DOOR•GARD.

LS2 & LS2P Access Control Lockset Installation & Programming Guide

Note: This product is designed to be installed and serviced by security and lock industry professionals.

LS2 & LS2P Access Control Lockset Programming Manual

Service Company, Put Contact Information Here:
Company Name:

Access system programming: This access system possesses IR communications capability and can be managed as part of an overall access control system with Hub Manager Professional[™] software. Included with your product is the latest version of Hub Manager Professional[™] PC software. See the inside cover for system requirements.

Optional Keypad Programming: The LS2/LS2P unit can be programmed manually using the keypad on each unit and without the use of a personal computer (PC) and software. This manual contains the optional keypad programming instructions. Keypad programming can be helpful to get a door or doors up and running prior to having the availability of the host computer. In all cases, the personal computer programming options supersede the keypad programming options.

Access system programming - System Requirements

• Hub Manager Professional[™] access control software Version 7 or higher (part number HUBSWR, includes software installation instructions). Visit our website at www.nortekcontrol.com for software updates.

PC Hardware Requirements

- IBM-compatible Pentium-class computer
- 30MB available hard disk space
- VGA monitor or better, 800 x 600 resolution recommended
- CD-ROM or DVD-ROM drive
- Mouse

Operating System List

- Hub Manager Professional[™] software Version 8.1 is compatible with Microsoft Windows XP[®], Windows Vista[®], Windows 7[®], and Windows 8[®]
- Hub Manager Professional[™] software Version 7.4 is compatible with Microsoft Windows 2000[®] and Windows XP[®] (upgrading to the latest version is recommended unless using Hub Manager Professional[™] software to program older Max2 Controllers with Modems)

Data Transport Device

- Use with Data Transport Device (Model DTD)
- USB Connectivity to import/export door data and event logs between PC running Hub Manager Professional[™] and DTD
- No additional software application required
- Please visit our website at www.nortekcontrol.com for details

Table of Contents

1. Intr	oductio	on	2
1.1	About	this Manual	2
1.2	Safety	Warnings and Cautions	2
1.3	Desig	n Change Disclaimer	2
1.4	FCC S	itatement	2
1.5	Techn	ical Support	2
1.6	Limite	d Warranty	2
1.7	Gener	al Description and Features	3
1.8	Speci	fications.	4
1.9	Defau	It Settings	4
1.10	LED II	idicators/Sounder Operations	5
1.11	LS2/L	S2P Connectors	6
1.12	Batter	y Operation.	7
	1.12.1	Low Voltage Warning	7
	1.12.2	Low Voltage Inhibit Warning	7
1.13	Perfo	ming a Keypad Self-Test	7
2. Pro	gramm	ing	8
2.1	Gener	al Programming Features	8
	2.1.1	Changing the Master Code	8
	2.1.2	Programming a Supervisor Code	9
	2.1.3	Master Code and Supervisor Features	9
2.2	Progra	amming Users	0
	2.2.1	User Types	0
	2.2.2	Programming a "Code Only" User	1
	2.2.3	Programming "Card Only" Users by Presentation	1
	2.2.4	Programming 26-Bit "Card Only" Users without Presentation	1
	2.2.5	Programming "Code AND Card" Users	2
	2.2.6	Programming "Code OR Card" Users	2
	2.2.7	Programming 26-Bit "Card Only" Users via Batch Entry without Presentation.	3
	2.2.8	Programming Consecutive "Card Only" Users via Batch Entry by Presentation	3
	2.2.9	Quick Program Feature - "Code Only" or "Card Only" 14	4
	2.2.10	Disabling Users	4
	2.2.11	Deleting Users	5
		2.2.11a Deleting a Single User	5
		2.2.11b Deleting a Block of Users	5
2.3	Progra	amming Lock Time Duration and Audio Alerts	6
	2.3.1	Lock Time Duration	6
	2.3.2	Extended Unlock Time	6
	2.3.3	Propped Door and Forced Door Audio Alerts	7
	2.3.4	Propped Door Audio Alert Delay Time	8
	2.3.5	Forced Door Audio Alert Expire Time	8
2.4	Progr	amming Keypad Options and Parameters	9
	2.4.1	Audio Keypress Feedback	9
	2.4.2	Visual Keypress Feedback	9
	2.4.3	Auto-Entry	0
	2.4.4	Card and Code Required for Program Mode	0
	2.4.5		1
	2.4.6		2
		2.4.6.a Timezones	2
		2.4.6.D Auto-Uniock	2
	0.47		3
	2.4.7	Daylight Saving Time	ک ₄
	∠.4.ŏ	Daylight Saving Hille Fulliat	4
	2.4.9	Fracincy Code for Card Programming without Presentation	4
	∠.4.10	24.10 a Error Lockout Throshold	о F
		2.4.10 h Error Lockout Duration	о F
2 5	Fracis	2.4.10.0 Entri Luckoul Dulation	0 8
2.3	2 5 1	Resetting the Master Code and System Defaults Only	6
	2.5.1	Frasing Entire Memory and Resetting System Defaults	6
	2.J.Z 253	Frasing the Transaction Log Memory	7
26	Progr	amming Options Chart	'n
- .v			~

1. Introduction

1.1 About this Manual

This manual is designed for installers of the LS2/LS2P Access Control Lockset. It contains information about operation and keypad programming instructions.

For hardware installation information, refer to the LS2 Installation Instructions (Document # 6-041002), included with this unit.

1.2 Safety Warnings and Cautions

When handling the main printed circuit board, to guard against possible static discharges, touch a grounded object before touching the unit. Static shock can render the product unusable.

1.3 Design Change Disclaimer

Due to design changes and product improvements, information in this manual is subject to change without notice. The manufacturer assumes no responsibility for any errors that may appear in this manual.

1.4 FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into and outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experience radio/television technician for help

Any changes or modifications not expressly approved by the party responsible for compliance could void the users' authority to operate the equipment.

The term "IC:" before the radio certification number only signifies that Industry of Canada technical specifications were met.

1.5 Technical Support

DEALERS/INSTALLERS ONLY! End users must contact the dealer/installer for support. If the keypad still does not work after troubleshooting, please call the Technical Services department at 1-800-421-1587.

1.6 Limited Warranty

This Nortek Security & Control product is warranted against defects in material and workmanship for twenty four (24) months. This warranty extends only to wholesale customers who buy direct from Nortek Security & Control or through Nortek Security & Control's normal distribution channels. Nortek Security & Control does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any. There are no obligations or liabilities on the part of Nortek Security & Control LLC for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation. All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until the warranty expires. This Nortek Security & Control LLC Warranty is in lieu of all other warranties express or implied.

All products returned for warranty service require a Return Authorization Number (RA#). Contact Returns at 1-855-546-3351 for an RA# and other important details.

1.7 General Description and Features

Providing the combination of access control protection, and an ANSI Grade-1 lockset, the LS2/LS2P locksets are a perfect choice to manage door access that may otherwise not be available through traditional hardwired access systems. The access decisions are made at the door and access is granted to those that have a valid PIN programmed into the LS2/LS2P.

The LS2/LS2P unit is typically programmed and managed from a personal computer (PC) using Hub Manager Professional software (Version 7 or higher). The data is transferred to the LS2/LS2P by using the DTD device. Refer to the system requirement information on the inside cover of this manual.

This manual only covers the features available in the product when you are not using the PC software. Please refer to the Hub Manager Professional manual for those details. All the features involving proximity cards are only available in the LS2P product.

Important features include:

- 2000 User capacity
- 2000 Event transaction log
- Built-in proximity reader in LS2P models
- Non-Volatile EEPROM memory allows in-shop programming
- One non-handed unit for both indoor and outdoor applications
- · Wire raceway provides clean installation and protects wires inside door
- Programs the same as all Door+Gard[®] products
- Durable alpha-numeric Braille keys
- Selective Lockout of users
- Passage/Toggle codes allow door to remain unlocked
- Service codes allow one-time entry
- Error Lockout for successive invalid entry attempts
- Two-Stage Low Battery Alert assures entry
- Request to Exit (REX) Input for one-button unlocking of the door from the secure side
- Door Position Input for connection to a door position switch
- Propped Door and Forced Door alerts available when used with a door position switch
- Four standard AA batteries provide up to 150,000 operations (100,000 for the LS2P)

1.8 Specifications

Table 1. Specifications

Electrical			
Voltage	6 Volts (Four 1.5 Volt AA Batteries)		
Current Draw (sleep mode)	30µA		
Monitor Inputs			
Door Position Switch Input	Normally Open, Dry Contact		
Request to Exit (REX) Input Normally Open, Dry Contact			
Credentials (LS2P Only)			
Compatible Proximity Cards (All HID [®] cards up to 40 bits, including the following)	Prox Card II, IsoProx II, DuoProx II, Proxkey FOB		
Unit Capacity			
Users	2000 Maximum (each user can have a card, PIN or both)		
Logged Transactions	2000 Maximum (includes event number, time, date, and user number if applicable)		
Environmental			
Operating Environment	Indoor or Outdoor (The rear part of the system must be indoors; only the keypad can be outside.)		
Operating Temperature	-31° to 150° F (-35° to 66° C)		

1.9 Default Settings

The table below lists the default settings for the unit as shipped from the factory. Subsequent sections in this manual explain how to change these default settings or program additional functions.

Table 2. Default Settings

Option	Default Setting	Option	Default Setting
Master Code	1234	Lock Time	5 Seconds
Audible Keypress Feedback	Enabled	Visual Keypress Feedback	Enabled
Auto-Entry (no * required)	Disabled	Card/PIN Program Mode	Disabled
User Lockout	Enabled	Timezones	Disabled
Auto-Unlock	Disabled	First-In Auto-Unlock	Enabled
DST Time/Date Format	US	Daylight Savings Time	Enabled
Forced Door Audio Alert	Disabled	Propped Door Audio Alert	Disabled
Forced Door Time	10 Seconds	Propped Door Time	30 Seconds
Error Lockout Threshold	3 Attempts	Error Lockout Duration	10 Seconds
Extended Unlock Time	10 Seconds	26-Bit Facility Code	11

1.10 LED Indicators/Sounder Operations

The table below describes the various LED and Sounder indications used in the LS2/LS2P.

LED/Sounder	Visual/Audible Condition	Description	
	Slow flash	Unit is in Program mode	
	Rapid flash	Verify mode is active (during Program Mode)	
Yellow LED	Steady	Program error; error lockout (no keypress feedback), to clear press *	
	Very rapid flash	Memory erase is in progress (Command 46)	
	"Pulsing" rapid flash	Batch program of cards in progress (Command 56); block delete of users (Command 58)	
	Steady green	Lock is energized (timed or latched), green LED lights only for 1 second, regardless of the unlock time	
	Green Drop Out	Auto-Unlock is Active	
Bi-color LED	1/2 Second Green Flash	After enter 5 # Code * ; This sequence indicates a single-use code is programmed.	
	Quick double red/green flash	Prox card read correctly	
	Alternating red/green	Waiting for second PIN or "card and code" user	
	Short beep (100 ms) every 2 seconds	Propped Door Audio Alert	
Sounder	Sounder 1/2 sec on, 1/2 sec off	Forced Door Audio Alert	
(system)	3 slow beeps (250ms), followed by a double-beep	Indicates self-test	
	3 rapid beeps	PIN not found	
	Double Beep	User Lockout Canceled	
	Pair of Double Beep	User Lockout Activated	
	1 Long Beep Followed by 1 Short Beep	Access Denied – User Disabled	
	1 Long Beep Followed by 2 Short Beeps	Access Denied – Bad Timezone	
Sounder	1 Long Beep Followed by 3 Short Beeps	Access Denied – User Locked Out	
(after PIN)	4 Quick Beeps	First-In Auto-Unlock Activated	
	6 Quick Beeps	Toggle Mode Activated	
	4 Long Beeps	Low Voltage Warning	
	4 Long Beeps, pause, 4 more Long Beeps	Low Voltage Inhibit Warning (Door will not unlock)	
	1 Long Beep	PIN verified, but ignored (Only occurs after entering toggle code during auto-unlock)	

Table 3. LED Indicators/Sounder Operations

1.11 LS2/LS2P Connectors

The table below describes the various connectors on the LS2/LS2P and their function.

Connector	Description		
	Battery Connector		
	Pin	Wire Color	Function
J1	1	Red	Battery +
	2	Black	Battery -
	3	Not Used	
	Keypad Connector for Flex	Cable (26 pins)	
J2			
	The flex cable is keyed and p	in 1 must match up.	
	REX/Door Loop		
	Pin	Wire Color	Function
	1	Brown	REX
14	2	Orange	REX
0-	3	Green	Not Used
	4	White	Door Loop
	5	Yellow	Door Loop
	6	Gray	Not Used
	Motor Cable		
15	Pin	Wire Color	Function
00	1	Red	Motor A
	2	Gray	Motor B

Table 4. Connector Pin-outs

1.12 Battery Operation

The LS2/LS2P is a battery powered product. When system is not in use, it consumes very little power, but the batteries normally discharge over an extended period. The unit powers itself down (sleep mode) after each of the following events:

- Fifteen (15) seconds after the last keypress that does not result in an unlock
- Immediately after sending the lock pulse, regardless of what triggered it (valid PIN or REX)
- Fifteen (15) seconds after a Lockout Code is entered
- Immediately after a Toggle/Passage (on/off) code is entered

The LS2/LS2P is equipped with two separate low voltage warnings to indicate when the batteries are low and should be changed. To determine the operating voltage, the unit wakes up momentarily every 30 seconds to check the battery voltage. If the battery is below the warning threshold you get a warning. These are described below.

1.12.1 Low Voltage Warning

When the battery voltage drops below 4.4 Volts, the Low Voltage Warning sounds after entering a valid code/presenting card. This warning is indicated by four long beeps. The lock still activates allowing you access through the door. At this point, it is recommended that you change the batteries as soon as possible.

1.12.2 Low Voltage Inhibit Warning

The Low Voltage Inhibit Warning, which occurs when the voltage drops below 4.0 Volts, is a more severe condition that requires you change the batteries immediately. This is indicated by four long beeps, a pause, then another four long beeps. When this condition occurs the lock does not activate when a user enters their code. In order to get through the door, you must enter either the Master Code, the Supervisor Code or an Emergency Code. These codes have special privileges that allow the door to unlock when the voltage is this low. This allows you access to the secure area to change the batteries.

1.13 Performing a Keypad Self-Test

To verify that all the LS2/LS2P keypad keys are operating properly, you can perform the keypad self-test.

To perform the keypad self-test enter the following on the keypad outside of programming mode:

Press: 7890 # 123456 *

While you are pressing the keys pay attention to the keypress audible and visual feedback (if enabled). Each key should beep when pressed and the yellow LED should flash. If the test is successful the keypad LED's will cycle and the unit beeps three times, followed by a double-beep. The yellow LED flashes on the first beep of the double-beep.

Programming

2. Programming

You can program the LS2/LS2P manually using the keypad on each unit or by using Hub Manager Professional PC Software and a DTD to transfer the data to the door. This chapter contains the optional keypad programming instructions. Keypad programming can be helpful to get a door or doors up and running prior to having the availability of the host computer. To use all of the features available in your LS2/LS2P you must use the PC software. In all cases, the personal computer programming options supersede the keypad programming options.

Certain parameters must be programmed upon initial installation, such as changing the default Master Code.

2.1 General Programming Features

The first step in programming the LS2/LS2P unit is to place it into Program Mode by using the Master Code, which is set to 1234 by default.

- To place the unit in Program Mode, press: 99 # Master Code *
- When the LS2/LS2P is in Program Mode the yellow LED flashes slowly.
- When you are done programming, to exit Program Mode press the ***** key and the yellow LED stops flashing.
- If at any point you make a programming error (either press a wrong key or perform a command the unit does not recognize), the unit produces a program error by turning on the yellow LED solid. To clear a program error, simply press the * key.

Throughout the programming section the last step is to exit Program Mode. If you are going to program multiple users or keypad options, you are not required to exit Program Mode after each command sequence. You may continue to the next programming option without exiting Program Mode. When all your programming is complete, you can then exit Program Mode by pressing the ***** key.

NOTE: You may also access Program Mode using the Supervisor Code. See Section 2.1.2.

2.1.1 Changing the Master Code

The default Master Code is 1234 and should be changed prior to performing any programming on the unit.

To change the Master Code, use Command 1:

1. Enter Program Mode

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Program the new Master Code.

Press: 1 # new Master Code * repeat new Master Code *

The yellow LED continues to flash slowly.

3. Exit Program Mode

Press: *

The yellow LED stops flashing.

If you don't know the Master Code press the program button (SW1) on the main circuit board. To access this button remove the battery cover and take out the battery back/control board module. Leave all the wires connected. SW1 is located next to pin 25 on J2 (the keypad flex cable) through a hole in the bracket. Momentarily pushing this button forces the unit into Program Mode.

NOTE: You can also program the Master Code as "card and code" or "card or code." Please see the users programming section for details.

2.1.2 Programming a Supervisor Code

User location #2 is reserved for the Supervisor Code. This user has access to only user programming commands and can't change other system related options and parameters.

To program the Supervisor Code use, Command 2:

1. Enter Program Mode

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Program the new Supervisor Code.

Press: **2 # Supervisor Code * repeat Supervisor Code *** The yellow LED continues to flash slowly.

3. Exit Program Mode

Press: *

The yellow LED stops flashing.

NOTE: You can also program the supervisor as "card and code" or "card or code." Please see the users programming section for details.

2.1.3 Master Code and Supervisor Features

The following is list of items that pertain only to the Master and Supervisor codes:

- The Master and Supervisor codes can only be programmed as standard user types
- The Master and Supervisor codes can be programmed as "card AND code" or "card OR code" users.
- The Master and Supervisor codes cannot be programmed as "card only."
- When either the Master or Supervisor is programmed as "card AND code," both are required to enter Program mode.
- When they are programmed for "card OR code," only the code is required to enter Program mode.
- If the Master or Supervisor is programmed for "card OR code" and you want them to require both to enter Program mode, enable Option 3 using Command 30 (**30 # 3 # 1 # * ***).

2.2 Programming Users

The following section describes in detail how to program users. The LS2/LS2P can store up to 2000 users. Each user is stored in a separate location in the unit's memory. This is referred to as the user location. Codes can be from 1 to 6 digits in length in any combination.

If at any point while programming a code or a card, you get a programming error (solid yellow LED), and you know you are entering the command correctly, make sure that the code or card is not already programmed. If you are unsure, try entering that code or presenting that card outside of Program Mode and see if you are granted access. If so, you must use a different code or card for that user.

Note: It is recommended that you keep a list of all the users you have programmed in the device, in case you need to modify or delete a particular user.

2.2.1 User Types

The table below identifies and describes the eight user types supported by the LS2/LS2P unit. The user type number is used in programming commands in the subsequent sections where it indicates "user type."

User Type Name	User Type Number	Description	
Toggle User	0	Toggle users are used to latch the lock in the unlocked position for an indefinite period of time. Entering the same (or another) toggle code, re-locks the unit.	
Normal Access1Normal access users are the default user type. This user type un door for the duration of the Lock Time set in Command 11.		Normal access users are the default user type. This user type unlocks the door for the duration of the Lock Time set in Command 11.	
Lockout	3	This user type, locks the keypad disallowing all other codes in a higher user location, plus the door remains in the current state. During a lockout state, card access does not continue to work. If it is locked, it remains locked. If it is unlocked, it remains unlocked until another Lockout code (or the same one) is entered, releasing it from Lockout mode.	
Extended User	4	Extended Unlock users operate like standard access users, except they use a different unlock time programmed using Command 32, Parameter 3. The default value is 10 seconds.	
Single Use Code 5 still greater beet		Single use users are allowed to gain access only once. After you enter this code/card the user is deleted from memory. To verify a single use code is still programmed enter 5 # code * . This looks up the code and flashes the green LED for ½ second if it's still programmed. If it's not found the unit beeps 3 times quickly.	
Relock User	6	A Relock user is used to relock the door if it was toggled open or is in auto- unlock. Once entered, the door relocks immediately. Entering 00 # prior to entering a relock code allows auto-unlock to be re-triggered when first-in auto-unlock is enabled.	
Emergency User	7	An Emergency user is a special user that can't be locked out by a user lockout code. This user can also unlock the door when the battery voltage is below low voltage inhibit threshold of 4.0 Volts. This user also uses the extended unlock time. The default value is 10 seconds.	
Comm. Enable	8	Comm Enable (communications enable) Users are used to enable communications so you can transfer data between the LS2/LS2P and the DTD. This code does not unlock the door.	

Table 5. User Types

2.2.2 Programming a "Code Only" User

This user gains access by entering their code on the keypad. Codes can be from 1 to 6 digits in length in any combination. Refer to Table 5 for details on user types.

To program a "Code Only" user, use Command 50:

1. Enter Program Mode

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Program the "Code Only" User.

Press: **50 # user type # user location # user code * repeat user code *** *The yellow LED continues to flash slowly.*

3. Exit Program Mode

Press: *

The yellow LED stops flashing.

2.2.3 Programming "Card Only" Users by Presentation

This user type gains access by presenting their card to the reader. Refer to Table 5 for details on user types.

To program a "Card Only" user by presentation, use Command 50:

1. Enter Program Mode

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Program the "Card Only" User.

Press: **50 # user type # user location # * *** <present card> The yellow LED continues to flash slowly.

3. Exit Program Mode

Press: *

The yellow LED stops flashing.

2.2.4 Programming 26-Bit "Card Only" Users without Presentation

This command is useful, if you want to program a card, but you don't have the physical card with you. Refer to Table 5 for details on user types.

NOTE: When programming cards with this command, you must program the facility code, using Command 32, Parameter 4, prior to programming users.

To program a 26-bit "Card Only" user without presentation, use Command 51:

1. Enter Program Mode

Press: **99 # Master Code *** The yellow LED flashes slowly.

2. Program the "Card Only" User.

Press: **51 # user type # user location # card number * card number *** *The yellow LED continues to flash slowly.*

3. Exit Program Mode

Press: *

2.2.5 Programming "Code AND Card" Users

When you are a combination "code and card" user you can present either your proximity card first to the proximity reader or enter the code first on the keypad. Codes can be from 1 to 6 digit in length in any combination. After you either present your card or enter your code, the red and green LEDs alternate. This indicates that the unit is awaiting the second part of the combination before granting access. Once access is granted, the bi-color LED turns solid green and the door unlocks. Refer to Table 5 for details on user types.

To program a 26-bit "Code AND Card" users, use Command 50:

1. Enter Program Mode

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Program the "Code AND Card" User.

Press: **50 # user type # user location # user code * repeat user code *** <present card> The yellow LED continues to flash slowly.

3. Exit Program Mode

Press: *

The yellow LED stops flashing.

2.2.6 Programming "Code OR Card" Users

This type of user can use either their code or card to gain access. Codes can be from 1 to 6 digit in length in any combination. Refer to Table 5 for details on user types.

To program a "Code OR Card" users, use Command 52:

- 1. Enter Program Mode
 - Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Program the "Code OR Card" User.

Press: **52 # user type # user location # user code * repeat user code *** <present card> The yellow LED continues to flash slowly.

3. Exit Program Mode

Press: *

2.2.7 Programming 26-Bit "Card Only" Users via Batch Entry without Presentation

"Batch entry" allows you to enter multiple, sequential 26-bit HID[®] format cards into the unit's memory at one time. (Keeping proximity cards in order is easy as the code is printed on the front of each card.) Up to 1,998 users can be added this way at one time. (User 1 is reserved for the Master code and User 2 is reserved for the Supervisor.)

NOTE: When programming cards with this command, you must program the facility code, using Command 32, Parameter 4, prior to programming users.

To program 26-bit "Card Only" users via batch entry without presentation, use Command 57:

1. Enter Program Mode.

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Enter command to batch program users.

Press: 57 # (total number of cards to be added) # (starting user location) # card number * repeat card number *

The yellow LED continues to flash slowly.

NOTE: Never enter one (1) or two (2) as the starting user location since it is reserved for the Master Code and Supervisor Code.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

2.2.8 Programming Consecutive "Card Only" Users via Batch Entry by Presentation

This command provides a simple method of programming a group of consecutive users by presenting the appropriate prox cards. This method of programming cards does not require any knowledge of the card format as long as it contains 40 bits or less of data. Up to 1,998 users can be added this way at one time. Entering the Master Code or supervisor as the first card in the sequence generates an error because these codes cannot be programmed as a "Card Only" users. The card loading stops automatically once the current user location exceeds 2000. Pressing any key on the faceplate aborts the loading process. Refer to Table 5 for details on user types.

To program consecutive "Card Only" users via batch entry by presentation, use Command 53:

1. Enter Program Mode.

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Enter command to batch program users.

Press: 53 # user type # start location # * * <present cards one after another>

The yellow LED continues to flash slowly.

NOTE: Never enter one (1) or two (2) as the starting user location since it is reserved for the Master Code and Supervisor Code.

3. Exit Program Mode.

Press: ***** The yellow LED stops flashing.

2.2.9 Quick Program Feature - "Code Only" or "Card Only"

The LS2/LS2P contains a quick method for programming normal access user type users that are usually programmed using Command 50. When using this method, entering 50 is not required in the command sequence.

To quick program "Code Only" or "Card Only" users:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Program the "Code Only" User.

Press: user location # user code * repeat user code * *The yellow LED continues to flash slowly.* Program the "Card Only" User.

Press: user location # * * <present card> The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

2.2.10 Disabling Users

The LS2/LS2P has a feature that allows you to disable a user without deleting them from the system. Both the Master Code and Supervisor Code are allowed to disable users. The following is a list of actions that are not allowed.

- The Master Code can't be disabled
- The Master Code can disable the Supervisor Code
- The Supervisor Code can be disabled by the Master Code
- The Supervisor Code can't disable itself
- A disabled Supervisor Code can't access Program Mode

To disable (or enable a previously disabled user), use Command 56:

1. Enter Program Mode.

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. To Disable User.

Press: **56 # 1 # user location # * *** *The yellow LED continues to flash slowly.* To Enable User

Press: 56 # 0 # user location # * * The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: ***** The yellow LED stops flashing.

2.2.11 Deleting Users

There are two methods for deleting users from the LS2/LS2P unit. You can either delete a single user or you can delete a block of consecutive users. You must know the user locations for the user(s) you wish to delete in order to do this.

2.2.11a Deleting a Single User

To delete a single user:

- 1. Enter Program Mode.
 - Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Delete the User

Press: User location # * *

To delete user 100, for example, press: 100 # * *

The yellow LED continues to flash slowly. Repeat this step for additional users.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

2.2.11b Deleting a Block of Users

You can delete a block of consecutive users. This command requires you to enter the starting user location you want the deletion to begin and how many users from that point you want to delete. You must enter each value twice to ensure that you've entered the correct number. Every user from the starting location to the ending user location is deleted. For example if you want to delete user 10 to user 25, enter 10 in the start user value and 15 in the number of users value.

To delete a block of consecutive users, use Command 58:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Delete the Block of Users.

Press: 58 # start user # start user # number of users * number of users *

The yellow LED flashes rapidly for several seconds until all the users are deleted.

3. Exit Program Mode.

Press: *

2.3 **Programming Lock Time Duration and Audio Alerts**

The following section shows how to change the lock time duration as well as the propped door and forced door audio alerts.

2.3.1 Lock Time Duration

Setting the lock output time simultaneously sets the time for all normal access users (user Type 1). You can set the lock time in one-second increments from 1 second to 99 seconds. The default value is 5 seconds.

To change the Lock Time Duration, use Command 11:

1. Enter Program Mode.

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Enter the new lock output time (1 to 99 seconds).

Press: **11 # time # 0 # * *** For example, to enter 10 seconds, press: **11 # 10 # 0 # * *** *The yellow LED continues to flash slowly.*

3. Exit Program Mode.

Press: ***** The yellow LED stops flashing.

2.3.2 Extended Unlock Time

The extended unlock time is for programming the unlock time for extended unlock users (Type 4) and emergency users (Type 7). You can program this time from 1 to 255 seconds. The default value is 10 seconds.

To change the Extended Unlock Time, use Command 32, Option 3:

1. Enter Program Mode.

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Enter the extended unlock time (time = 1 to 255 seconds).

Press: 32 # 3 # time # * *

For example, to enter 60 seconds, press: 32 # 3 # 60 # * *

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

SECONDS



DEFAULT

DISABLED

<u>Setting</u>

2.3.3 Propped Door and Forced Door Audio Alerts

The LS2/LS2P is equipped with a local sounder, which is used for the Propped Door and Forced Door audio alerts. By default, these audio alerts are disabled. You have the option to enable them separately or enable them both. Please note that this option controls the audio alerts only. The Propped Door and Forced Door transaction log events are recorded even if the audio alerts are disabled.

The detect a propped door or forced door, a normally closed (closed when the door is shut) door position switch must be installed and wired to the WHITE and YELLOW wires in the LS2/LS2P battery compartment.

To ensure that a forced door audio alert **does not** occur when the door is opened from the secure side of the door (the side without the keypad), the Normally Open Request-To-Exit (REX) input of the LS2/LS2P **must** be closed prior to using the handle to open the door. The REX wires (BROWN and ORANGE) are located in the battery compartment. Either an external REX button, or an LS2/LS2P ordered with the -REX option installed (internal switch on the inside door handle connected to the brown and orange wires) must be used to prevent a forced door audio alert when the door is opened from the secure side.

To program the Propped Door and Forced Door Audio Alerts use Command 32, Option 2:

1. Enter Program Mode.

Press: **99 # Master Code *** The yellow LED flashes slowly.

2. To Enable Forced Door audio alerts only press: 32 # 2 # 1 # * *

The yellow LED continues to flash slowly.

To Enable Propped Door audio alerts only press: 32 # 2 # 2 # * *

The yellow LED continues to flash slowly.

To Enable both Forced Door and Propped Door audio alerts press: 32 # 2 # 3 # * *

The yellow LED continues to flash slowly.

To Disable both audio alerts press: 32 # 2 # 0 # * *

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

2.3.4 Propped Door Audio Alert Delay Time

You can program the Propped Door Audio Alert Delay Time from 10 to 990 seconds in 10 second increments. The propped door audio alert triggers if the door position switch input is held closed (door open) longer than the time set. The audio alert turns off if you either enter a valid code/present a valid card or close the door. The default value is 30 seconds.

To change the Propped Door Audio Alert Delay Time, use Command 44:

- 1. Enter Program Mode.
 - Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Enter the propped door audio alert delay time (time = 10 to 990 seconds).

Press: 44 # time # 0 # * * For example, to enter 60 seconds, press: 44 # 60 # 0 # * *

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

2.3.5 Forced Door Audio Alert Expire Time

You can program the Forced Door Audio Alert Time from 10 to 990 seconds in 10 second increments. The forced door audio alert triggers immediately if the door position switch input is closed (door open) without entering a valid code/card or activating the REX. It times out after the forced door time expires. Enter 00 in the time field to toggle the audio alert. The audio alert turns off when you either enter a valid code/present a valid card or wait until the timer expires (when not set to toggle). The default value is 10 seconds.

To change the Forced Door Audio Alert Expire Time, use Command 45:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Enter the forced door expire time (time = 10 to 990 seconds).

Press: 45 # time # 0 # * * For example, to enter 60 seconds, press: 45 # 60 # 0 # * * The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *





6-041000 X2

2.4 Programming Keypad Options and Parameters

The following section details various keypad programming options.

2.4.1 Audio Keypress Feedback

Audio Keypress Feedback refers to the sounder beeping momentarily each time a key is pressed. This feedback indicates the key was pressed hard enough for the keypad to acknowledge and recognize which key you pressed. The default setting is enabled.

To enable or disable the Audio Keypress Feedback use Command 30, Option 0:

1. Enter Program Mode.

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. To disable this feature, press: 30 # 0 # 0 # * *

The yellow LED continues to flash slowly.

To renable this feature, press: 30 # 0 # 1 # * *

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

2.4.2 Visual Keypress Feedback

Visual Keypress Feedback refers to the yellow LED flashing momentarily each time a key is pressed. This feedback indicates the key was pressed hard enough for the keypad to acknowledge and recognize which key you pressed. The default setting is enabled.

To enable or disable the Visual Keypress Feedback use Command 30, Option 1.

- 1. Enter Program Mode.
 - Press: 99 # Master Code *

The yellow LED flashes slowly.

2. To disable this feature, press: 30 # 1 # 0 # * *

The yellow LED continues to flash slowly. To enable this feature, press: **30 # 1 # 1 # * *** The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

DEFAULT

ENABLED

Programming

2.4.3 Auto-Entry

Auto-Entry is a feature that determines whether or not you need to press the ***** key after entering your access code on the keypad. **By default, the feature is disabled** which means you are required to enter the ***** key after your access code to gain entry. If you enable the feature you are not required to enter the ***** key after entering your code to gain entry. This feature applies only to codes that are the same length as the Master Code. For example if the Master Code is four-digits, your user code must be four digits to use the auto-entry feature. All codes less than four digits require the ***** key. Codes longer than the Master Code are not allowed, since you'll reach that number of digits prior to entering the ***** key.

Note: When auto-entry is enabled you do not have to press the ***** key after **"99 # Master Code**" to enter Program Mode.

To enable or disable Audio-Entry use Command 30, Option 2:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. To enable this feature, press: 30 # 2 # 1 # * *

The yellow LED continues to flash slowly. To disable this feature, press: **30 # 2 # 0 # * ***

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

2.4.4 Card and Code Required for Program Mode

The LS2/LS2P has feature that allows you to require both a card and code to enter Program Mode. If you program the Master Code or Supervisor Code as a "Card or Code" user they are normally only required to enter the code to enter Program Mode. If you enable this option, then both are required to enter Program Mode. First enter **99 # Master Code/ Supervisor Code *** and the unit's bi-color LED starts alternating red and green. Now present your card. If the master or supervisor is programmed as "card and code" then both are always required to enter Program Mode. The default setting is disabled.

To enable or disable Card and Code Required for Program Mode use Command 30, Option 3:

1. Enter Program Mode.

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. To enable this feature, press: 30 # 3 # 1 # * *

The yellow LED continues to flash slowly. To disable this feature, press: **30 # 3 # 0 # * ***

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

DEFAULT
DISABLED
SETTING

DEFAULT

DISABLED

<u>Setting</u>

LS2 & LS2P Programming Manual

2.4.5 User Lockout

User lockout is used to lock down the unit so users cannot gain entrance through the door. If a locked out user attempts to gain access after a lockout code (user Type 3) is entered the unit indicates an access denied error condition.

The User Lockout option allows user codes to be assigned as a "Lockout" user (Type 3). When this type of code is entered, only codes in lower locations function; codes in higher locations do not function.

For example, if user 30 is a lockout user and they enter their code, users 31 to 2000 will be denied access. Then, if after that, user 10 is a lockout user and they enter their code, users 11 to 2000 will be denied access (including lockout user 30 who use to have access).

To remove the lockout, the same code that started the lockout can be entered again, or a lockout code in a lower position than the first lockout can be entered twice (once to change the first lockout code position, then a second time to clear the lockout).

The default setting is enabled.

Note: The Master Code, Supervisor Code, and Emergency Code users can't be locked out.

To enable or disable User Lockout use Command 30, Option 5:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

- 2. To disable this feature, press: 30 # 5 # 0 # * * The yellow LED continues to flash slowly. To enable this feature, press: 30 # 5 # 1 # * * The yellow LED continues to flash slowly.
- 3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

DEFAULT ENABLED SETTING

2.4.6 Using the Default Auto-Unlock Timezone

The LS2/LS2P contains a default Auto-Unlock timezone from 9:00 A.M. to 5:00 P.M. Software is not required for this feature to work. First you must enable timezones and then enable auto-unlock timezones. If you want it to operate as a first-in auto-unlock timezone you must also enable that feature. The default setting is disabled.

Note: If you require additional timezones you must use the PC software.

2.4.6.a Timezones

To enable or disable Timezones use Command 30, Option 9:

- **1.** Enter Program Mode.
 - Press: 99 # Master Code * The yellow LED flashes slowly.
- 2. To enable this feature, press: 30 # 9 # 1 # * *

The yellow LED continues to flash slowly. To disable this feature, press: **30 # 9 # 0 # * ***

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: ***** The yellow LED stops flashing.

2.4.6.b Auto-Unlock

Auto-Unlock is disabled by default.

To enable or disable Auto-Unlock, use Command 30, Option 11:

- 1. Enter Program Mode.
 - Press: 99 # Master Code * The yellow LED flashes slowly.
- To enable this feature, press: 30 # 11 # 1 # * *
 The yellow LED continues to flash slowly.

To disable this feature, press: **30 # 11 # 0 # * *** The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

DEFAULT DISABLED SETTING

DEFAULT DISABLED SETTING

2.4.6.c First-In Auto-Unlock

First-in Auto-Unlock is enabled by default.

To enable or disable First-in Auto-Unlock, use Command 30, Option 12:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. To disable this feature, press: 30 # 12 # 0 # * * The yellow LED continues to flash slowly. To enable this feature, press: 30 # 12 # 1 # * * The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: ***** The yellow LED stops flashing.

2.4.7 Daylight Saving Time

Daylight Saving Time is enabled by default.

To enable or disable Daylight Saving Time, use Command 30, Option 13:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. To disable this feature, press: 30 # 13 # 0 # * * The yellow LED continues to flash slowly.
To enable this feature, press: 30 # 13 # 1 # * *

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.

ENABLED SETTING

DEFAULT

DEFAULT ENABLED SETTING You can program the Daylight Saving Time Format to either European format or US format. The formats are as follows:

- United States Format:
 - Begins Second Sunday in March turn ahead 1 hour @ 2:00 AM
 - Ends First Sunday in November turn back 1 hour @ 2:00 AM
- European Format:
 - Begins Last Sunday in March turn ahead 1 hour @ 2:00 AM
 - Ends Last Sunday in October turn back 1 hour @ 2:00 AM

The Daylight Saving Time Format is set to US Format by default.

To change the Daylight Saving Time Format, use Command 30, Option 15:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. To select European DST Format, press: 30 # 15 # 1 # * * *The yellow LED continues to flash slowly.* To select US DST Format, press: 30 # 15 # 0 # * *

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: ***** The yellow LED stops flashing.

2.4.9 Facility Code for Card Programming without Presentation

This option is used to set the facility code used when you are programming card users using Commands 51 and 57.

Prior to programming users using these commands you must set this value to match that of the cards you are going to be programming.

The default value is 11, which is the same as $HID^{\textcircled{R}}$ format proximity cards.

To change the Facility Code for Card Programming without Presentation, use Command 32, Parameter 4:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Enter the facility code (value = 0 to 255).

Press: 32 # 4 # value # * * The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing

NOTE: If you want to program users with a different facility code, simply change the facility code with Command 32, Parameter 4 before each series of users.



DEFAULT **11** VALUE

LS2 & LS2P Programming Manual

2.4.10 Error Lockout

This feature refers to the number of invalid keypad attempts you can make before the keypad locks up. It's used to keep people from continually attempting to gain access to the door by entering various code combinations by trying to guess a code or presenting cards.

This also applies to attempting to enter Program Mode by guessing the Master Code. As attempts are made, the unit maintains a count of the number of consecutive invalid attempts. When the number reaches the value programmed in the Error Lockout Threshold, the unit locks up for the amount of time programmed in the Error Lockout Duration.

When the unit locks up, the yellow LED remains on solid for five seconds and turns off. If error lockout is still active when the unit wakes up, the yellow LED remains on solid for an additional five seconds.

There are a couple of ways to reset this count prior reaching the count limit. You can reset it by either entering a valid keypad code, presenting a programmed prox card, pressing the program button, entering a valid [99 # Master code *] sequence, or by the expiration of the keypad timer.

2.4.10.a Error Lockout Threshold

The Error Lockout Threshold is the number attempts you can make before the unit locks up. The default value is 3 attempts.

To change the Error Lockout Threshold, use Command 32, Parameter 0:

- 1. Enter Program Mode.
 - Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Enter the Error Lockout Threshold (value = 1 to 50; default = 3 attempts).

Press: 32 # 0 # value # * *

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: \star

The yellow LED stops flashing.

2.4.10.b Error Lockout Duration

The Error Lockout Duration is the amount of time the unit is locked out for when the Error Lockout Threshold is reached. The default value is 10 seconds.

To change the Error Lockout Duration, use Command 32, Parameter 1:

- 1. Enter Program Mode.
 - Press: 99 # Master Code * The yellow LED flashes slowly.
- Enter the Error Lockout Duration (value = 1 to 255; set in 1 second increments; default = 10 seconds).

Press: 32 # 1 # value # *

For example: To set for 30 seconds press 32 # 1 # 30 # * *

The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

The yellow LED stops flashing.



DEFAULT

SECONDS

Programming 2.5 Erasing Memory

There are two methods for deleting programmed information from the LS2/LS2P. The first method is using Command 40, which resets the system defaults and the Master Code only. The second method is through Command 46, which erases all the memory in the unit, except the transaction log. Command 76 is used to erase the transaction log.

2.5.1 Resetting the Master Code and System Defaults Only

Entering Command 40 erases everything from the LS2/LS2P memory **except the user list and transaction log** and restores the default settings. This is useful if the unit has experienced programming problems, or wish to delete earlier programming.

To erase the memory, restore the defaults including the Master Code, but KEEP the user list, use Command 40:

1. Enter Program Mode.

Press: 99 # Master Code *

The yellow LED flashes slowly.

2. Enter the command to reset system defaults.

Press: 40 # 00000 # 00000 # * * The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: ***** The yellow LED stops flashing.

2.5.2 Erasing Entire Memory and Resetting System Defaults

Entering Command 46 deletes everything from the LS2/LS2P memory **including the user list** but not the transaction log and restores the default settings. This is used as a last resort if you need to erase a specific user and could not retrieve the Programmed User List.

To erase the memory, restore the defaults including the Master Code, and ERASE the user list, use Command 46:

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Enter the command to erase memory.

Press: 46 # 00000 # 00000 # * *

The yellow LED flashes rapidly for several seconds until the memory is deleted.

3. Exit Program Mode.

Press: *

2.5.3 Erasing the Transaction Log Memory

Entering Command 76 erases the transaction event log. This command normally would not be entered, but is available in case you have need to erase the log manually.

1. Enter Program Mode.

Press: 99 # Master Code * The yellow LED flashes slowly.

2. Enter the command to erase log memory.

Press: **76 # 00000 # 00000 # * *** The yellow LED continues to flash slowly.

3. Exit Program Mode.

Press: *

2.6 Programming Options Chart

The following chart is a complete list of programming commands available in the LS2/LS2P. This chart is for quick reference. Please refer to the preceding sections for complete details of each command. Defaults are in **bold**.

Table 6. Programming Options

Action Desired	Press	Details
Enter Program Mode	99 # (Master Code) *	Yellow LED flashes slowly
Change Master Code	1 # (new code) * (repeat code) * Ex: 1 # 4321 * 4321 *	Code-only operation
Program Supervisor Code	2 # (new code) * (repeat code) *	No Default (empty)
Set lock time	11 # time # 0 # * *	Time =1-99 seconds (default = 5 seconds)
Set/clear standard options	30 # Option # 0 or 1 # * *	See Chart below
Option	Set	Clear
0 – Audio Keypress Feedback	1 = Enabled	0 = Disabled
1 – Visual Keypress Feedback	1 = Enabled	0 = Disabled
2 - Auto-Entry	1 = Enabled	0 = Disabled
3 – Code and Card Required for Program Mode	1 = Enabled	0 = Disabled
5 – User Lockout Enable	1 = Enabled	0 = Disabled
9 – Time Zone Select	1 = Enabled	0 = Disabled
11 – Auto-Unlock Select	1 = Enabled	0 = Disabled
12 – First-In Auto-Unlock	1 = Enabled	0 = Disabled
13 – Daylight Saving Time	1 = Enabled	0 = Disabled
15 – Daylight Saving Time Format	1 = European	0 = US
Change Platform Parameters	32 # Parameter # value # * *	See Chart Below
Parameter	Value	
0 – Error Lockout Threshold	1 – 50 Attempts (Default = 3)	
1 – Error Lockout Duration	1-255 Sec. (Default = 10 Sec.)	
2 – Propped Door and Forced Door Audio Alerts	0 = No Audio Alerts; 1 = Forced Door Alerts	
	2 = Propped Door Alerts; 3 = Forced & Propped Door Alerts	
3 – Extended User Unlock Time	1-255 Sec. (Default = 10 Sec.)	
4 – Facility Code (For Commands 51 & 57)	0 – 255 (Default = 11)	
Reset System Defaults Only	40 # 00000 # 00000 # * *	Does not delete users
Set System Time	41 # hhmm # 0 # * *	hhmm=hour/minute (24 Hour Format)
Set System Date	42 # mmddyy # dow # * *	mmddyy=month, date, year; dow=day of week, 1=Sunday
Set Propped Door Time	44 # time # 0 # * *	Time = 10-990 seconds; (default=30 secs)
Set Forced Door Time	45 # time # 0 # * *	Time = forced door time, to nearest 10's seconds, entered as 30-990; (default=10 secs)
Delete Entire Memory and Reset System Defaults	46 # 00000 # 00000 # * *	Deletes all memory including users
Program User – Code Only	50 # user type # user location # code * repeat code *	User Types: 0 – Toggle 1 – Standard 3 – Lockout 4 – Extended 5 – Single Use 6 – Relock 7 – Emergency 8 – Comm Enable

LS2 & LS2P Programming Manual

Action Desired	Press	Details
		<u>User Types:</u>
		0 – Toggle
		1 – Standard
Drearem Llear Code AND Cord	50 # user type # user location #	3 – Lockout
Program User – Code AND Card	code * repeat code * * <present< td=""><td>4 – Extended</td></present<>	4 – Extended
By Presenting Card	card>	5 – Single Use
		6 – Relock
		7 – Emergency
		8 – Comm Enable
		<u>User Types:</u>
		0 – Toggle
		1 – Standard
Program User Card Only	50 # user type # user location # * *	3 – Lockout
By Presenting Card	so # user type # user location # * *	4 – Extended
By Tresenting Card		5 – Single Use
		6 – Relock
		7 – Emergency
		8 – Comm Enable
		<u>User Types:</u>
	51 # user type # user location # card	0 – Toggle
	PIN * card PIN *	1 – Standard
Program User – Card Only		3 – Lockout
Without Presenting Card	For 26-bit Cards only.	4 – Extended
Without Presenting Ouro	The card PIN appears on the card	5 – Single Use
	(Facility code must be entered first;	6 – Relock
	see Command 32, Parameter 4)	7 – Emergency
		8 – Comm Enable
	52 # user type # user location # code * repeat code * <present card=""></present>	<u>User Types:</u>
		0 – loggle
		1 – Standard
Program User – Code OR Card		3 – LOCKOUT
By Presenting Card		
		5 – Single Use
		6 – Relock
		7 – Emergency
	53 # user type # start user # * * <present card=""> <present card=""></present></present>	0 Toggle
		1 - Standard
		3 – Lockout
Program Consecutive Users – Card Only		4 – Extended
By Presenting Cards	Simply present one card after another.	5 - Single Use
		6 – Relock
		7 - Emergency
		8 – Comm Enable
	56 # enable/disable # user location	Enable = 0
Enable/Disable Users	# * *	Disable = 1
		"Number of Users" = total
		number of cards to be
Program Consecutive Users – Card Only	57 # number of users # user location	entered; card PIN appears
Without Presenting Cards	# card PIN * card pin *	on card; a facility code
	-	must be entered first (see
		Command 32, Parameter 4)
Delete Block of Consecutive Users	58 # start user # start user # number	
	of users * number of users *	
Delete Single User	user location # * *	
Erase Transaction Log	76 # 00000 # 00000 # * *	

