correspond to symbols in shaded areas on adjoining menu pages. SCAN these bar codes in the sequence indicated on menu page to program desired selections and variables.

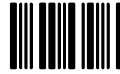
ROMAN NUMERALS



I



XIV



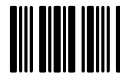
VIII



II



XV



IX



III



XVI



X



IV



XVII



XI



V



XVIII



XII



VI



XIX



XIII



VII



XX

USE THIS PAGE

- In combination with the adjoining menu pages to program the 3000.
- The bar codes on this page correspond to symbols in shaded areas on adjoining menu pages. SCAN these bar codes in the sequence indicated on menu page to program desired selections and variables.

LETTERS



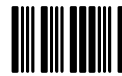
A



F



B



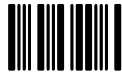
G



C



H



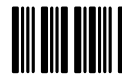
D



I



E



J

OTHERS



ESCAPE



EXIT

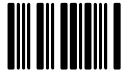


DEFAULT

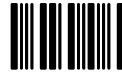
USE THIS PAGE

- In combination with the adjoining menu pages to program the 3000.
- The bar codes on this page correspond to symbols in shaded areas on adjoining menu pages. SCAN these bar codes in the sequence indicated on menu page to program desired selections and variables.

DIGITS



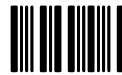
0 (YES)



5



1 (NO)



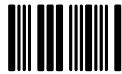
6



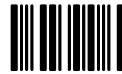
2



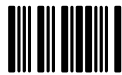
7



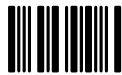
3



8



4



9

OTHERS



ALT-A



ALT-C

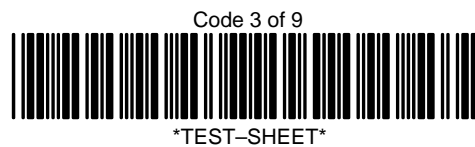
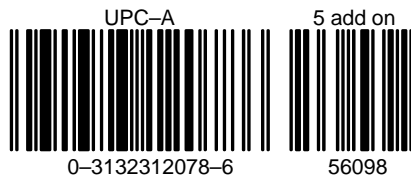


ALT-B

SAMPLE BAR CODES

SCANTEAM 3000/DO Programming Menu

■ This page contains bar code symbols in some of the most commonly used symbologies. You may use these codes to test that your system is properly programmed for a particular symbology.





3000/DO/PM Rev K