



Operations Manual

E-PLEX 2000



Kaba Access Control
2941 Indiana Avenue Winston-Salem, NC 27105 USA
Tel: (800) 849-8324 (336) 725-1331
Fax: (800) 346-9640 (336) 725-3269
www.e-plexlock.com • www.kaba-ilco.com

PK3173 0306



TABLE OF CONTENTS

States of the Lock	4
Factory Mode	4
Access Mode	4
Pushbutton Programming Mode	4
Sequence of Operations for Start-Up Programming	4
Default Values of the E-Plex 2000 Programmable Parameters	5
Configuring the Lock	6
General Procedure for Pushbutton Programming	6
Reset Procedures	7
Procedure 1 - Program the Access Code Length	7
Procedure 2 - Modify the Master User Access Code	8
Procedure 3 - Program the Unlock Time	8
Procedure 4 - Program the Duration of the	9
Passage Mode Period	
Procedure 5 - Program the Lock for Tamper Time Parameters ..	10
Procedure 6 - Programming the Lock for Keypad	11
Buzzer Volume	
Users - General Information	11
User Levels	12
User Codes	13
User Access Codes (PINs) - Examples	13
Procedure 1 - Add / Modify a User Access Code	14
Procedure 2 - Add / Modify a Manager Access Code	14
Procedure 3 - Add / Modify Service User Access Code	15
Procedure 4 - Delete User Access Codes	19
Procedure 5 - Delete Manager Access Codes	19
Procedure 6 - Delete Service User Access Codes	20
Procedure 7 - Delete All Access Codes Except Master	20
and Manager	
Procedure 8 - Activate User Access Codes	21
Procedure 9 - Activate Manager Access Code	21
Procedure 10 - Activate Service User Access Code	22
Procedure 11 - Activate All User Access Codes	22

TABLE OF CONTENTS (continued)

Procedure 12 - Activate / De-activate Passage Mode	23
Procedure 13 - De-activate User Access Codes	23
Procedure 14 - De-activate Manager Access Codes	24
Procedure 15 - De-activate Service User Access Code	24
Procedure 16 - De-activate all Access Codes except	25
Master and Manager	
Procedure 17 - Activate / De-activate Lockout Mode	25
Procedure 18 - Perform Manual Diagnostics	25
Battery Life and Replacement	26
Summary of Pushbutton Programming Commands	27
Visual Feedback Message Definitions	30
User List Table	31

*A publication of Kaba Access Control
2941 Indiana Avenue
Winston-Salem, NC 27105*

March 2006

No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without prior written permission from the Publisher.

The information contained in this publication is accurate to the best of Kaba Access Control's knowledge.

Specifications are subject to change without notice.

States of the Lock

Factory Mode

The factory mode is one of three primary states of the E-Plex 2000. The main characteristics of this state are:

- The E-Plex 2000 opens only when the 8-digit master combination (1-2-3-4-5-6-7-8) is keyed in.
- The visual indication for 'access granted' is green LED flashing once. A high-pitched tone is also generated while the green LED is on.
- The Master User must change the combination to be able to exit the factory mode, and switch to the access mode.

Access Mode

This mode refers to a lock that is operational for user access, and not in factory or Programming Mode.

Pushbutton Programming Mode

The E-Plex 2000 enters the Pushbutton Programming Mode when the user enters the master combination or one of the manager combinations, preceded and followed by the character '#' (ex: #12345678#). Once the E-Plex 2000 is in the Pushbutton Programming Mode, the Master/Manager can enter one or more command sequences. Each command sequence ends with a '#' character that acts like an **<enter>** character. At the very end of all sequences of programming commands, enter one more # to remove the lock from the Pushbutton Programming Mode to return to normal access mode.

Sequence of Operations for Start-Up Programming

What is the recommended sequence of operations?

With the E-Plex 2000 in the factory mode.

- Program the Access Code Length (default length is four digits).
The access code field length can only be changed when the lock is not activated (when still in the factory mode).
- Change factory Master to your own Master Code (always eight digits) to place lock in access mode.

Put lock in Pushbutton Programming Mode.

- Program the Unlock time.
- Program the Lock for the Duration of Passage Mode (if desired).
- Program the Lock for Tamper Time Settings.
- Program the Lock for Buzzer Volume.
- Add Access Codes as desired.

Default values of the E-Plex 2000 programmable parameters

Parameters	Factory Default Values
Lock state	Unprogrammed
Passage mode open time limit	9 hours
Passage mode	De-Activated
Lockout mode	De-Activated
Unlock time	2 seconds
Buzzer volume control	Low
Tamper shutdown time	30 seconds
Tamper attempt count	4 attempts
Access code length	4 digits
Master combination	12345678 (8 digits)
Access code	None
Code status	Activated

Configuring the Lock

General Procedure for Pushbutton Programming

1. The pages that follow provide step-by-step instructions for programming the E-Plex 2000 lock.
2. The general procedure for all programming functions is as follows:
 - a. Put the lock in Programming Mode by pressing # Master Code #
 - b. Use the Summary of Commands Table in the appendix section of this guide to enter the three digit command sequence (Command Type + Function Code), followed by #.
 - c. Enter the appropriate numbers as required.
 - d. Press # to end Programming Mode.
 - e. Once the lock is in programming mode, multiple command sequences can be entered without having to repeat the #mastercode#. However, if there is no activity for 15 seconds at the keypad, the lock will automatically exit from programming mode.

For example

- If the Master or Manager enters his code of **87654321**, the door will open.
- If he enters **#87654321#**, the lock will enter into the Programming Mode and wait for the next part of the command.
- If he enters the # sign twice at the end of the code, for example **#87654321##**, the lock will go out of Programming Mode and return to its normal mode.

Note: The # pound sign acts like the Enter key on a keyboard in your communications with the lock. The # tells the lock that one part of the entry is finished. The # serves another purpose - to distinguish a programming type command from a simple Access Code to open the door. A Master or Manager User can use the same number to open the door or to put the lock in Programming Mode, the only difference being that he uses the # sign in front to signal that he is about to enter a programming command. For increased security, it is recommended that the master user code not be used for everyday access. This can be accomplished by creating an access user code for the master user.

Reset Procedures

There are three different “Reset” levels available in the E-Plex 2000.

Code 099# will reset the lock to the factory default settings except for the access code length (Master and Manager User codes are retained if already programmed)

Code 299# will delete all access and service user codes (Master and Manager users are retained)

Hard Reset will return the lock to factory mode including deleting all codes, putting the lock back to factory default values (4 digit access code length) and making the master code 1-2-3-4-5-6-7-8. A hard reset is performed as follows.

Resetting a Lock to Factory-Default: (lock must be powered)

- On the inside or back housing, remove the top right screw holding the lock to the door.
- Insert a long non-metallic blunt ended tool in the screw hole to press and release the Reset-to-Factory-Default button. You will hear the motor turning if successful, meaning the lock has reset.

Procedure 1 - Program the Access Code Length

Setting the length of Access Codes must be the first lock programmable function you perform, because all your other access codes must have the same length. If a user enters a code of a different length, the lock will not accept it. Longer length Access Codes permit a greater number of code possibilities, and thus higher security. The master code must always be 8 digits

Required User Level: Master

1. To configure the E-Plex 2000 programmable pushbutton lock, it must first be placed in Programming Mode.

Important: This is the only programmable function that can be done during the factory mode using the factory master code. Except for changing from the factory code to a new master code.

2. Enter the E-Plex 2000 factory Master (Programming) Code (**#12345678#**). The lock responds with a flashing green light. If 1-2-3-4-5-6-7-8 does not seem to work, please follow the steps to perform a hard reset by following the procedure in on page 7.

3. Enter the code **009 #LL #**, where **LL** represents the length (number of digits in a code). The range is from 04 to 08 digits. **You can leave the factory default Access Code length (4 digits) if you wish.**
4. Example of Complete Entry: **009#05#**.
5. Key in another # to indicate the end of programming.
6. From now on, all the Access Codes you create must be the length specified in this step, which is 5 digits.

Procedure 2 - Modify the Master User Access Code

Required User Level: Master

1. To change the factory code or current Master Code, follow the next three steps:
2. Put lock into Pushbutton Programming Mode.
3. Use the command, **000**, for Master, then the new Master Code number.
4. You must use 8 digits between 00000000 and 99999999 as follows: **000#MMMMMMMM#**, we'll use **000#87654321#** as an example.
5. Enter the Master Code again **87654321#** for confirmation.
6. Example of Complete Entry: **000#87654321#87654321#**.
7. Key in another # to indicate the end of programming.
8. After that, you will always use your own Master Code. Please write the code down and keep in a safe place. The factory code is no longer valid.

Required User Level: Master

Procedure 3 - Program the Unlock Time

Unlock time is the length of time the door will remain unlocked when a correct code is entered before automatically re-locking itself.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. To establish Unlock Time, enter the following code: **004#TT#**, where **TT** is the time in seconds, (**TT=02** to 20 seconds, for example 10 seconds).

3. Example of Complete Entry: **004#10#**.
4. Enter another # to indicate the end of programming.
5. You have now programmed an Unlock Time of 10 seconds for the door.

Procedure 4 - Program the Duration of the Passage Mode Period

You might want to program locks for public areas, such as cafeterias, to have free access (Passage Mode) during certain periods of the day, and revert to required code access outside of these regular hours.

The length of time that the lock remains in Passage Mode is programmable.

The factory default length of time for Passage Mode is 9 hours - you may leave the default.

Once the lock has been put into Passage Mode, it will automatically relock after the designated duration.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter command code **005#**.
3. Then **TT#**, where **TT= 01 to 24** hours.
4. A **TT** entry of 00 means there is no time limit - the door remains unlocked.
5. Enter **005 #TT#**; for example, **005#06#** for six hours.
6. Example of Complete Entry: **005#06#**.
7. Enter another # to indicate the end of programming.
8. In this example, the lock will remain unlocked for six hours, starting from the time you put it in Passage Mode.
9. You have now configured the duration of the Passage Mode period for that lock. This does **NOT** initiate Passage Mode.
10. The new length of time will take effect the next time you put a lock into Passage Mode by following the correct command sequence.

Procedure 5 - Program the Lock for Tamper Time Parameters

You can set a Tamper Time Wrong Tries parameter referring to the number of times the wrong code can be entered before the lock goes into Tamper Shutdown Mode.

For example, if you program the lock to accept three wrong tries, the lock will tolerate three wrong entries, staying locked but providing visual feedback (see visual message chart in rear section). After that, it will go into a Tamper Shutdown Mode and remain locked until the end of the Tamper Shutdown Time period - the length of that period is configured in Steps 1a through 1 c below.

Required User Level: Master, Manager

1. Set the tamper time for the period of time during which the keypad will remain inaccessible after the specified number of wrong Access Codes are entered
 - a. Put the lock into Pushbutton Programming Mode.
 - b. Enter the code as follows - **006#TT#** (TT is seconds - **00 to 90** seconds).
 - c. Example of Complete Entry: **006#30#**. (for 30 seconds)
2. Enter the code as follows: **007 #TT#** (TT is number of wrong entries - **03 to 09**), let's use **03** for example.
 - a. Example of Complete Entry: **007#03#**.
 - b. Enter another # to indicate the end of programming.
 - c. The lock will stay locked after three wrong entries for the length of time you select in the steps below, **even if a valid code (including the Master or a Manager Code) is entered after the three wrong codes. Only the mechanical key override will open the lock during the lockout period.**
 - d. Enter another # to indicate the end of programming.

In this example, the lock will now remain locked out for 30 seconds after three wrong Access Codes have been entered. No codes, even valid ones, will work in the lock until that time period has elapsed. During this tamper shut down period, the lock will flash the red LED once every 10 seconds

Procedure 6 - Programming the Lock for Keypad Buzzer Volume

You might want to adjust the volume of the Keypad Buzzer depending on where the lock is located - a noisy or quiet area.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter the code **008#VV#** (where VV is a scale of volume from 00 to 03; 00 = off; 01 = Low; 02 = Normal; 03 = High).
3. Example of Complete Entry: **008#02#**.
4. Enter another # to indicate the end of programming.
5. The lock will now sound the buzzer at the desired volume Normal, until you change it.

Users - General Information

1. Master and Manager Codes can do two different things:
 - Open the door by entering the Access Code without # signs.
 - Put the lock into Pushbutton Programming Mode by entering # before and after their Access Code.
2. Each user (Manager User, Service User or Access User) occupies one of the available 100 locations in the user table.
3. By default, user 000 is the Master User.
4. Users have a 15-second period to enter the entire key sequence, and 5 seconds between pressing each pushbutton number. If they pause longer than 5 seconds between each pushbutton pressed, or exceed the 15-second period to enter the total sequence, the lock:
 - aborts the current programming sequence
 - automatically exits the programming state
 - sends the user a 'Keypad Timeout' feedback message

Note: Correct errors during a command sequence. If an invalid entry occurs, recover from the mistake by entering the (*) key, which will clear all entries made from the beginning of the current command sequence, and will reset the 15-second time limit for entering the code. In this case, you still have 15 seconds from the first number entered to enter the whole code.

User Levels

Four different classifications of users can perform various operations at the lock.

Master User - The Master User is the top-level manager who performs the initial lock setup activities and can program all lock functions. There is a maximum of one Master User per lock.

Manager - A Manager can program all lock functions except:

- defining the Access User Code length
- modifying master user Access Code
- resetting to default value
- activating lockout mode
- adding / deleting / enabling / disabling a Manager User. The number of Managers is limited only by available user table space (99 maximum because one (000) is reserved for the Master Code).

Access User - An Access User has the ability to open the lock. The number of Access Users is limited only by available user table space (99 maximum because one (000) is reserved for the Master Code).

Service User - A user with an Access Code valid for a configurable period of time. This period of time starts on the first use of the code. Each Service User combination is automatically deleted after its period of time expires. The number of service users is limited only by available user table space (99 maximum because one (000) is reserved for the Master Code).

Note: The total number of codes enrolled into the lock at any given time cannot exceed 100, regardless of code classification.

User Codes

Each time you add a user to give access to a door, you must program the door with an Access Code for them. This User Access Code can also be referred to as a PIN (Personal Identification Number). If you modify the Access Code for an existing user, the procedure is the same.

User Codes must not have the exact same numbers in the same position as the Master Code.

The Master Code **00004992** is used as an example in the table below.

User Access Codes (PINs) - Examples

Master Code	User Code Length	Sample User Codes	
		Acceptable	Unacceptable
00004992	4 digits	1000	0000
		0005	
		1206	
		0001	
00004992	5 digits	32000	00004
		00006	
		00100	
		00044	
00004992	6 digits	001041	000049
		000046	
		400492	
		000048	
00004992	7 digits	0005521	0000499
		2000499	
		9900872	
		1000892	
00004992	8 digits	80009765	00004992
		12006654	
		00004993	
		40004992	

Procedure 1 Add/Modify a User Access Code

- When users no longer need access to the lock, delete the User Code. This permits you to use the number for a new user.
- If you only de-activate the old code, you cannot add a user with the same number. De-activate should only be used when the User is, for example, on vacation, and his number will be re-activated when he returns.
- A User ID location is a 3-digit number assigned by the Master or Manager. You should have the list of User ID locations with you when programming locks. You should always maintain an accurate and correct list of User ID locations and users assigned to those ID locations. See the supplied sample form for your convenience on page 31.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter command **100#** to add/modify a User Access Code.
3. Enter the ID location followed by # - **NNN#**, we use **023#** for example (Range = 000 to 099). The chart on page 30 may be helpful.
4. Enter **UUUUUUUU#**, representing a User Access Code of between 4 and 8 numbers, depending on the length of Access Code that you selected in Procedure 1 on page 7. For example, if your code length is 4 digits, the number could be **1024#**.
5. Enter the code **1024#** again.
6. Example of Complete Entry: **100#023#1024#1024#**.
7. Enter another # to indicate the end of programming.
8. In this example, the User Access Code **1024** will now work in that door with all the access privileges assigned to that regular User.

Procedure 2 - Add/Modify a Manager Access Code

Each time you add a Manager access to a door, you must program the door with a Manager Access Code. If you change the Access Code for an existing Manager, the procedure is the same.

Required User Level: Master

1. Put the lock into Pushbutton Programming Mode.
2. Enter command **101#** to add/modify a Manager Access Code.
3. Enter the User ID location (a three-digit number you have on a list that you should carry with you) followed by #, for example **024#**.
4. Enter **UUUUUUUU#**, representing a User Access Code of between 4 and 8 numbers, depending on the length of Access Code that you selected in Procedure 1 on page 7. For example, if your code length is 4 digits, it could be **1224#**.
5. Enter the code **1224#** again.
6. Example of Complete Entry: **101#024#1224#1224#**.
7. Enter another # to indicate the end of programming.
8. The Manager Access Code **1224** will now work in that door with all the access privileges assigned to a Manager User.
9. Manager Users can open the door by just entering the Access Code without the # signs, or put the lock into Pushbutton Programming Mode by entering # before and after their Access Code.

Procedure 3 - Add/Modify Service User Access Code

A Service User is any person who needs access to the lock for a limited time period in order to perform a service, such as painting or repairs in the room or area. A Service User Access Code allows the service person to enter, exit and re-enter using that code for a certain number of hours.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **102#** to add/modify a Service User Access Code.
3. Enter the Service User ID location (a three-digit number you have on a list that you should carry with you) followed by #, for example **025#**.
4. Enter **UUUUUUUU#**, representing a User Access Code of between 4 and 8 numbers depending on the length of Access Code that you selected in Procedure 1 on page 7. For example, if your code length is 4 digits, it could be **2240#**.
5. Enter the code **2240#** again.

E-PLEX 2000 LIMITED WARRANTY

E-PLEX® Kaba Access Control warrants the E-Plex 2000 to be free from defects in material and workmanship under normal use and service for a period of two (2) years from initial installation date. Kaba Access Control will repair or replace, at our discretion, E-Plex 2000 Locks found by Kaba Access Control analysis to be defective during this period. Our only liability, whether in tort or in contract, under this warranty is to repair or replace products that are returned to Kaba Access Control within the two (2) year warranty period.

This warranty is in lieu of and not in addition to any other warranty or condition, express or implied, including without limitation merchantability, fitness for purpose or absence of latent defects.

ATTENTION: This warranty does not cover problems arising out of improper installation, neglect or misuse. All warranties implied or written will be null and void if the lock is not installed properly and/or if any supplied component part is substituted with a foreign part. If the lock is used with a wall bumper, the warranty is null and void. If a doorstop is required, we recommend the use of a floor secured stop.

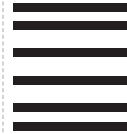
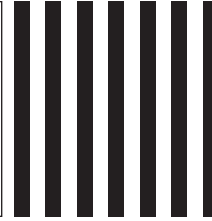
The environment and conditions of use determine the life of finishes on Kaba Access Control products. Finishes on Kaba Access Control products are subject to change due to wear and environmental corrosion. Kaba Access Control cannot be held responsible for the deterioration of finishes.

Authorization to Return Goods

Returned merchandise will not be accepted without prior approval. Approvals and Returned Goods Authorization Numbers (RGA Numbers) for the E-Plex 2000 are available through our Customer Service department in Winston-Salem, NC (800) 849-8324. **The serial number of a lock is required to obtain this RGA Number.** The issuance of an RGA does not imply that a credit or replacement will be issued.

The RGA number must be included on the address label when material is returned to the factory. All component parts including latches and strikes (even if not inoperative) must be included in the package with return. All merchandise must be returned prepaid and properly packaged to the address indicated.

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 1563 WINSTON-SALEM, NC

POSTAGE WILL BE PAID BY ADDRESSEE

KABA ACCESS CONTROL
2941 INDIANA AVENUE
WINSTON-SALEM, NC 27199-3770



6. Now enter the number of hours, programmable between 01 and 24, for example **06**. If you enter a Service Access Code of 00, you can only enter the door once. If the door shuts upon exiting, you will not be able to re-enter. This type of access is called a “one-shot” code.
7. Example of Complete Entry: **102#025#2240#2240#06#**.
8. Enter another # to indicate the end of programming.
9. The Service User Access Code **2240** will now work in that door, with all the access privileges assigned to a Service User for a period of 6 hours from the time the Service User enters his Access Code.

Procedure 4 - Delete User Access Codes

User Access Codes should be deleted if no longer needed. This frees the numbers to be assigned to another user. Codes that may be needed some time in the future should be de-activated rather than deleted.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **200#** to delete a User Access Code.
3. Enter the ID location **NNN#**, where **NNN** is the specific User ID location.
4. Example of complete entry: **200 #023#**.
5. Enter another # to indicate the end of programming.

By deleting a User ID location, you have now also deleted a User Access Code, allowing you to assign that number to another user if you wish.

Procedure 5 - Delete Manager Access Codes

A Manager Code should be deleted if no longer needed, in order to free the code number to be assigned to another Manager User. Manager Codes that might be needed some time in the future should be de-activated rather than deleted.

Required User Level: Master

1. Put the lock into Pushbutton Programming Mode.

E-plex 2000 REGISTRATION CARD

Thank you for purchasing our product. In order to protect your investment and to enable us to better serve you in the future, please fill out this registration card and return it to Kaba Access Control, or register online at www.e-plexlock.com.

Name _____

Position _____

Company _____

Address _____

City _____

State _____ ZIP (Postal Code) _____ Country _____

Phone _____ Fax _____

Email _____

Name of Dealer Purchased From _____

Date of Purchase _____

Lock Model Number _____

Serial Number (on box label) _____

This lock will be used in what type of facility?

- Commercial Building
- College/University
- School/Educational
- Airport
- Industrial / Manufacturing
- Government/Military
- Hospital/Healthcare
- Other (please specify) _____

What area is being secured with this lock? (e.g. Front Door, Common Door, Exercise Room)

- This lock is:
- Replacing a conventional keyed lock
- Replacing another electronic keyless lock
- Replacing a Simplex/Unican/Kaba Ileo/Kaba Access Control Mechanical Pushbutton Lock (e.g.L1000)

How did you learn about Kaba Access Control Pushbutton Locks?

- Advertisement
- Locksmith
- Previous Use
- Locksmith
- Maintenance
- Another Use
- Other (please specify) _____

What was your reason for buying this lock? _____

Who installed your lock?

- Locksmith
- Maintenance
- Other _____

Check here if you would like more information on Kaba Access Control locks.

2. Enter Command **201#** to delete a Manager Code.
3. Enter the ID location **NNN#**, where **NNN** is the specific Manager ID location, **024** for example.
4. Example of complete entry: **201#024#**.
5. Enter another # to indicate the end of programming.

You have now deleted a Manager ID location, and (indirectly) his Access Code, allowing you to assign that number to another Manager or Access User if you wish.

Procedure 6 - Delete Service User Access Codes

A Service User Access Code is automatically deleted at the end of its specified length of time. However, use this procedure if you want to delete the code earlier than the specified expiry time.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **202#** to delete Service User Access Code.
3. Enter the ID location **NNN#**, where **NNN** is the specific Service User ID location, **025** for example
4. Example of complete entry: **202#025#**.
5. Enter another # to indicate the end of programming.
6. You have now deleted a Service User ID location, and (indirectly) his access code, allowing you to assign that number to another Service User if you wish.

Procedure 7 - Delete All Access Codes Except Master and Manager

All codes may be deleted together if you are changing everything because of, for example, suspected theft of codes. **Warning** - be sure that you want to do this, because re-creating codes for all the personnel will be time-consuming at the pushbuttons.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.

2. Enter Command **299#** to delete all Access and Service User Codes.
3. Enter another # to indicate the end of programming.
4. You have now deleted all User Access Codes, allowing you to re-assign Access Codes from 0000{0000} to 9999{9999}, if not used by Master or Managers.

Procedure 8 - Activate User Access Codes

A User Code should be activated if it has been de-activated for a certain time period - during a user's vacation, for example, or if you created an Access Code but never assigned it to a user. User Codes that are inactive, but might be needed some time in the future, should be de-activated rather than deleted.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **300#** to activate a User Code.
3. Enter the ID location **NNN #**, where **NNN** is the specific User ID location, **023** for example.
4. Example of complete entry: **300 #023#**.
5. Enter another # to indicate the end of programming.
6. You have now activated the User Access Code assigned to 023.

Procedure 9 - Activate Manager Access Code

A Manager Code should be activated if it has been de-activated for a certain time period - during a Manager's vacation, for example, or if you created a Manager's Code, but never assigned it to anyone.

Required User Level: Master

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **301#** to activate a Manager Access Code.
3. Enter the ID location **NNN#**, where **NNN** is the specific User ID location, **024** for example.
4. Example of Complete Entry: **301#024#**.

5. Enter another # to indicate the end of programming.
 6. The Manager Access Code will now work in that door with all the access privileges assigned to a Manager User.
-

Procedure 10 - Activate Service User Access Code

A Service User Access Code should be activated if it has been de-activated for a certain time period - during a Service User's vacation, for example, or if you created an Access Code but never assigned it to a Service User.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
 2. Enter Command **302#** for Service User Functional Code.
 3. Enter the ID location **NNN#**, where **NNN** is the specific User ID location, **025** for example.
 4. Example of Complete Entry: **302#025#**.
 5. Enter another # to indicate the end of programming.
 6. You have now activated a Service User Access Code.
-

Procedure 11 - Activate All User Access Codes

You may need to activate all users if you have de-activated the whole group - after a lockout, for example. This procedure will re-activate all regular and Service User Access Codes that are not active.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **398#**.
3. Example of Complete Entry: **398#**.
4. Enter another # to indicate the end of programming.
5. You have now activated all regular User and Service User Access Codes.

Procedure 12 - Activate/De-activate Passage Mode

You have already programmed a default duration for a door to remain in Passage Mode. When you enable Passage Mode, it becomes enabled for the duration you have set in Procedure 5 - Program the Duration of the Passage Mode period, on page 9.

If your length is 6 hours, and you enable Passage Mode at 1:00, it will automatically re-lock at 7:00. Even if the lock was taken in and out of Passage Mode multiple times during the six hour period, it will still re-lock after six hours (programmable) from the original starting period. This ensures that a lock will never remain in Passage Mode beyond the programmed time period.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
 2. Enter Command **399#** to activate / de-activate Passage Mode.
 3. Enter the code where **1** = activate Passage Mode and **0** = de-activate Passage Mode.
 4. Example of Complete Entry to activate Passage Mode **399#1#**.
 5. Enter another # to indicate the end of programming.
 6. You have now activated Passage Mode on the door.
-

Procedure 13 - De-activate User Access Codes

A User Code should be de-activated during a User's vacation, for example, or if you created an Access Code but never assigned it to a User. User codes that are inactive, but might be needed some time in the future, should be de-activated rather than deleted.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **400#** to de-activate User Access Codes.
3. Enter the code **400 #NNN #**, where **NNN** is the specific User ID location, **023** for example.
4. Example of complete entry: **400 #023#**.
5. Enter another # to indicate the end of programming.
6. You have now de-activated the User Access Code.

Procedure 14 - De-activate Manager Access Codes

A Manager Access Code should be de-activated for a certain time period - during a Manager's vacation, for example, or if you created an Access Code but never assigned it to a Manager. Manager Codes that might be needed some time in the future should be de-activated rather than deleted.

Required User Level: Master

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **401#** to de-activate a Manager Access Code.
3. Enter the code **401#NNN#**, where **NNN** is the specific Manager ID location, **024** for example.
4. Example of complete entry: **401#024#**.
5. Enter another # to indicate the end of programming.
6. You have now de-activated a Manager Access Code.

Procedure 15 - De-activate Service User Access Code

A Service User Access Code should be de-activated for a certain time period - during a Service User's absence, for example, or if you created an Access Code but have not yet assigned it to a Service User. A Service User's time period continues to decrement if the User has only been de-activated, not deleted.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **402#** to de-activate a Service User Access Code.
3. Enter the code **402#NNN#**, where **NNN** is the specific Manager ID location, **025** for example.
4. Example of Complete Entry: **402#025#**.
5. Enter another # to indicate the end of programming.
6. You have now de-activated a Service User Access Code.

Procedure 16 - De-activate all Access Codes except Master and Manager

You may need to de-activate all users, for example, during a plant shut-down. This procedure will de-activate all regular User Access Codes that are active, excluding Master and Manager Codes.

Required User Level: Master, Manager

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **498#** to de-activate all Access and Service Codes.
3. Example of Complete Entry: **498#**.
4. Enter another # to indicate the end of programming.
5. You have now de-activated all regular User Access Codes.

Procedure 17 - Activate/De-activate Lockout Mode

You may need to use Lockout Mode, for example, during a fire or fire drill when you do not want anyone to return to his or her office. This procedure will de-activate all regular User Access Codes that are active, including Manager Codes, but excluding the Master Code.

Required User Level: Master

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **499#** for Lockout Users Mode (except Master).
3. Enter **1#** to activate Lockout Mode and **0#** to disable it.
4. Example of Complete Entry: **499#1# or 499#0#**.
5. Enter another # to indicate the end of programming.
6. You have now activated or de-activated Lockout Mode.

Procedure 18 - Perform Manual Diagnostics

Use the Diagnostic Code to perform manual diagnostics of the lock, green LED, red LED, buzzer, and the twelve pushbuttons - 0 through 9, * and #.

Required User Level: Master

1. Put the lock into Pushbutton Programming Mode.
2. Enter Command **500#** for Diagnostics.
3. You will see a green LED and hear a high beep followed by a red LED and a low beep.
4. Enter **123456789*0#**, in that order exactly, to test each pushbutton. If every pushbutton is working correctly, you will see a green LED and hear a normal beep for each pushbutton that is pressed.
5. Example of Complete Entry: **500#123456789*0#**.
6. Enter another # to indicate the end of programming.
7. If you see a red LED at any time you are pressing a pushbutton, or at the end of the code, there could be a problem with the pushbuttons.
8. Try the Diagnostic Code again, **500#123456789*0#**, to be sure you entered all the numbers correctly and in the correct order.
9. Enter another # to indicate the end of programming.
10. If you still see the red LED, the lock has a problem. Call a service person to repair or replace the lock.

Battery Life and Replacement

A variety of factors (shelf life, openings per day, environment, battery brand, lock settings, etc.) will determine how long your lock operates on a set of batteries. In average conditions, you can expect a minimum of 100,000 openings for E-Plex 2000 models with 3 “AA” Alkaline Batteries.

A Low Battery condition is identified by a flash of both red and green LEDs when a valid access code is entered and the lock will still give access. When the low battery condition is observed, the batteries should be replaced as soon as possible.

Summary of Pushbutton Programming Commands

Name	Command	Description of Command	Authorization
Configure	000 # MMMMMMMM# MMMMMMMM#	'Modify Master User Access Code (lock's activation)' (Always 8 digits)	Master
	004 # TT#	'Unlock time setup' (TT = 02 to 20 seconds)	Master, Mgr
	005 # TT#	'Passage Mode Timeout setup' (TT = 01 to 24 hours - duration time in hours; 00 = no time limit)	Master, Mgr
	006 # TT#	'Tamper time setup' (TT = 00 to 90 seconds)	Master, Mgr
	007 # TT#	'Tamper wrong try setup' (TT = 03 to 09)	Master, Mgr
	008 # VV#	'Buzzer volume control' (VV = 00 to 03; 00 = off; 01 = Low; 02 = Normal; 03 = High)	Master, Mgr
	009 # LL#	'Modify access length' (LL = 04 to 08 digits)	Master
	099 #	'Reset to factory default values', except access code length. (Master, manager and access user are retained if already programmed. Users are not reset.)	Master

Summary of Pushbutton Programming Commands

Name	Command	Description of Command	Authorization
Add/Modify Users	100 # NNN # UUUU {UUUU}# UUUU {UUUU}#	'Add/Modify User Access Code' NNN = specific User ID location (001 to 099) (Combination length can be 4 to 8 digits, depending on access length LL setting)	Master, Mgr
	101 # NNN # UUUU {UUUU}# UUUU {UUUU}#	'Add/Modify Manager Access Code' NNN = specific User ID location (001 to 099) (Combination length can be 4 to 8 digits, depending on access length LL setting)	Master
	102 # NNN # UUUU {UUUU}# UUUU {UUUU}# HH#	'Add/Modify Service User Access Code' NNN = specific User ID location (001 to 099) (HH = 01 to 24 hours - duration time in hours; 00 = one-time entry; Combination length can be 4 to 8 digits, depending on access length LL setting)	Master, Mgr
Delete Users	200 # NNN#	'Delete User Access Code'	Master, Mgr
	201 # NNN#	'Delete Manager Access Code'	Master
	202 # NNN#	'Delete Service User Access Code'	Master, Mgr
	299 #	'Delete all User Access Codes' (except Master, and Manager User)	Master, Mgr

Summary of Pushbutton Programming Commands

Name	Command	Description of Command	Authorization
Activate Users	300 # NNN#	'Activate User Access Code' NNN = specific User ID location (001 to 099)	Master, Mgr
	301 # NNN#	'Activate Manager Access Code' NNN = specific User ID location (001 to 099)	Master
	302 # NNN#	'Activate Service User Access Code' NNN = specific User ID location (001 to 099)	Master, Mgr
	398 #	'Activate all User Codes' (except Master and Manager)	Master, Mgr
	399 # P#	'Activate / De-Activate Passage Mode' (P = 0 or 1; 0 = disable Passage Mode; 1 = enable Passage Mode)	Master, Mgr
De-activate Users	400 # NNN#	'De-Activate User Access Code' NNN = specific User ID location (001 to 099)	Master, Mgr
	401 # NNN#	'De-Activate Manager Access Code' NNN = specific User ID location (001 to 099)	Master
	402 # NNN#	'De-Activate Service User Access Code' NNN = specific User ID location (001 to 099)	Master, Mgr
	498 #	'De-Activate all User Codes' (except Master and Manager)	Master, Mgr
	499 # L#	'Activate / De-Activate Lockout Mode' (Master User doesn't affect by Lockout Mode) (L = 0 or 1; 0 = disable Lockout Mode; 1 = enable Lockout Mode)	Master
Diagnostic	500 # 123456789*0#	'Manual diagnostic'	Master, Mgr

Visual Feedback Message Definitions

Condition	Parameters			
	Green LED	Red LED	Duration	Rate
Valid pushbutton pressed	ON	OFF	1/10 sec	Once
Timeout expired	OFF	ON	1 sec	Once
Valid access code keyed	ON	OFF	1 sec	Once
Access granted	ON	OFF	1/10 sec	1 sec
Access granted (battery low condition)	ON	ON	1/10 sec	1 sec
Access denied	OFF	ON	1 sec	Once
Valid programming entry	ON	OFF	1 sec	Once
Invalid programming entry (including duplicate access code)	OFF	ON	1 sec	Once
Tamper shutdown beginning	OFF	ON	2 sec	Once
Tamper shutdown state	OFF	ON	1 sec	10 sec
Tamper shutdown ending	ON	OFF	2 sec	Once

E-Plex 2000 User List Table

User #	Access Code	User Name	User Type
001			
002			
003			
004			
005			
006			
007			
008			
009			
010			
011			
012			
013			
014			
015			
016			
017			
⋮	⋮	⋮	⋮
↓	↓	↓	↓
099			