

BEYOND SECURITY

KABA®

E-PLEX® 2000 Series
PowerPlex 2000 Series

Operations Manual

TABLE OF CONTENTS

Introduction 4
E2000 Operation 4
PowerPlex 2000 Operation 4
States of the Lock 5
Factory Mode 5
Access Mode 5
Pushbutton Programming Mode 5
Sequence of Operations for Start-Up Programming 5
Default Values of the E-Plex 2000 Programmable Parameters 6
Configuring the Lock 6
General Procedure for Pushbutton Programming 6
Reset Procedures 7
A. Program the Access Code Length 10
B. Modify the Master User Access Code 11
C. Program the Unlock Time 11
D. Program the Duration of the Passage Mode Period 11
E. Program the Lock for Tamper Time Parameters 12
F. Programming the Lock for Keypad Buzzer Volume 13
Users - General Information 13
User Levels 14
User Codes 15
User Access Codes (PINs) - Examples 15
G. Add / Modify a User Access Code 17
H. Add / Modify a Manager Access Code 17
I. Add / Modify Service User Access Code 18
J. Delete User Access Codes 19
K. Delete Manager Access Codes 19
L. Delete Service User Access Codes 19
M. Delete All Access Codes Except Master and Manager 20
N. Activate User Access Codes 20
O. Activate Manager Access Code 21
P. Activate Service User Access Code 21
Q. Activate All User Access Codes 21

TABLE OF CONTENTS (continued)

R. Activate / De-activate Passage Mode 22
S. De-activate User Access Codes 22
T. De-activate Manager Access Codes 23
U. De-activate Service User Access Code 23
V. De-activate all Access Codes except Master and Manager 23
W. Activate / De-activate Lockout Mode 24
X. Perform Manual Diagnostics 24
Battery Life and Replacement (E2000 Series Only) 25
Summary of Pushbutton Programming Commands 25
Visual Feedback Message Definitions 28
User List Table 28

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

February 2013

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.

INTRODUCTION

The E-Plex 2000 (E2000) and the PowerPlex 2000 are both easy to use PIN only lock series that do not require any software to operate.

E2000 Operation
The E2000 uses three (3) AA alkaline batteries. This means that anytime you can simply access the lock with your valid PIN and/or you can program the lock at its keypad since the lock power is always present for its electronic circuit to operate.

PowerPlex 2000 Operation
The PowerPlex 2000 Self Powered Lock does not contain any batteries and is an environmentally friendly "Green" lock. The lock electronics are always "asleep" but to activate the circuit to access and/or program the lock, you must power the lock by depressing any button on the locks keypad. This energizes the lock for you to enter the remainder of your PIN and open the lock; or start to program the lock with a command sequence. If you have not operated the lock for a few weeks, you will need to pump the handle 4 to 6 times to "recharge" the lock before using it. If the lock is used on a regular basis, pumping the lever is not neccessary.

During a multiple command sequence at the lock's keypad when you are trying to program many user PINs one after the other—say more than 5 or 6 users, you will notice that the lock will start flashing the Red light (LED) every second (typically after about 20 seconds), indicating that the stored lock power is beginning to fade. When you see this Red light flashing, you must pump the handle again once to recharge which will enable you to continue programming the lock.

Important: When you pump the handle, the lock will flash the Green light once accompanied by a high pitched beep indicating that it is "ready"—either for you to enter your valid access PIN, or for you to start programming. If you do not pump the handle, there will be no response from the lock and consequently there will be no access granted.

STATES OF THE LOCK

Factory Mode

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

- The E2000/PowerPlex 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 lock 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/PowerPlex 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 / POWERPLEX 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/PowerPlex 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.

Hard reset sequence for the E-Plex E2000 Series:

A) User knows the Master code:

1. 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 hold the Reset-to-Factory-Default button..
2. You have up to 5 seconds to push '#' and release the reset button. If 5-second timeout is reached without pressing '#', the lock continues its normal operation. As soon as the '#' is pressed, the lock exits the current state. If timeout is reached or if any other key is pressed after

the '#' was pressed, the lock exits the sequence and stays in access state. If '#' is pushed and reset button is released within 5-second period, the lock goes in Reset Sequence State and the lock displays the 'Reset Sequence In Progress' message by flashing Green and Red LED alternatively once every second.

3. In this state, users have a 20-second period to enter the Master Code to perform a hard reset. If a bad Master Code is keyed-in, the lock exits the Reset Sequence State and goes back in access state. If the correct Master Code is entered within 20 seconds, the lock performs a hard reset and goes back in unprogrammed state. When an incorrect Master Code is entered, the Tamper Count decrements. After 4 unsuccessful attempts to Reset the lock with a bad Master code, the lock goes in the Tamper Shutdown state for 30 seconds. It will resume normal operations after this delay. If no master code is entered during the 20 seconds delay, the lock will enter a 15 minute wait period assuming the Master Code is unknown.

B) User does not know the Master code:

1. 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 hold the Reset-to-Factory-Default button
2. You have up to 5 seconds to push '#' and release the key or reset button. If 5-second time out is reached without pressing '#', the lock continues its normal operation. As soon as the '#' is pressed, the lock exits the current state. If timeout is reached or if any other key is pressed after the '#' was pressed, the lock exits the sequence and stays in access state. If '#' is pushed and reset button is release within 5-second period, the lock goes in Reset Sequence State and the lock displays the 'Reset Sequence In Progress' message by flashing Green and Red LED alternatively once every second.
3. In this state, users have a 20-second period to enter the Master Code to perform a hard reset. When the user does not know the master code, the user must not enter anything during that 20 seconds delay. The Reset sequence in progress message will be displayed on the LEDs.
4. When the 20 seconds delay will be exhausted, a 15 minutes wait period will begin. During that state, any operation on the lock will be ignored (green LED will not blink when pressing keys) and the Green and Red LED will blink once a minute.
5. After the 15 minutes delay has exhausted, the Reset sequence in progress message will be displayed on the LEDs again for 20 seconds. During this period, the user must enter the 1-2-3-4-5-6-7-8-# sequence and the lock will reset. If the user fails to do so, the sequence will abort and the lock will resume normal operation.

Hard reset sequence for PowerPlex 2000 Series:

A) User knows the Master Code:

1. On the inside or back housing, remove the top right screw holding the lock to the door.
2. Pump the handle until you get a green LED. Insert a long non-metallic blunt ended tool in the screw hole to press and hold the Reset-to-Factory-Default button.
3. You have up to 5 seconds to push '#' and release the reset button. If 5-second timeout is reached without pressing '#', the lock continues its normal operation. As soon as the '#' is pressed, the lock exits the current state. If timeout is reached or if any other key is pressed after the '#' was pressed, the lock exits the sequence and stays in access state. If '#' is pushed and reset button is released within 5-second period, the lock goes in Reset Sequence State and the lock displays the 'Reset Sequence In Progress' message by flashing Green and Red LED alternatively once every second.
4. In this state, users have a 20-second period to enter the Master Code plus '#' to perform a hard reset. If a bad Master Code is keyed-in, the lock exits the Reset Sequence State and back in access state. If the correct Master Code is entered within 20 seconds, the lock per forms a hard reset and goes back in unprogrammed state. When an incorrect Master Code is entered, the Tamper Count decrements. After 4 unsuccessful attempts to Reset the lock with a bad Master Code, the lock goes in the Tamper Shutdown state for 30 seconds. It will resume normal operations after this delay. If no Master Code is entered during the 20 seconds delay, the lock will enter a 15 minute wait period assuming the Master Code is unknown.

B) User does not know the Master Code:

1. On the inside or back housing, remove the top right screw holding the lock to the door.
2. Pump the handle until you get a green LED. Insert a long non-metallic blunt ended tool in the screw hole to press and hold the Reset-to-Factory-Default button.
3. You have up to 5 seconds to push '#' and release the reset button. If 5-second timeout is reached without pressing '#', the lock continues its normal operation. As soon as the '#' is pressed, the lock exits the current state. If timeout is reached or if any other key is pressed after the '#' was pressed, the lock exits the sequence and stays in access state. If '#' is pushed and reset button is release within 5-second period, the lock goes in Reset Sequence State and the lock displays the 'Reset Sequence In Progress' message by flashing Green and Red LED alternatively once every second.

4. In this state, users have a 20-second period to enter the Master Code plus '#' to perform a hard reset. When the user does not know the Master Code, the user must not enter anything during that 20 seconds delay.
5. When the 20 seconds delay will be exhausted, a 15 minutes wait period will begin. During that state, any operation on the lock will be ignored. During this period, if key is pressed a high beep will sound but no green LED and will be followed by the 'Reset Sequence In Progress' message will be displayed by flashing Green and Red LED alternatively once. If handle is pumped, green LED and high beep will show normally and will be followed by the 'Reset Sequence In Progress' message by flashing Green and Red LED alternatively once to show that the lock is in the reset sequence long wait.
6. After the 15 minutes delay has exhausted, the Reset sequence in progress message will be displayed on the LEDs again for 20 seconds. During this period, the user must enter the 1-2-3-4-5-6-7-8-# sequence and the lock will reset. If the user fails to do so, the sequence will abort and the lock will resume normal operation.

A. 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

A-1 To configure the 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.

A-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.

A-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.**

A-4 Example of Complete Entry: **009#05#**.

A-5 Key in another **#** to indicate the end of programming.

A-6 From now on, all the Access Codes you create must be the length specified in this step, which is 5 digits.

B. MODIFY THE MASTER USER ACCESS CODE

Required User Level: Master

B-1 To change the factory code or current Master Code, follow the next three steps:

B-2 Put lock into Pushbutton Programming Mode.

B-3 Use the command, **000,** for Master, then the new Master Code number.

B-4 You must use 8 digits between 00000000 and 99999999 as follows: **000#MMMMMMMM#**, we'll use **000#87654321#** as an example.

B-5 Enter the Master Code again **87654321#** for confirmation.

B-6 Example of Complete Entry: **000#87654321#87654321#**.

B-7 Key in another **#** to indicate the end of programming.

B-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.

C. 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

C-1 Put the lock into Pushbutton Programming Mode.

C-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).

C-3 Example of Complete Entry: **004#10#**.

C-4 Enter another **#** to indicate the end of programming.

C-5 You have now programmed an Unlock Time of 10 seconds for the door.

D. 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 on all models except PowerPlex 2000 versions.

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

D-1 Put the lock into Pushbutton Programming Mode.

D-2 Enter command code **005#**.

D-3 Then **TT#**, where **TT= 01 to 24** hours.

D-4 A TT entry of 00 means there is no time limit - the door remains unlocked.

D-5 Enter **005 #TT#**; for example, **005#06#** for six hours.

D-6 Example of Complete Entry: **005#06#**.

D-7 Enter another **#** to indicate the end of programming.

D-8 In this example, the lock will remain unlocked for six hours, starting from the time you put it in Passage Mode.

D-9 You have now configured the duration of the Passage Mode period for that lock. This does **NOT** initiate Passage Mode.

D-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.

E. 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

E-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)

E-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

F. 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

F-1 Put the lock into Pushbutton Programming Mode.

F-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).

F-3 Example of Complete Entry: **008#02#**.

F-4 Enter another **#** to indicate the end of programming.

F-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	

E-PLEX 2000 / PowerPlex 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 three (3) 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 three (3) year warranty period.

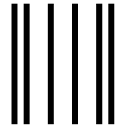
This warranty is in lieu of and not in addition to any other warranty or condition, express or implied, including without limitation merchantability, fitness for purpose or absence of latent defects.

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.

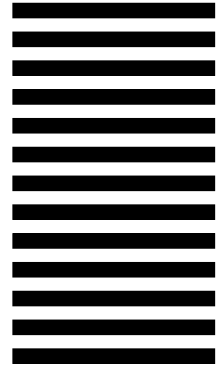
The environment and conditions of use determine the life of finishes on Kaba Access Control products. Finishes on Kaba Access Control products are subject to change due to wear and environmental corrosion. Kaba Access Control cannot be held responsible for the deterioration of finishes.

Authorization to Return Goods
Returned merchandise will not be accepted without prior approval. Approvals and Returned Goods Authorization Numbers (RGA Numbers) 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 ADS AMERICAS
2941 INDIANA AVE
WINSTON SALEM NC 27199-3770

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 a Simplex / Unican / Kaba Ilco / Kaba Access Control Mechanical Pushbutton Lock (e.g.L1000)
- ❑ Replacing another electronic keyless lock

How did you learn about Kaba Access Control Pushbutton Locks?

- ❑ Advertisement
- ❑ Previous Use
- ❑ Another Use
- ❑ Locksmith
- ❑ Maintenance
- ❑ 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.**

G. 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

G-1 Put the lock into Pushbutton Programming Mode.

G-2 Enter command **100#** to add / modify a User Access Code.

G-3 Enter the ID location followed by # - **NNN#**, we use **023#** for example (Range = 000 to 099). The chart on page 26 may be helpful.

G-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#**.

G-5 Enter the code **1024#** again.

G-6 Example of Complete Entry: **100#023#1024#1024#**.

G-7 Enter another **#** to indicate the end of programming.

G-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.

H. 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

H-1 Put the lock into Pushbutton Programming Mode.

H-2 Enter command **101#** to add / modify a Manager Access Code.

H-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#**.

H-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#**.

H-5 Enter the code **1224#** again.

H-6 Example of Complete Entry: **101#024#1224#1224#**.

H-7 Enter another **#** to indicate the end of programming.

H-8 The Manager Access Code **1224** will now work in that door with all the access privileges assigned to a Manager User.

H-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.

I. 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

I-1 Put the lock into Pushbutton Programming Mode.

I-2 Enter Command **102#** to add / modify a Service User Access Code.

I-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#**.

I-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#**.

I-5 Enter the code **2240#** again.

I-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.

I-7 Example of Complete Entry: **102#025#2240#2240#06#**.

I-8 Enter another **#** to indicate the end of programming.

I-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.

J. 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

J-1 Put the lock into Pushbutton Programming Mode.

J-2 Enter Command **200#** to delete a User Access Code.

J-3 Enter the ID location **NNN#**, where **NNN** is the specific User ID location.

J-4 Example of complete entry: **200 #023#**.

J-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.

K. 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

K-1 Put the lock into Pushbutton Programming Mode.

K-2 Enter Command **201#** to delete a Manager Code.

K-3 Enter the ID location **NNN#**, where **NNN** is the specific Manager ID location, **024** for example.

K-4 Example of complete entry: **201#024#**.

K-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.

L. 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

L-1 Put the lock into Pushbutton Programming Mode.

L-2 Enter Command **202#** to delete Service User Access Code.

L-3 Enter the ID location NNN**#**, where **NNN** is the specific Service User ID location, **025** for example

L-4 Example of complete entry: **202#025#**.

L-5 Enter another **#** to indicate the end of programming.

L-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.

M. 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

M-1 Put the lock into Pushbutton Programming Mode.

M-2 Enter Command **299#** to delete all Access and Service User Codes.

M-3 Enter another **#** to indicate the end of programming.

M-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.

N. 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

N-1 Put the lock into Pushbutton Programming Mode.

N-2 Enter Command **300#** to activate a User Code.

N-3 Enter the ID location **NNN #**, where **NNN** is the specific User ID location, **023** for example.

N-4 Example of complete entry: **300 #023#**.

N-5 Enter another **#** to indicate the end of programming.

N-6 You have now activated the User Access Code assigned to 023.

O. 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

O-1 Put the lock into Pushbutton Programming Mode.

O-2 Enter Command **301#** to activate a Manager Access Code.

O-3 Enter the ID location **NNN#**, where **NNN** is the specific User ID location, **024** for example.

O-4 Example of Complete Entry: **301#024#**.

O-5 Enter another **#** to indicate the end of programming.

O-6 The Manager Access Code will now work in that door with all the access privileges assigned to a Manager User.

P. 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

P-1 Put the lock into Pushbutton Programming Mode.

P-2 Enter Command **302#** for Service User Functional Code.

P-3 Enter the ID location **NNN#**, where **NNN** is the specific User ID location, **025** for example.

P-4 Example of Complete Entry: **302#025#**.

P-5 Enter another **#** to indicate the end of programming.

P-6 You have now activated a Service User Access Code.

Q. 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

Q-1 Put the lock into Pushbutton Programming Mode.

Q-2 Enter Command **398#**.

Q-3 Example of Complete Entry: **398#**.

Q-4 Enter another **#** to indicate the end of programming.

Q-5 You have now activated all regular User and Service User Access Codes.

R. 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.

The duration feature is not available on PowerPlex 2000 models.

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

R-1 Put the lock into Pushbutton Programming Mode.

R-2 Enter Command **399#** to activate / de-activate Passage Mode.

R-3 Enter the code where **1** = activate Passage Mode and **0** = de-activate Passage Mode.

R-4 Example of Complete Entry to activate Passage Mode **399#1#**.

R-5 Enter another **#** to indicate the end of programming.

R-6 You have now activated Passage Mode on the door.

S. 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

S-1 Put the lock into Pushbutton Programming Mode.

S-2 Enter Command **400#** to de-activate User Access Codes.

S-3 Enter the code **400 #NNN #**, where **NNN** is the specific User ID location, **023** for example.

S-4 Example of complete entry: **400 #023#**.

S-5 Enter another **#** to indicate the end of programming.

S-6 You have now de-activated the User Access Code.

T. 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

T-1 Put the lock into Pushbutton Programming Mode.

T-2 Enter Command **401#** to de-activate a Manager Access Code.

T3 Enter the code **401#NNN#**, where **NNN** is the specific Manager ID location, **024** for example.

T-4 Example of complete entry: **401#024#**.

T-5 Enter another **#** to indicate the end of programming.

T-6 You have now de-activated a Manager Access Code.

U. 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

U-1 Put the lock into Pushbutton Programming Mode.

U-2 Enter Command **402#** to de-activate a Service User Access Code.

U-3 Enter the code **402#NNN#**, where **NNN** is the specific Manager ID location, **025** for example.

U-4 Example of Complete Entry: **402#025#**.

U-5 Enter another **#** to indicate the end of programming.

U-6 You have now de-activated a Service User Access Code.

V. DE-ACTIVATE ALL ACCESS CODES EXCEPT MASTER AND MANAGER

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

Required User Level: Master, Manager

V-1 Put the lock into Pushbutton Programming Mode.

V-2 Enter Command **498#** to de-activate all Access and Service Codes.

V-3 Example of Complete Entry: **498#**.

V-4 Enter another **#** to indicate the end of programming.

V-5 You have now de-activated all regular User Access Codes.

W. 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

W-1 Put the lock into Pushbutton Programming Mode.

W-2 Enter Command **499#** for Lockout Users Mode (except Master).

W-3 Enter **1#** to activate Lockout Mode and **0#** to disable it.

W-4 Example of Complete Entry: **499#1# or 499#0#**.

W-5 Enter another **#** to indicate the end of programming.

W-6 You have now activated or de-activated Lockout Mode.

X. 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

X-1 Put the lock into Pushbutton Programming Mode.

X-2 Enter Command **500#** for Diagnostics.

X-3 You will see a green LED and hear a high beep followed by a red LED and a low beep.

X-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.

X-5 Example of Complete Entry: **500#123456789*0#**.

X-6 Enter another **#** to indicate the end of programming.

X-7 If you see a red LED at any time you are pressing a push button, or at the end of the code, there could be a problem with the pushbuttons.

X-8 Try the Diagnostic Code again, **500#123456789*0#**, to be sure you entered all the numbers correctly and in the correct order.

X-9 Enter another **#** to indicate the end of programming.

X-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) **Note: Not applicable to PowerPlex 2000 Models**	Master, Mgr
	006 # TT#	'Tamper time setup' (TT = 00 to 90 sec)	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

For PowerPlex 2000 only:

Lock is ready when a button on keypad is depressed	ON	OFF	1/10 sec	Once
Lock's stored power is starting to fade	OFF	ON	1/10 sec	1 sec

Ⓐ= 1/10 second; Ⓑ= Twice; Ⓒ= Can be observed only when a button on keypad is depressed.

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			



BEYOND SECURITY

Kaba ADS Americas
2941 Indiana Avenue
Winston-Salem, NC 27105 USA
Tel: (800) 849-8324 (336) 725-1331
Fax: (800) 346-9640 (336) 725-3269

www.kabaaccess.com

PKG3173 0213