Chapter 6 Parameter Menus

This chapter provides the bar codes necessary to program the LL 500. Specific parameters, their defaults and page numbers are found in *Table 6-1*.

Table 6-1. Default Table

Parameter	Default	Page Number
Host Type	None*	
Code Types	All	6-22
Operational Parameters		
Laser Control		
Primary Trigger Mode	Level	6-24
Primary Trigger Modifier	Time	6-26
Primary Laser On Time-out	1 Sec	6-27
Primary Laser Off Time-out	1 Sec	6-27
Secondary Trigger Mode	Level	6-29
Secondary Trigger Modifier	Time	6-30
Secondary Laser On Time-out	1 Sec	6-31
Secondary Laser Off Time-out	1 Sec	6-31
Host Laser Off Delay	0	6-32
Beep After Good Decode	Enabled	6-33
Beeper Volume	High	6-34
Transmit “No Read” Message	Disabled	6-35
*A host type must be selected.		

Table 6-1. Default Table (cont'd)

Parameter	Default	Page Number
Security Options		
Code 39 Simple Redundancy	Disabled	6-37
Code 128 Simple Redundancy	Disabled	6-37
I 2 of 5 Simple Redundancy	Disabled	6-38
Codabar Simple Redundancy	Enabled	6-38
Bi-Directional Redundancy	Disabled	6-39
Linear UPC Decoded	Disabled	6-40
UPC/EAN Security Level	0	6-42
UPC/EAN		
UPC-E	Enabled	6-43
UPC-A	Enabled	6-43
EAN-8	Enabled	6-44
EAN-13	Enabled	6-44
Decode UPC/EAN Supplementals	Disabled	6-45
UPC/EAN Supplemental Redundancy	5 Times	6-46
Transmit UPC-A Check Digit	Enabled	6-47
Transmit UPC-E Check Digit	Enabled	6-47
UPC-A Preamble	System Character	6-48
UPC-E Preamble	System Character	6-49
Convert UPC-E to UPC-A	Disabled	6-50
EAN Zero Extend	Disabled	6-51
Code 128		
Code 128	Enabled	6-52
Code 128 Length	Any Length (3 to 55)	6-53
Code 39		
Code 39	Enabled	6-54
Code 39 Length	Any Length (1 to 55)	6-56
Code 39 Check Digit	Disabled	6-57
Code 39 Full ASCII	Disabled	6-58
Buffer Code 39	Disabled	6-59

Table 6-1. Default Table (cont'd)

Parameter	Default	Page Number
Interleaved 2 of 5		
Interleaved 2 of 5	Enabled	6-62
Interleaved 2 of 5 Length	1 Discrete Length (14)	6-64
Codabar		
Codabar	Enabled	6-65
Codabar Length	Any Length (2 to 55)	6-67
CLSI Editing	Disabled	6-68
NOTIS Editing	Disabled	6-69
Data Transmission Formats		
Pause Duration	0	6-70
Transmit Code ID	Disabled	6-71
Ignore Unknown Characters	Enabled	6-72
Prefix/Suffix Values*	CR/LF	6-74
Scan Data Transmission Format	Data As Is	6-76
Serial Data Transmission Format	Data As Is	6-78
Magstripe Data Transmission Format	Data As On Card	6-80
Single or Dual Port RS-232C		
Baud Rate	9600	6-86
Parity	Even	6-87
Check For Received Errors	Enabled	6-89
Hardware Handshaking	None	6-90
Software Handshaking	None	6-91
Serial Response Time-out	2.0 Sec.	6-93
Stop Bit Select	Two	6-94
8-Bit ASCII Data Format	7 Bit	6-95
Beep on <BEL>	Disabled	6-96
Intercharacter Delay	0	6-97
Transmission Direction	Talk & Receive Host Computer	6-98
RTS Line State	Low	6-99

* Prefix/Suffix values are only applicable when the selected transmission format uses them. For example, if you select the default setting for Scan Data Transmission Format (Data As Is), any prefix or suffix selected is not recognized since the format requires neither.

Table 6-1. Default Table (cont'd)

Parameter	Default	Page Number
Auxiliary Port RS-232C		
Baud Rate	9600	6-102
Parity	Even	6-103
Check For Received Errors	Enabled	6-105
Hardware Handshaking	None	6-106
Software Handshaking	None	6-107
Serial Response Time-out	2.0 Sec.	6-108
Stop Bit Select	Two	6-109
8-Bit ASCII Data Format	7 Bit	6-110
RTS Line State	Low	6-111
Host Specific		
OCIA Transmit Time-out	3.0 Sec	6-112
OCIA Clock Polarity	Falling	6-113
NCR 2152 Fast Transmit	Disabled	6-114
IBM 4683/4 Magstripe Communications	Enabled	6-115

Set Default Parameter

Scanning the **SET ALL DEFAULTS** bar code returns all parameters to the values listed in *Table 6-1* on page 6-1.

SET ALL DEFAULTS

Host Types

Select the type of host from *Table 6-2* and scan the corresponding bar code on the page listed.

Table 6-2. Host Types

Host Type	Page
Single Port RS-232	6-10
Dual Port RS-232	6-10
PC Keyboard	
ADDS PC I / II	6-11
ATT 6286 / 6386	6-11
Columbia PC	6-11
Compaq 286 / 386	6-10
Compaq Deskpro	6-11
HP Vectra CS / RS	6-11
HP Vectra ES / QS	6-10
IBM PC / AT	6-10
IBM PC / XT	6-11
IBM PS / 2-30	6-10
IBM PS2 / 50 / 55SX / 60 / 70 / 80	6-10
ITT PC	6-11
Leading Edge PC	6-11
NCR PC4	6-11
NCR PC8	6-10
Pitney Bowes A2000	6-11
Sperry PC	6-11
Tandy HD 1200	6-11
Wyse PC	6-11
Wyse PC Enhanced	6-11
Zenith 248	6-10

Table 6-2. Host Types (cont'd)

Host Type	Page
Terminal Keyboard	
DEC VT2XX / VT3XX	6-12
Decision Data 3496	6-11
Decision Data 359X	6-12
Decision Data 3761	6-12
HP 239X	6-12
HP 700-9X	6-12
IBM 3178	6-13
IBM 3278	6-13
IBM 319X	6-13
IBM 3179 / 3180	6-13
IBM 3151 / 316X / 347X	6-13
Tandem 6526	6-14
Tandem 6530	6-14
Telex-Memorex 88	6-14
Telex-Memorex 122	6-13
TI 924	6-14
Wyse 50	6-14
Wyse 60 / 85 / 150 / 185	6-15
POS Keyboard	
IBM 3653	6-15
IBM 3683 / 3684 Calc 35	6-16
IBM 3683 / 3684 Calc 48	6-16
IBM 3683 / 3684 Calc 116	6-16
IBM 3683 / 3684 Tel 35	6-16
IBM 3683 / 3684 Tel 48	6-16
IBM 3683 / 3684 Tel 116	6-17
NCR 280	6-17

Table 6-2. Host Types (cont'd)

Host Type	Page
NCR 2151(Tel)	6-18
NCR 2151 (Calc)	6-18
NCR 2152 (Tel)	6-18
NCR 2152 (Calc)	6-18
NCR 2154 / 2155	6-17
NCR 2157	6-18
NCR 2950	6-19
NCR 7052	6-19
IBM 4683/4684	
Port 5B	6-17
Port 17	6-17
OCR	
Casio	6-19
Fujitsu 7770 / 7880	6-19
Fujitsu 7990 / 8770 / 9000	6-19
IBM 3653 / 3683 / 3684 / 5265	6-20
OMRON RS80 / 81	6-20
OMRON RS80-B / 80E	6-19
SASI	6-20
Sweda L50 / L58 / 9801	6-20
OCIA	
NCR 255 / 1255 / 2152 / 2154 / 2155	6-20
NCR 2126-1120 / 2126-1320	6-20
NCR 2157 / 2257 / 7000 / 7050 / 7051	6-20
NCR "S" 2950	6-20
NCR "S" 7052	6-20
NCR "F" 7052	6-20
Nixdorf 8812	6-21

Table 6-2. Host Types (cont'd)

Host Type	Page
Spectra Physics	6-21
ICL 9520 / 9550 / 9505 / 9507 / 9518	6-21
Metrologic	6-21

Host Types (cont'd)

SINGLE PORT RS-232C

DUAL PORT RS-232C

IBM PS2-30

IBM PC/AT
IBM PS2-50/55SX/60/70/80
COMPAQ 286/386, NCR PC8
ZENITH 248

HP VECTRA ES/QS

Host Types (cont'd)

IBM PC/XT
ADDS PC I/II, COLUMBIA PC
COMPAQ DESKPRO, HP VECTRA CS/RS,
ITT PC, LEADING EDGE PC, NCR PC4,
PITNEY BOWES A2000, SPERRY PC, TANDY HD 1200

ATT 6286/6386

WYSE PC

WYSE PC ENHANCED

DECISION DATA 3496

Host Types (cont'd)

DECISION DATA 359X

DECISION DATA 3761

DEC VT2XX/3XX

HP 239X

HP 700-9X

Host Types (cont'd)

IBM 3178

IBM 3278

IBM 319X
TELEX-MEMOREX 122

IBM 3151/316X/347X

IBM 3179/3180

Host Types (cont'd)

TANDEM 6526

TANDEM 6530

TELEX-MEMOREX 88

TI 924

WYSE 50

Host Types (cont'd)

WYSE 60 - ASCII KYBD

WYSE 60 - PC KYBD

WYSE 60/150 - ANSI KYBD

WYSE 85/150+/185

IBM 3653

Host Types (cont'd)

IBM 3683/3684 CALC 35

IBM 3683/3684 TEL 35

IBM 3683/3684 TEL 48

IBM 3683/3684 CALC 48

IBM 3683/3684 CALC 116

Host Types (cont'd)

IBM 3683/3684 TEL 116

IBM 4683/4684 PORT 5B

IBM 4683/4684 PORT 17

NCR 280

NCR 2154/2155

Host Types (cont'd)

NCR 2151 TEL

NCR 2151 CALC

NCR 2152 TEL

NCR 2157

NCR 2152 CALC

Host Types (cont'd)

NCR 2950

NCR 7052

OMRON RS80-B/80-E

FUJITSU 7770/7880/7990/8770/9000

CASIO

Host Types (cont'd)

OMRON RS80/81
SWEDA L50/L58/9801

IBM 3653/3683/3684/5265
SASI OCR

NCR 255/1255/2152/2154/2155
NCR 2126-1120/2126-1320
NCR 2157/2257/7000/7050/7051
NCR "S" 7052

NCR "S" 2950

NCR "F" 7052

Host Types (cont'd)

ICL 9505/9507/9518/9520/9550

METROLOGIC

NIXDORF 8812

SPECTRA PHYSICS

Code Types

Select whether to enable or disable all code types, or to enable common code types only. Common code types are Code 39, UPC / EAN, I 2 of 5 and Code 128.

ENABLE ALL CODE TYPES

DISABLE ALL CODE TYPES

ENABLE COMMON CODE TYPES

To enable or disable individual code types, see:

- *UPC-E, UPC-A, EAN-8, EAN-13* starting on page 6-43.
- *Code 128* on page 6-52.
- *Code 39* on page 6-54.
- *Code 39 Full ASCII* on page 6-58.
- *Interleaved 2 of 5* on page 6-62.
- *Codabar* on page 6-65.

Operational Parameters

Laser Control

Select a *Primary Trigger Mode* from below. Then, if you wish, select one of the *Primary Trigger Modifiers* beginning on page 6-26. You may also select a *Secondary Trigger Mode* beginning on page 6-28 and one of the *Secondary Trigger Modifiers* on page 6-30.

Primary Trigger Mode

This parameter controls the triggering of the primary scanner port. Select one of the following options:

- **Level** - A trigger pull activates the laser and decode processing. The laser remains on, and decode processing occurs until a trigger release, a valid decode, or the Laser On Time-out is reached.
- **Pulse** - A trigger pull activates the laser and decoding processing. The laser remains on and decode processing occurs until a valid decode or the Laser On Time-out is reached.
- **Continuous** - Laser is always on and decoding.
- **Continuous/Level** - The laser is always on. Decode processing begins with a trigger pull (usually an object sensor) and continues until a trigger release, or the Laser On Time-out is reached.
- **Continuous/Pulse** - The laser is always on. Decode processing begins with a trigger pull (usually an object sensor) and continues until the Laser On Time-out is reached.
- **Blinking** - This trigger mode is used only for triggerless LT 1700 / 1800 operation (Primary Port only.) If you select this option with another type of scanner plugged into the primary scanner port, the laser does not turn on. If this occurs, disconnect the scanner, and plug it into the secondary scanner port. Scan one of the other primary trigger mode options. You can then re-attach the scanner to the primary scanner port.

Primary Trigger Mode (cont'd)

LEVEL

PULSE

CONTINUOUS

Primary Trigger Mode (cont'd)

CONTINUOUS/LEVEL

CONTINUOUS/PULSE

BLINKING

Primary Trigger Modifiers

The *Primary Trigger Mode* may be modified by one of the following:

- **New** - Data is transmitted only when a new symbol is decoded.
- **Time** - Data is transmitted when a new symbol is decoded or the Laser Off Time-out is reached.

NEW

TIME

Primary Laser On Time-out

This is the maximum time the primary laser remains on or decode processing continues during a trigger pull, and is programmable in 0.1 sec increments from 0.0 to 9.9 sec. Scan the bar code below, then scan two numeric bar codes beginning on page 6-116. Settings less than 1 second must have a leading zero. If you make a mistake, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.

PRIMARY LASER ON TIME-OUT

Primary Laser Off Time-out

This is the minimum time between decodes of the same symbol when in continuous laser mode, and is programmable in 0.1 sec increments from 0.0 to 9.9 sec. Scan the bar code below, then scan two numeric bar codes beginning on page 6-116. Settings less than 1 second must have a leading zero. If you make a mistake, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.

PRIMARY LASER OFF TIME-OUT

Secondary Trigger Mode

This parameter controls the triggering of the secondary scanner port, and contains the same options as the Primary Trigger Mode, except the **Blinking** option.

- **Level** - A trigger pull activates the laser and decode processing. The laser remains on, and decode processing occurs until a trigger release, a valid decode, or the Laser On Time-out is reached.
- **Pulse** - A trigger pull activates the laser and decoding processing. The laser remains on and decode processing occurs until a valid decode or the Laser On Time-out is reached.
- **Continuous** - Laser is always on and decoding.
- **Continuous/Level** - The laser is always on. Decode processing begins with a trigger pull (usually an object sensor) and continues until a trigger release, or the Laser On Time-out is reached.
- **Continuous/Pulse** - The laser is always on. Decode processing begins with a trigger pull (usually an object sensor) and continues until the Laser On Time-out is reached.

Secondary Trigger Mode (cont'd)

LEVEL

PULSE

CONTINUOUS

CONTINUOUS/LEVEL

CONTINUOUS/PULSE

Secondary Trigger Modifiers

This modifies the *Secondary Trigger Mod*e and contains the same options as the *Primary Trigger Modifiers*.

- **New** - Data is transmitted only when a new symbol is decoded.
- **Time** - Data is transmitted when a new symbol is decoded or the Laser Off Time-out is reached.

NEW

TIME

Secondary Laser On Time-out

This is the maximum time the secondary laser remains on or decode processing continues during a trigger pull. Programmable in 0.1 sec increments from 0.0 to 9.9 sec. Scan the bar code below, then scan two numeric bar codes beginning on page 6-116. Settings less than 1 second must have a leading zero. If you make a mistake, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.

SECONDARY LASER ON TIME-OUT

Secondary Laser Off Time-out

This is the minimum time between decodes of the same symbol when in continuous laser mode, and is programmable in 0.1 sec increments from 0.0 to 9.9 sec. Scan the bar code below, then scan two numeric bar codes beginning on page 6-116. Settings less than 1 second must have a leading zero. If you make a mistake, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.

SECONDARY LASER OFF TIME-OUT

Host Laser Off Delay

This parameter sets the minimum time between decodes on either scanner port. This time-out overrides the primary and secondary laser off time-out parameters. For example, if this parameter is programmed for 1 second time-out, the unit does not decode again until 1 second after a successful decode on either scanner port. It is programmable in 0.1 sec increments from 0.0 to 9.9 sec. Scan the bar code below, then scan two numeric bar codes beginning on page 6-116. Settings less than 1 second must have a leading zero. If you make a mistake, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.

HOST LASER OFF DELAY

Beep After Good Decode

Enable or disable the beeper during normal scanning. Operating the unit with the beeper enabled is recommended. In all cases, the beeper operates during parameter menu scanning and indicates error conditions. See *Table 5-2* on page 5-6 for beeper indications.

BEEP AFTER GOOD DECODE

DO NOT BEEP AFTER GOOD DECODE

Beeper Volume

To select a beeper volume, scan the appropriate bar code below.

LOW

MEDIUM

HIGH

Transmit “No Read” Message

This feature gives you the option to transmit “NR” when a symbol does not decode. Any prefixes and suffixes which have been enabled are appended around this message.

ENABLE NO READ

DISABLE NO READ

Security Options

These options are provided for enhanced decode security on certain poor quality bar codes (e.g., poorly printed or low contrast), and for insecure symbologies such as Interleaved 2 of 5. *Table 6-3* shows which options apply to specific host types.

Table 6-3. Security Options

	RS-232C	IBM 4683	OCIA	OCR	Wedge
Code 39 Simple Redundancy	X	X			X
Code 128 Simple Redundancy	X	X			X
Codabar Simple Redundancy	X				X
I 2 of 5 Simple Redundancy	X	X			X
Bidirectional Redundancy	X	X			X
Linear UPC Decode				X	

Simple Redundancy

When enabled, a bar code is transmitted only when there are two decodes with the same result. This option can be enabled for selected code types on an individual basis, and can be used with an SL 9000, LT 1700 / 1800 and any single line Symbol scanner.

ENABLE CODE 39 SIMPLE REDUNDANCY

DISABLE CODE 39 SIMPLE REDUNDANCY

ENABLE CODE 128 SIMPLE REDUNDANCY

DISABLE CODE 128 SIMPLE REDUNDANCY

Simple Redundancy (cont'd)

ENABLE I 2 OF 5 SIMPLE REDUNDANCY

DISABLE I 2 OF 5 SIMPLE REDUNDANCY

ENABLE CODABAR SIMPLE REDUNDANCY

DISABLE CODABAR SIMPLE REDUNDANCY

Bi-Directional Redundancy

When enabled, a bar code must be decoded in both directions before being accepted as a successful decode. The option only applies to those code types which have *Simple Redundancy* already enabled, and can be used with an LT 1700 / 1800 or any single line Symbol scanner.

ENABLE BI-DIRECTIONAL REDUNDANCY

DISABLE BI-DIRECTIONAL REDUNDANCY

Linear UPC/EAN Decode

This option applies to those code types containing two adjacent blocks (e.g., UPC-A, EAN-8 and EAN-13). When enabled, a bar code is transmitted only when both the left and right blocks are successfully decoded within one laser scan. This option should be enabled when bar codes are in proximity to each other, and can be used with an LT 1700 / 1800 or any single line Symbol scanner.

ENABLE LINEAR UPC DECODE

DISABLE LINEAR UPC DECODE

UPC/EAN Security Level

The LL 500 offers four levels of decode security for UPC/EAN bar codes. Increasing levels of security are provided for decreasing levels of bar code quality. There is an inverse relationship between security and scanner aggressiveness, so be sure to choose only that level of security necessary for any given application.

- **Security Level 0** - This default setting allows the scanner to operate in its most aggressive state, while providing sufficient security in decoding “in spec” UPC/EAN bar codes.
- **Security Level 1** - As bar code quality levels diminish, certain characters become prone to mis-decodes before others (i.e., 1, 2, 7, 8). If you are experiencing mis-decodes of poorly printed bar codes, and the mis-decodes are limited to these characters, select this security level.
- **Security Level 2** - If you are experiencing mis-decodes of poorly printed bar codes which are not limited to characters 1, 2, 7 and 8, select this security level.
- **Security Level 3** - If you have tried Security Level 2 and are still experiencing mis-decodes, select this security level. Selecting this option is an extreme measure against mis-decoding severely out of spec bar codes and significantly impairs the decoding ability of the scanner.

UPC/EAN Security Level (cont'd)

UPC/EAN SECURITY LEVEL 0

UPC/EAN SECURITY LEVEL 1

UPC/EAN SECURITY LEVEL 2

UPC/EAN SECURITY LEVEL 3

UPC/EAN

Enable/Disable UPC-E/UPC-A

To enable or disable UPC-E or UPC-A, scan the appropriate bar code(s).

ENABLE UPC-A

DISABLE UPC-A

ENABLE UPC-E

DISABLE UPC-E

Enable/Disable EAN-8/EAN-13

To enable or disable EAN-8 or EAN-13, scan the appropriate bar code(s).

ENABLE EAN-8

DISABLE EAN-8

ENABLE EAN-13

DISABLE EAN-13

Decode UPC/EAN Supplementals

Supplementals are additionally appended characters (2 or 5) according to specific code format conventions (e.g., UPC A+2, UPC E+2, EAN 8+2). Three options are available.

- If UPC/EAN with supplemental characters is selected, UPC/EAN symbols without supplemental characters are not decoded.
- If UPC/EAN without supplemental characters is selected, and the scanner is presented with a UPC/EAN plus supplemental symbol, the UPC/EAN is decoded and the supplemental characters ignored.
- An autodiscriminate option is also available. If this option is selected, choose an appropriate *Decode UPC/EAN Supplemental Redundancy* value from the next page. A value of 5 or more is recommended.

Note: To minimize the risk of invalid data transmission, select whether to read or ignore supplemental characters.

DECODE UPC/EAN WITH SUPPLEMENTALS

IGNORE UPC/EAN WITH SUPPLEMENTALS

AUTODISCRIMINATE UPC/EAN SUPPLEMENTALS

Decode UPC/EAN Supplemental Redundancy

With *Autodiscriminate UPC/EAN Supplementals* selected, this option adjusts the number of times a symbol without supplementals is decoded before transmission. The range is from two to 20 times. Five or above is recommended when decoding a mix of UPC / EAN symbols with and without supplementals, and the autodiscriminate option is selected.

Scan the bar code below to select a decode redundancy value. Next scan two numeric bar codes beginning on page 6-116. Single digit numbers must have a leading zero. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.

DECODE UPC/EAN SUPPLEMENTAL REDUNDANCY

Transmit UPC-A/UPC-E Check Digit

Scan the appropriate bar code below to transmit the symbol with or without the UPC-A or UPC-E check digit.

TRANSMIT UPC-A CHECK DIGIT

DO NOT TRANSMIT UPC-A CHECK DIGIT

TRANSMIT UPC-E CHECK DIGIT

DO NOT TRANSMIT UPC-E CHECK DIGIT

UPC-A Preamble

Three options are given for lead-in characters for UPC-A symbols transmitted to the host device: transmit system character only, transmit system character and country code (e.g., “0” for USA), and no preamble transmitted. The lead-in characters are considered part of the symbol.

NO PREAMBLE
(<DATA>)

SYSTEM CHARACTER
(<SYSTEM CHARACTER> <DATA>)

SYSTEM CHARACTER & COUNTRY CODE
(< COUNTRY CODE> <SYSTEM CHARACTER> <DATA>)

UPC-E Preamble

Three options are given for lead-in characters for UPC-E symbols transmitted to the host device: transmit system character only, transmit system character and country code (e.g., “0” for USA), and no preamble transmitted. The lead-in characters are considered part of the symbol.

NO PREAMBLE
(<DATA>)

SYSTEM CHARACTER
(<SYSTEM CHARACTER> <DATA>)

SYSTEM CHARACTER & COUNTRY CODE
(< COUNTRY CODE> <SYSTEM CHARACTER> <DATA>)

Convert UPC-E to UPC-A

This parameter converts UPC-E (zero suppressed) decoded data to UPC-A format before transmission. After conversion, data follows UPC-A format and is affected by UPC-A programming selections (e.g., Preamble, Check Digit).

Scanning **DO NOT CONVERT UPC-E TO UPC-A** allows you to transmit UPC-E (zero suppressed) decoded data.

CONVERT UPC-E TO UPC-A
(ENABLE)

DO NOT CONVERT UPC-E TO UPC-A
(DISABLE)

EAN Zero Extend

If this parameter is enabled, five leading zeros are added to decoded EAN-8 symbols to make them compatible in format to EAN-13 symbols.

Disabling this parameter returns EAN-8 symbols to their normal format.

ENABLE EAN ZERO EXTEND

DISABLE EAN ZERO EXTEND

Code 128

Enable/Disable Code 128

To enable or disable Code 128, scan the appropriate bar code.

ENABLE CODE 128

DISABLE CODE 128

Lengths for Code 128

The default setting is Any Length.

CODE 128 ANY LENGTH

Code 39

Enable/Disable Code 39

To enable or disable Code 39, scan the appropriate bar code below.

ENABLE CODE 39

DISABLE CODE 39

Set Lengths for Code 39

Lengths for Code 39 may be set for any length, one or two discrete lengths, or lengths within a specific range. The length of a code refers to the number of characters (i.e., human readable characters), including check digit(s) the code contains. If Code 39 Full ASCII is enabled, **Length Within a Range** or **Any Length** are the preferred options.

- **One Discrete Length** - This option allows you to decode only those codes containing a selected length. For example, if you select **Code 39 One Discrete Length**, then scan **1**, **4**, only Code 39 symbols containing 14 characters are decoded. Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Two Discrete Lengths** - This option allows you to decode only those codes containing two selected lengths. For example, if you select **Code 39 Two Discrete Lengths**, then scan **0**, **2**, **1**, **4**, only Code 39 symbols containing 2 or 14 characters are decoded. Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Length Within Range** - This option allows you to decode a code type within a specified range. For example to decode Code 39 symbols containing between 4 and 12 characters, first scan **Code 39 Length Within Range**. Then scan **0**, **4**, **1** and **2** (single digit numbers must always be preceded by a leading zero). Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Any Length** - Scanning this option allows you to decode Code 39 symbols containing any number of characters.

Set Lengths for Code 39 (cont'd)

CODE 39 - ONE DISCRETE LENGTH

CODE 39 - TWO DISCRETE LENGTHS

CODE 39 - LENGTH WITHIN RANGE

CODE 39 - ANY LENGTH

Code 39 Check Digit Verification

When enabled, this parameter checks the integrity of a Code 39 symbol to ensure it complies with specified algorithms.

Only those Code 39 symbols which include a modulo 43 check digit are decoded when this parameter is enabled.

ENABLE CODE 39 CHECK DIGIT

DISABLE CODE 39 CHECK DIGIT

Enable/Disable Code 39 Full ASCII

When enabled, the ASCII character set assigns a code to letters, punctuation marks, numerals, and most control keystrokes on the keyboard.

The first 32 codes are non-printable and are assigned to keyboard control characters such as BACKSPACE and RETURN. The other 96 are called printable codes because all but SPACE and DELETE produce visible characters.

Code 39 Full ASCII interprets the bar code special character ($ + % /) preceding a Code 39 character and assigns an ASCII character value to the pair. For example, when Code 39 Full ASCII is enabled and a **+B** is scanned, it is interpreted as **b**, **%J** as **?**, and **$H** emulates the keystroke **BACKSPACE**. Scanning **ABC$M** outputs the keystroke equivalent of **ABC ENTER**. Refer to *Table A-1* on page A-1.

The scanner does not autodiscriminate between Code 39 and Code 39 Full ASCII.

To enable or disable Code 39 Full ASCII, scan the appropriate bar code below.

ENABLE CODE 39 FULL ASCII

DISABLE CODE 39 FULL ASCII

Code 39 Buffering

When you select to buffer Code 39, all Code 39 symbols having a leading space as a first character are temporarily buffered in the unit to be transmitted later. The leading space is not buffered.

Decode of a valid Code 39 symbol with no leading space causes transmission in sequence of all buffered data in a first-in first-out format, plus transmission of the “triggering” symbol.

When the scan and transmit option is selected, decoded Code 39 symbols without leading spaces are transmitted without being stored in the buffer.

Scan and Store affects Code 39 decodes only. If you select this, it is recommended that you configure the scanner to decode Code 39 symbology only.

BUFFER CODE 39
(ENABLE)

DO NOT BUFFER CODE 39
(DISABLE)

While there is data in the transmission buffer, deleting Code 39 buffering capability via the parameter menu is not allowed. The buffer holds 200 bytes of information.

To allow disabling of Code 39 buffering, first force the buffer transmission (see *Transmit Buffer*) or clear the buffer. Both the **CLEAR BUFFER** and **TRANSMIT BUFFER** bar codes are length 1. Be sure Code 39 length is set to include length 1.

Buffer Data

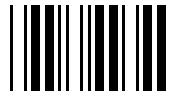
To buffer data, Code 39 buffering must be enabled, and a symbol must be read with a space immediately following the start pattern.

- Unless a symbol overflows the transmission buffer, the unit gives lo / hi beep to indicate successful decode and buffering. See *Overfilling Transmission Buffer*.
- The unit adds the message, excluding the leading space, to the transmission buffer.
- No transmission occurs.

Clear Transmission Buffer

To clear the transmission buffer, read a symbol which contains only a start character, a dash (minus), and a stop character.

- The unit issues a short hi / lo / hi beep to signal that the transmission buffer has been erased, and no transmission has occurred.
- The unit erases the transmission buffer.
- No transmission occurs.



CLEAR BUFFER

Transmit Buffer

To transmit the buffer, read a symbol containing either the first or second condition:

1. Only a start character, a plus (+), and a stop character.
   - The unit signals that the transmission buffer has been sent (a lo / hi beep).
   - The unit sends the buffer.
   - The unit clears the buffer.

TRANSMIT BUFFER

2. A Code 39 bar code with a leading character other than a space.
   - The unit sounds a hi / lo beep to signal that a good decode and buffering of that decode has occurred.
   - The unit transmits the buffer.
   - The unit signals that the buffer has been transmitted with a lo / hi beep.

Overfilling Transmission Buffer

If the symbol just read will result in an overflow of the transmission buffer:

- The unit indicates that the symbol has been rejected by issuing three long, high beeps.
- No transmission occurs. Data in buffer is not affected.

Attempt to Transmit an Empty Buffer

If the symbol just read was the transmit buffer symbol and the Code 39 buffer is empty:

- A short lo / hi / lo beep signals that the buffer is empty.
- No transmission occurs.
- The buffer remains empty.

Interleaved 2 of 5

Enable/Disable Interleaved 2 of 5

To enable or disable Interleaved 2 of 5, scan the appropriate bar code below.

ENABLE INTERLEAVED 2 OF 5

DISABLE INTERLEAVED 2 OF 5

Set Lengths for Interleaved 2 of 5

Lengths for I 2 of 5 may be set for any length, one or two discrete lengths, or lengths within a specific range. The length of a code refers to the number of characters (i.e., human readable characters) the code contains and includes check digits.

- **One Discrete Length** - This option allows you to decode only those codes containing a selected length. For example, if you select **I 2 of 5 One Discrete Length**, then scan **1**, **4**, the only I 2 of 5 symbols decoded are those containing 14 characters. Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Two Discrete Lengths** - This option allows you to decode only those codes containing two selected lengths. For example, if you select **I 2 of 5 Two Discrete Lengths**, then scan **0**, **2**, **1**, **4**, the only I 2 of 5 symbols decoded are those containing 2 or 14 characters. Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Length Within Range** - This option allows you to decode a code type within a specified range. For example, to decode I 2 of 5 symbols containing between 4 and 12 characters, first scan **I 2 of 5 Length Within Range**. Then scan **0**, **4**, **1** and **2** (single digit numbers must always be preceded by a leading zero). Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Any Length** - Scanning this option allows you to decode I 2 of 5 symbols containing any number of characters.

  Note: Selecting this option may lead to misdecodes for I 2 of 5 codes.

Set Lengths for Interleaved 2 of 5 (cont'd)

I 2 of 5 - ONE DISCRETE LENGTH

I 2 of 5 - TWO DISCRETE LENGTHS

I 2 of 5 - LENGTH WITHIN RANGE

I 2 of 5 - ANY LENGTH

Codabar

Enable/Disable Codabar

To enable or disable Codabar, scan the appropriate bar code below.

ENABLE CODABAR

DISABLE CODABAR

Set Lengths for Codabar

Lengths for Codabar may be set for any length, one or two discrete lengths, or lengths within a specific range. The length of a code refers to the number of characters (i.e., human readable characters) the code contains. It also includes any start or stop characters.

- **One Discrete Length** - This option allows you to decode only those codes containing a selected length. For example, if you select **Codabar One Discrete Length**, then scan **1**, **4**, the only Codabar symbols decoded are those containing 14 characters. Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Two Discrete Lengths** - This option allows you to decode only those codes containing two selected lengths. For example, if you select **Codabar Two Discrete Lengths**, then scan **0**, **2**, **1**, **4**, the only Codabar symbols decoded are those containing 2 or 14 characters. Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Length Within Range** - This option allows you to decode a code type within a specified range. For example to decode Codabar symbols containing between 4 and 12 characters, first scan **Codabar Length Within Range**. Then scan **0**, **4**, **1** and **2** (single digit numbers must always be preceded by a leading zero). Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.
- **Any Length** - Scanning this option allows you to decode Codabar symbols containing any number of characters.

Set Lengths for Codabar (cont'd)

CODABAR - ONE DISCRETE LENGTH

CODABAR - TWO DISCRETE LENGTHS

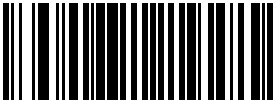
CODABAR - LENGTH WITHIN RANGE

CODABAR - ANY LENGTH

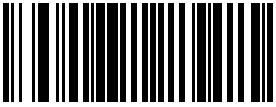
CLSI Editing

If enabled, this parameter strips the start and stop characters and inserts a space after the first, fifth, and tenth characters of a 14-character Codabar symbol.

Note: Symbol length does not include start and stop characters.



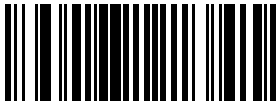
ENABLE CLSI EDITING



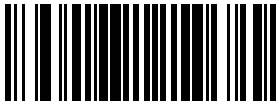
DISABLE CLSI EDITING

NOTIS Editing

If enabled, this parameter strips the start and stop characters from a decoded Codabar symbol.



ENABLE NOTIS EDITING



DISABLE NOTIS EDITING

Data Transmission Formats

Pause Duration

This parameter allows a pause to be inserted at any point in the data transmission. Pauses are set by scanning a two digit number (i.e., two bar codes), and are measured in 1/10 second intervals. For example, scanning bar codes “0” and “1” inserts a 1/10 second pause; “0” and “5” gives you a 1/2 second delay. Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.

PAUSE DURATION

Transmit Code ID Character

A code ID character identifies the code type of a scanned bar code. This may be useful when the scanner is decoding more than one code type. If a prefix is selected, the code ID character is sent after the prefix. Code ID characters are:

A = UPC-A, UPC-E, EAN-13, or EAN-8

B = Code 39

C = Codabar

D= Code 128

F = Interleaved 2 of 5.

Select whether to enable or disable this parameter.

TRANSMIT CODE ID CHARACTER

DO NOT TRANSMIT CODE ID CHARACTER

Ignore Unknown Characters

When enabled, all data is sent except for unknown characters, and no error beeps are sounded. Unknown characters are those characters the selected terminal does not recognize.

When disabled, all data containing one or more unknown characters is discarded, and error beeps are sounded.

Scan the appropriate bar code to enable or disable this parameter.

ENABLE

DISABLE

Prefix/Suffix Values

A prefix / suffix may be appended to scan, serial, and magstripe data for use in data editing. These values are set by scanning a four digit number (i.e., four bar codes) that corresponds to key codes for various terminals. See *Table A-1* on page A-1 for conversion values. Numeric bar codes begin on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-118.

Note: These values are also used for Advanced Data Formatting programming. See the *Advanced Programmer's Guide* for details.

SCAN SUFFIX (VALUE 1)

SCAN PREFIX (VALUE 2)

Prefix/Suffix Values (cont'd)

MAGSTRIPE SUFFIX
(VALUE 3)

MAGSTRIPE PREFIX
(VALUE 4)

SERIAL SUFFIX
(VALUE 5)

SERIAL PREFIX (VALUE 6)

Scan Data Transmission Format

To change the Scan Data Transmission Format, scan the **SCAN OPTIONS** bar code below. Then select one of four options from the next page. When you have made your selection, scan the **ENTER** bar code on page 6-83. If you make a mistake, scan the **CANCEL** bar code on page 6-83.

SCAN OPTIONS

Scan Data Transmission Format (cont'd)

DATA AS IS

<PREFIX> <DATA>

<DATA> <SUFFIX>

<PREFIX> <DATA> <SUFFIX>

Note: RS-232C hosts treat the extended keyboard default suffix (7013) as Enter.

Serial Data Transmission Format

To change the Serial Data Transmission Format, scan the **SERIAL OPTIONS** bar code below. Then select one of four options from the next page. When you have made your selection, scan the **ENTER** bar code on page 6-83. If you make a mistake, scan the **CANCEL** bar code on page 6-83.

SERIAL OPTIONS

Serial Data Transmission Format (cont'd)

DATA AS IS

<PREFIX> <DATA>

<DATA> <SUFFIX>

<PREFIX> <DATA> <SUFFIX>

Magstripe Data Transmission Format

To change the Magstripe Data Transmission Format, scan the **MAGSTRIPE OPTIONS** bar code below. Then select one of fifteen options from the following pages. When you have made your selection, scan the **ENTER** bar code on page 6-83. If you make a mistake, scan the **CANCEL** bar code on page 6-83.

MAGSTRIPE OPTIONS

Magstripe Data Transmission Format (cont'd)

DATA AS ON CARD

<ACCT NR>

<ACCT NR> <SUFFIX>

<ACCT NR> <SUFFIX> <EXP (MMYY)> <SUFFIX>

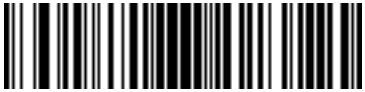
<ACCT NR> <SUFFIX> <EXP (YYMM)> <SUFFIX>

Magstripe Data Transmission Format (cont'd)

<ACCT NR> <SUFFIX> <NAME)> <SUFFIX>

<ACCT NR> <SUFFIX> <EXP (MMYY)> <SUFFIX> <NAME> <SUFFIX>

<ACCT NR> <SUFFIX> <EXP (YYMM)> <SUFFIX> <NAME> <SUFFIX>



<PREFIX> <ACCT NR> <SUFFIX>

<PREFIX> <ACCT NR> <SUFFIX> <EXP (YYMM)> <SUFFIX>

Magstripe Data Transmission Format (cont'd)

<PREFIX> <ACCT NR> <SUFFIX> <EXP (MMYY)> <SUFFIX> <NAME> <SUFFIX>

<PREFIX> <ACCT NR>

<PREFIX> <ACCT NR> <SUFFIX> <EXP (MMYY)> <SUFFIX>

<PREFIX> <ACCT NR> <SUFFIX> <EXP (YYMM)> <SUFFIX> <NAME> <SUFFIX>

Data Format Editing

These bar codes are only used in conjunction with Scan, Serial and Magstripe Data Formatting.

ERASE ALL FORMATS

ERASE LAST ENTERED FORMAT

CANCEL

ENTER

Single or Dual Port RS-232C

In Single Port mode, the host computer is connected to the Host port.

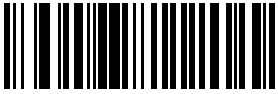
In Dual Port mode, the host device is connected to the Host port, and the secondary device (usually a terminal) is connected to the Aux port.

These options apply only to RS-232C devices connected to the Host port.

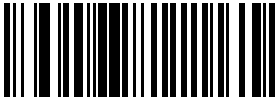
Baud Rate (Single or Dual Port)

Baud rate is the number of bits of data transmitted per second. The scanner's baud rate setting should match the data rate setting of the host device. If not, data may not reach the host device or may reach it in distorted form.

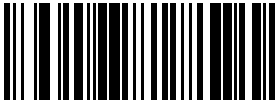
BAUD RATE 100



BAUD RATE 300

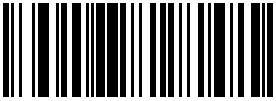


BAUD RATE 600

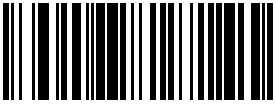


BAUD RATE 1200

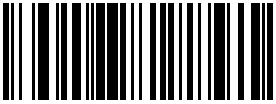
Baud Rate (Single or Dual Port) (cont'd)



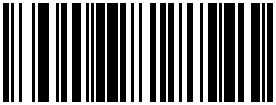
BAUD RATE 2400



BAUD RATE 4800



BAUD RATE 9600



BAUD RATE 19,200

Parity (Single or Dual Port)

A parity check bit is the most significant bit of each ASCII coded character. Select the parity type according to host device requirements.

- **Odd** - The parity bit has a value 0 or 1, based on data, to ensure than an odd number of 1 bits are contained in the coded character.
- **Even** - The parity bit has a value 0 or 1, based on data, to ensure than an even number of 1 bits are contained in the coded character.
- **Mark** - The parity bit is always 1.
- **Space** - The parity bit is always 0.
- **None -** If no parity is required, select None.

ODD

EVEN

Parity (Single or Dual Port) (cont'd)

MARK

SPACE

NONE

Check Receive Errors (Single or Dual Port)

Select whether or not the parity, framing, and overrun of received characters are checked. The type of parity used is selectable through the *Parity (Single or Dual Port)* parameter.

CHECK FOR RECEIVED ERRORS

DO NOT CHECK FOR RECEIVED ERRORS

Hardware Handshaking (Single or Dual Port)

Scan a bar code below to select a hardware handshaking option. See *Hardware Handshaking* on page 5-8 for explanations of the protocol and options.

- **None** - Scan this bar code below if no Hardware Handshaking is desired.
- **RTS/CTS** - Scan this bar code to select RTS / CTS Hardware Handshaking.

NONE

RTS/CTS

Software Handshaking (Single or Dual Port)

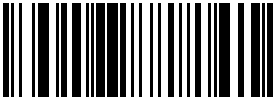
Scan one of the following bar codes to select a software handshaking option. See *Software Handshaking* on page 5-11 for explanations of the protocol and options.

Software Handshaking options cannot be used with Hardware Handshaking.

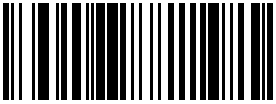
NONE

ACK/NAK

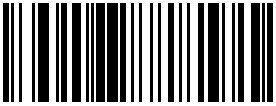
Software Handshaking (Single or Dual Port) (cont'd)



ENQ



ACK/NAK WITH ENQ



XON/XOFF

Serial Response Time-out (Single or Dual Port)

This parameter specifies how long the controller waits for an ACK, NAK or CTS before determining that a transmission error has occurred. This only applies when in one of the ACK/NAK Software Handshaking modes, or RTS/CTS Hardware Handshaking option.

The delay period can range from 0.1 to 9.9 seconds in .1 second increments. After scanning the bar code below, scan two numeric bar codes beginning on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-83.

SERIAL RESPONSE TIME-OUT

Stop Bit Select (Single or Dual Port)

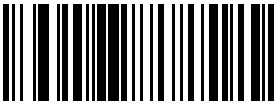
The stop bit(s) at the end of each transmitted character marks the end of transmission of one character and prepares the receiving device for the next character in the serial data stream. The number of stop bits (one or two) selected depends on the number the receiving terminal is programmed to accommodate. Set the number of stop bits to match host device requirements.

1 STOP BIT

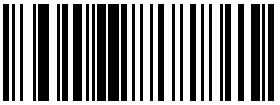
2 STOP BITS

ASCII Format (Single or Dual Port)

This parameter allows the controller to interface with devices requiring a 7-bit or 8-bit ASCII protocol.



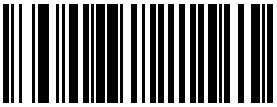
7-BIT



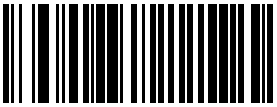
8-BIT

Beep on <BEL> (Single or Dual Port)

When this parameter is enabled, the controller issues a beep when a <BEL> character is detected on the RS-232C serial line. <BEL> is issued to signify an illegal entry or other important event.



BEEP ON <BEL> CHARACTER (ENABLE)



DO NOT BEEP ON <BEL> CHARACTER (DISABLE)

Intercharacter Delay (Single or Dual Port)

Select the intercharacter delay option matching host requirements. The intercharacter delay gives the host system time to service its receiver and perform other tasks between characters. The delay period can range from no delay to 99 msec in 1 msec increments. After scanning the bar code below, scan two bar codes beginning on page 6-116 to set the desired time-out. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-83.

IINTERCHARACTER DELAY

Transmission Direction (Single or Dual Port)

When the controller has data to send, this parameter determines the device(s) the controller talks to and the device(s) it can perform handshaking with.

For data transmissions from the controller, select whether the unit transmits to the host only, or to both the host and local terminal.

Software and hardware handshaking are accomplished with the host computer only.

This parameter is used for dual-port RS-232C operation only. In full or half duplex operation, **HOST COMPUTER** refers to the device connected to the **HOST** port, and **LOCAL TERMINAL** refers to the device connected to the **AUX** port.

TALK & RECEIVE HOST COMPUTER ONLY

TALK TO LOCAL TERMINAL & HOST COMPUTER
RECEIVE FROM HOST COMPUTER ONLY

RTS Line State (Single or Dual Port)

In order to transmit, some hosts expect the RTS line to be in a certain state (High or Low) when there is no hardware handshaking. This parameter adjusts the RTS Line State.

Scan the appropriate bar code to select the desired option.

LINE HIGH

LINE LOW

Auxiliary Serial Options

These options are used when:

- an RS-232C device, such as a portable terminal or scale, is connected to the Aux port and another type of host, such as a wedge or OCR terminal, is connected to the Host port.
- uploading or downloading parameters using the PC download program.
- cloning parameters from one LL 500 to another.

Although the following options are the same as single or dual port RS-232C options, they use different bar codes for programming.

- Baud Rate
- Parity
- Check Parity
- Hardware Handshaking
- Software Handshaking (all options except ENQ and ACK/NAK with ENQ)
- Serial Response Time-out
- Stop Bit Select
- ASCII Data Format
- RTS Line State

Baud Rate (Aux Serial Option)

Baud rate is the number of bits of data transmitted per second. The scanner's baud rate setting should match the data rate setting of the host device. If not, data may not reach the host device or may reach it in distorted form.

BAUD RATE 100

BAUD RATE 300

BAUD RATE 600

BAUD RATE 1200

Baud Rate (Aux Serial Option) (cont'd)

BAUD RATE 2400

BAUD RATE 4800

BAUD RATE 9600

BAUD RATE 19,200

Parity (Aux Serial Option)

A parity check bit is the most significant bit of each ASCII coded character. Select the parity type according to host device requirements.

- **Odd** - The parity bit has a value 0 or 1, based on data, to ensure than an odd number of 1 bits are contained in the coded character.
- **Even** - The parity bit has a value 0 or 1, based on data, to ensure than an even number of 1 bits are contained in the coded character.
- **Mark** - The parity bit is always 1.
- **Space** - The parity bit is always 0.
- **None** - If no parity is required, select None.

ODD

EVEN

Parity (Aux Serial Option) (cont'd)

MARK

SPACE

NONE

Check Receive Errors (Aux Serial Option)

Select whether or not the parity, framing, and overrun of received characters are checked. The type of parity used is selectable through the *Parity (Aux Serial Option)* parameter.

CHECK FOR RECEIVED ERRORS

DO NOT CHECK FOR RECEIVED ERRORS

Hardware Handshaking (Aux Serial Option)

Scan a bar code below to select a hardware handshaking option. See *Hardware Handshaking* on page 5-14 for explanations of the protocol and options.

- **None -** Scan this bar code below if no Hardware Handshaking is desired.
- **RTS/CTS -** Scan this bar code to select RTS / CTS Hardware Handshaking.

NONE

RTS/CTS

Software Handshaking (Aux Serial Option)

Scan one of the following bar codes to select a software handshaking option. See *Software Handshaking* on page 5-14 for explanations of the protocol and options.

Software Handshaking options cannot be used with Hardware Handshaking.

- **None** - When this option is selected, data is transmitted immediately.
- **XON/XOFF** -Scan this bar code to select the XON / XOFF software handshaking option.

NONE

XON/XOFF

Serial Response Time-out (Aux Serial Option)

This parameter specifies how long the controller waits for an ACK, NAK or CTS before determining that a transmission error has occurred. This only applies when in one of the ACK/NAK Software Handshaking modes, or RTS/CTS Hardware Handshaking option.

The delay period can range from 0.1 to 9.9 seconds in .1 second increments. After scanning the bar code below, scan two numeric bar codes beginning on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-83.

SERIAL RESPONSE TIME-OUT

Stop Bit Select (Aux Serial Option)

The stop bit(s) at the end of each transmitted character marks the end of transmission of one character and prepares the receiving device for the next character in the serial data stream. The number of stop bits (one or two) selected depends on the number the receiving terminal is programmed to accommodate. Set the number of stop bits to match host device requirements.

1 STOP BIT

2 STOP BITS

ASCII Format (Aux Serial Option)

This parameter allows the controller to interface with devices requiring a 7-bit or 8-bit ASCII protocol.

7-BIT

8-BIT

RTS Line State (Aux Serial Option)

In order to transmit, some hosts expect the RTS line to be in a certain state (High or Low) when there is no hardware handshaking. This parameter adjusts the RTS Line State.

Scan the appropriate bar code to select the desired option.

LINE HIGH

LINE LOW

Host Specific

OCIA Transmit Time-out

When connected to an OCIA terminal, the LL 500 after decoding a symbol, attempts to transmit the data to the host. If the host is not prepared to accept data at that time (i.e., the host data buffer may be full), the LL 500 tries to retransmit the data for up to 3 seconds. If transmission is not successful, the data is discarded, and the LL 500 issues a transmission error.

This parameter allows you to increase the time the LL 500 attempts transmission before discarding the data. You can select up to a 30 second delay in one second increments. During the time the LL 500 is attempting to transmit data, no new data can be scanned. The input ports are locked out.

After scanning the bar code below, scan two numeric bar codes beginning on page 6-116. If you make an error, or wish to change your selection, scan the **CANCEL** bar code on page 6-83.

OCIA TRANSMIT TIME-OUT

OCIA Clock Polarity

This parameter selects the appropriate clock edge values so that a host terminal with non-standard OCIA format can recognize the clock signal phase synchronized with data.

Select whether the OCIA clock pulse polarity is rising or falling.

RISING

FALLING

NCR 2152 Fast Transmit

This parameter selects the data transmission speed to the NCR 2152 POS terminal.

Scan the appropriate bar code to enable or disable this parameter.

ENABLE

DISABLE

IBM 4683 Magstripe Communications

The LL 500 communicates with the IBM 4683/4 as a scanner device, and also as a magstripe reader device. The LL 500/IBM 4683 magstripe communications can be enabled and disabled via this parameter. If the LL 500 magstripe capability is needed, this parameter should be enabled. If not, it should be disabled to avoid contention with any other magstripe reader which may be connected to the host.

Select whether to enable or disable IBM 4683 magstripe communications.

ENABLE

DISABLE

Numeric Bar Codes

For parameters requiring specific numeric values, scan the appropriately numbered bar code(s).

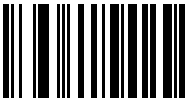
0

1

2

3

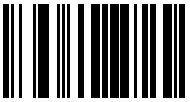
Numeric Bar Codes (cont'd)



4

5

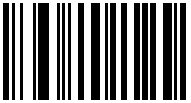
6



7

Numeric Bar Codes (cont'd)

8



9

Cancel

If you make an error, or wish to change your selection, scan the bar code below.

CANCEL