

Contents

Chapter 1. User's Guide

Scanning Made Easy	1-1
Set Up.....	1-2
Unpacking.....	1-2
Mounting.....	1-2
Connecting the LS 1220.....	1-3
Ready, Test, Scan	1-4
LS 1220.....	1-4
LS 1220LR	1-4
Triggering	1-5
Host	1-5
Level Trigger.....	1-5
Pulse Trigger.....	1-6
Constant Scan and Report	1-6
Next New Code	1-6
Continuous Level.....	1-6
Continuous Pulse.....	1-6
Aiming.....	1-7
Scan the Entire Symbol	1-7
Position at an Angle.....	1-7
Problems	1-7
What If... ..	1-8
You Should	1-8
LS 1220 Standard Range Decode Zone.....	1-9
LS 1220 Long Range Decode Zone	1-10
Maintenance	1-11
Factory Service	1-12
Symbol Support Center.....	1-13
Accessories	1-14
Required Accessories.....	1-14
Optional Accessories	1-14
Technical Specifications	1-15
Interface Pin-outs.....	1-17

Chapter 2. Programming

Overview.....	2-1
Scanning Sequence Examples	2-1
Errors While Scanning.....	2-1
Parameter Descriptions.....	2-3
• Set Parameter Defaults.....	2-3
• Code Types	2-3
• Code Lengths	2-3
• Code 39 Full ASCII.....	2-4
• Decode Options.....	2-4
Transmit UPC-E/UPC-A Check Digit	2-4
Convert UPC-E to UPC-A.....	2-4
EAN Zero Extend.....	2-4
Xmit “No Decode” Message.....	2-4
Decode UPC/EAN Supplemental.....	2-5
Decode UPC Only	2-5
MSI Plessey Check Digit.....	2-5
MSI/Plessey 2 Check Digit Algorithm.....	2-5
Code 39 Check Digit	2-6
Code 39 Buffering (Scan & Store)	2-6
Beep After Good Decode (only with optional beeper).....	2-6
CLSI Editing	2-6
NOTIS Editing	2-6
• UPC A and E Preamble	2-7
• Prefix/Suffix Values.....	2-7
• Security Options.....	2-8
UPC/EAN Security Level.....	2-8
UPC Security Zone.....	2-8
Bi-Directional Redundancy	2-8
• Laser Control.....	2-9
Trigger Mode	2-9
Laser On Time-out.....	2-9
Laser Off Time-out.....	2-9
• RS-232C Options	2-10
Baud Rate	2-10
Parity	2-10
Handshaking	2-10
Hardware Handshaking.....	2-11
Software Handshaking	2-13
Stop Bit Select	2-15
ASCII Format	2-15
• Intercharacter Delay.....	2-15
• Code ID Character	2-15

Code 39 Buffering	2-17
Buffer Data	2-17
Clear Transmission Buffer	2-17
Transmit Buffer	2-18
Overfilling Transmission Buffer	2-18
Attempt to Transmit an Empty Buffer	2-18
Programming Protocol	2-22
Replacing an LS 6X20	2-36
Converting an LS 6X20 Application to an LS1220 Application	2-36
Downloading Specific Parameters	2-37
Downloading All Parameters	2-37

Chapter 3. Parameter Menus

Set Default Parameter	3-2
Code Type	3-3
Code Lengths	3-6
Decode Options	3-8
UPC-A Preamble	3-12
UPC-E Preamble	3-13
Prefix/Suffix Values	3-14
Security Options	3-16
UPC Security Level	3-16
UPC Security Zone	3-17
Bi-Directional Redundancy	3-19
Laser Control	3-20
Trigger Modes	3-20
Laser On Time-out	3-21
Laser Off Time-out	3-22
RS-232C Options	3-23
Baud Rate	3-23
Parity	3-24
Hardware Handshaking	3-25
Software Handshaking	3-26
Stop Bit Select	3-27
ASCII Data Format	3-28
Intercharacter Delay	3-29
Code ID Character	3-31

Chapter 4. Glossary