

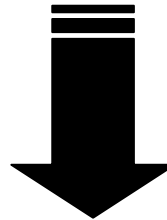
Introduction

The RetroFit 1000 is a battery-powered conversion module that turns your existing pushbutton lock into an electronic access control system supporting the following features:

- Up to 100 individual codes and 2 service codes programmed at the keypad
- One Master code
- Passage codes to keep the lock unlocked indefinitely
- Lockout/Freeze codes to prevent other codes from working
- One-time use or time limited service codes
- Pass-thru codes that are not affected by lockouts
- 3-Stage low battery warnings
- Beeper ON/OFF
- Adjustable tamper lockout time
- Adjustable relock time delay

READ FIRST

1. Ensure the RetroFit module has been installed according to the "Quick Installation Guide".
2. **** *The RetroFit module will stay in passage mode (door UNLOCKED) until the factory default PROGRAM code is replaced* ****
3. The length of the first *Program* code created will determine the length of the *Master* code.
4. At least one *User* or *Master* code needs to be created before the lock can be operated.
5. The length of the first *User* code created will determine the length of all future codes (except for the *Master* code).
6. *Program* & *Master* codes can be initially set to have a different length than *User* codes.
7. **FOLLOW "GETTING STARTED" INSTRUCTIONS (STEPS 1 & 2) below**



Keypad Convention

- All codes can be comprised of a maximum of 8 digits. Digits can be any single key number: 1, 2, 3, 4, 5 or any combination of two keys: (12), (13), (14), (15), (23), (24), (25), (34), (35) or (45) for a total of 15 digits.
- The code (15), 2, (23), 5 or 2, (23) or 1, 4, 5 are all examples of valid codes depending if the first user code created was respectively 4, 2 or 3 digits long.
- The "()" enclosing numbers mean the keys need to be depressed together once and released. For example, if prompted to press keys (123), this mean depressing keys #1, #2 and #3 together (simultaneously).
- After the *Program* code has been changed, any use of the *Program* or *Master* code requires that you first depress keys (123) together before entering your code. Ex: If *Master* code 1,2,3,4,5 is created, when using use it you need to depress keys 1,2 and 3 together followed by 1,2,3,4, 5.

Battery Information

Low battery warnings: when a low battery condition is initially detected, the lock beeps three times, key #5 flashes RED and the lock adds a 1 second delay before it unlocks. The unlock delay increases as the battery voltage decreases. When battery is almost dead, the unlock delay may reach up to 8 seconds. Green LED #4 illuminates when the lock unlocks.

To read battery voltage: 1. Enter (123) followed by the *Program* code. Depress keys (1234) and release. → Check which key is flashing to determine battery status: ① = FULL, ②= GOOD, ③= WEAK, ④= REPLACE, ⑤ = DEAD.

Replacing Batteries (for models not equipped with an external power pack):
 1. Remove lockset from the door. 2. Open lock back panel, unscrew and pull out the RetroFit module. 3. Remove battery box cover. 4. Replace with NEW identical alkaline OR lithium batteries depending on the model in hand:
1000-3BA: Replace with (3) three AA (1.5 volts) Alkaline batteries
1000-3BL: Replace with (3) three AA (1.5 volts) "Energizer Ultimate Lithium batteries" ONLY

Anti-Tamper / wrong try penalty

Five (5) consecutive invalid codes initiates a 30 seconds (default) delay period. All codes are then ignored except for the *Program* and *Master* code. Tamper lockout time is adjustable from 30 seconds to 15 minutes.

Clearing Memory / Module Reset

Clearing memory will delete all programmed codes and restore the *Program* code to factory default: **(24), 3**. To clear memory (or reset the unit) please follow the steps below:

1. Disconnect the battery power cable (white connector).
2. Press any key.
3. Reconnect the power cable.
4. While red light #5 is flashing, hold down key #1 until key #4 turns green.
5. Press keys 4 & 5 together and release.
6. Wait for the red light to turn off
7. Unit is now cleared. **FOLLOW THE "GETTING STARTED" INSTRUCTIONS. →→→→→**

Getting Started: STEP #1 (Required after unit unpacking or reset)

REPLACE FACTORY DEFAULT PROGRAM CODE

A. Enter the factory default *Program* code: **(24),3**



While light #1 is flashing

B. Press keys 2 and 3 together and release



While light #2 is flashing

C. Enter **new** *Program* code (then wait until the buzzer beeps twice or key light #3 starts flashing...)

- *Program* code length can vary from 4 to 8 digits. Since the length of this code will also fix the *Master* code length, it should be at least 5 or 6 digits long for increased security.



Getting Started: STEP #2 (Required after unit unpacking or reset)

ADD A FIRST USER ACCESS CODE

A. Press keys 1, 2 and 3 together followed by your new *Program* code



While light #1 is flashing

B. Press key #1 and release



While light #2 is flashing

C. Enter a *User* access code (then wait until the buzzer beeps twice or key light #3 starts flashing...)

- User code length can be from 2 to 8 digits.
- The length of the first user code created will determine all future user codes length.



While light #3 is flashing

D. Confirm / re-enter the *User* code

You may try your new user code. Green light #4 should illuminate and a clicking sound should be heard.

LOCK CODES INFORMATION

The RetroFit 1000 can be manually programmed with a maximum of 100 user codes, one Master and (2) two Service codes. These codes can have different functions as described below. **You must keep a log of all issued codes.**

FUNCTION	Description
PROGRAM code Factory default: (24) + 3	Use the <i>Program</i> code to ADD or DELETE all the other codes. When entering the <i>Program</i> code, always precede it with keys (123) depressed together. Ex: (123) + <i>Program</i> code.
MASTER code	The <i>Master</i> code is an access code never affected by lockouts. The length of the <i>Master</i> (or <i>Program</i>) code is fixed and determined at start-up. The recommended length should be from 6 to 8 digits long. When entering the <i>Master</i> code, always precede it with keys (123) depressed together. Ex: (123) + <i>Master</i> code.
USER ACCESS codes	<i>User</i> access codes unlock the lock for the relock time delay. Light #4 flashes twice signalling a valid code has been entered. If the lock is in lockout mode, access is denied and key light #4 and #5 illuminate briefly.
PASS-THRU codes	<i>Pass-Thru</i> codes act like <i>User</i> access codes but are not denied access when lockout mode is active.
PASSAGE codes	Passage codes unlock the lock indefinitely. When the same (or another) Passage code is entered, the lock immediately relocks. When a Passage code is entered, key LEDs 4 to 1 flash once and lock beeps 4 times to signal activation or deactivation. There can be multiple Passage codes.
LOCKOUT codes	<i>Lockout</i> codes put the lock in lockout mode to prevent other codes from working. The lock can be locked or unlocked when one <i>Lockout</i> code is entered. When the lock is locked, a <i>Master</i> code or <i>Pass-Thru</i> code unlocks it but all other codes won't. Only another <i>Lockout</i> code can reverse the effect. When a valid <i>Lockout</i> code is entered, key LEDs 4 to 1 flash once and lock beeps 4 times. There can be multiple <i>Lockout</i> codes. When lockout mode is activated, Passage mode (if active) is automatically disabled.
SERVICE CODES (maximum 2)	A Service code act like a <i>User</i> access code until its duration expires. Service codes can be programmed for one-time use or for 1 to 24 hours duration. Service code delay timer begins when the code is used for the first time. Service codes are automatically erased from memory when expired.

PROGRAMMING STEPS




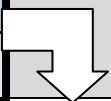
Function	Command to enter program mode	STEP 1	STEP 2	STEP 3
		 While key #1 is flashing	 While key #2 is flashing	 While key #3 is flashing
CHANGE PROGRAM CODE	Depress keys (123) followed by the <i>Program</i> code	Press keys (23) & release	Enter New <i>Program</i> code	Confirm code
ADD/CHANGE MASTER ACCESS CODE	Depress keys (123) followed by the <i>Program</i> code	Press keys (12) & release	Enter new <i>Master</i> code	Confirm code
ADD USER ACCESS CODE(S)	Depress keys (123) followed by the <i>Program</i> code	Press key #1 & release	Enter new <i>User</i> access code	Confirm code. Wait or press (345) to exit or continue adding codes at STEP 2
ADD PASS-THRU CODE(S)	Depress keys (123) followed by the <i>Program</i> code	Press key #2 & release	Enter new <i>Pass-Thru</i> code	Confirm code
ADD PASSAGE CODE(S)	Depress keys (123) followed by the <i>Program</i> code	Press key #3 & release	Enter new Passage code	Confirm code
ADD LOCKOUT/FREEZE CODE(S)	Depress keys (123) followed by the <i>Program</i> code	Press key #4 & release	Enter new <i>Lockout</i> code	Confirm code
ADD ONE SERVICE CODE (maximum 2)	Depress keys (123) followed by the <i>Program</i> code	Press key #5 & release	Enter new Service code	Enter duration from 01 to 24 hours or press (12) + (12) if this is a one-time use code. Refer to table 1 below for more option.
DELETE CODE(S) (except Master code) Note: to delete ALL codes at once, reset the module.	Depress keys (123) followed by the <i>Program</i> code	Press keys (45) & release	Enter code to delete	Confirm code. Wait or press (345) to exit or continue deleting codes at STEP 2
DELETE MASTER CODE	Depress keys (123) followed by the <i>Program</i> code	Press keys (25) & release	Press (123) and enter <i>Master</i> code to delete	Press (123) and confirm <i>Master</i> code to delete
SET TAMPER LOCKOUT TIME (default = 30 seconds, maximum 15 minutes)	Depress keys (123) followed by the <i>Program</i> code	Press keys (135) & release	Enter a time delay. Enter (12) + (12) for 30 seconds delay	
SET RELOCK TIME DELAY (default = 4 seconds)	Depress keys (123) followed by the <i>Program</i> code	Press keys (124) & release	Enter a time delay from 2 to 15 seconds	
CLEAR ALL SERVICE CODES	Depress keys (123) followed by the <i>Program</i> code	Press keys (35) & release		
TOGGLE BEEPER ON/OFF	Depress keys (123) followed by the <i>Program</i> code	Press keys (134) & release		

TABLE 1. (how to enter time delays)

Convention:

To enter 0, press (12), To enter 6, press (51),
To enter 7, press (52), To enter 8, press (53),
To enter 9, press (54)

Service code duration examples, to enter:

- One-time use: press (12), release then (12) & rel.
- 01 hour: press (12), release then 1 & release
- 06 hours: press (12), release then (51) & release
- 18 hours: press 1, release then (53) & release

Tamper lockout time examples, to enter:

- 30 secs: press (12), release then (12) & release
- 01 min: press (12), release then 1 & release
- 10 min: press 1, release then (12) & release

Relock time delay example, to enter:

- 02 secs: press (12), release then 2 & release
- 06 secs: press (12), release then (51) & release
- 10 secs: press 1, release then (12) & release

KEY LIGHTS ERROR CODE DESCRIPTION

An error has occurred if at any time during programming or when operating the lock the RED light #5 flashes or stays on while other keys illuminate green. The error codes are described below:

Light code					Error description
1red					Code invalid or invalid keypad entry
1red		2green			Code incomplete or waited too long
1red		3green			Invalid time delay. Refer to table 1.
1red	4green				Lockout mode is active, access denied
1red		2green	1green		Code already exists
1red		3green	1green		Start-up error: Refer to "Getting Started" STEP 2
1red	4green		1green		Code not found or incomplete
1red		3green	2green		Invalid code confirmation
1red	4green		2green		Code memory full (100 + 2 service) codes max.
1red	4green	3green			Invalid function or command
1red		3green	2green	1green	Code too short
1red	4green		2green	1green	Start-up error: Refer to "Getting Started" STEP 1