



CAL ROYAL CR3000

Digital Electronic Lock

OWNER'S MANUAL

THANK YOU for purchasing CAL-ROYAL CR 3000 Digital Lock.

Your new CAL-ROYAL CR3000 Digital Lock advanced features include:

- ❖ 1 Master Code for entry including all other functions.
- ❖ 1 Sub-Master Code for entry and other programming functions.
- ❖ 10 Manager Codes for entry and other programming functions.
- ❖ 90 User Access Codes for entry.
- ❖ 5 Service Codes (One-Time Entry Code).
- ❖ 2 Remote Switch Input.
- ❖ 2 User Disable Modes.
 - Disable all user codes except Master Code.
 - Bank disable all user codes except Manager Codes.
- ❖ Keypad Anti-Tamper Lockout (30 seconds). Keypad is disabled after 3 unsuccessful user code entries.
- ❖ Fire Alarm System (REM2)

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Connections:

Batteries:

Use only 1.5 volt AA batteries, 4 pieces.

Low Battery:

RED LED will flash five times with beep sound before BLUE LED flashes to signify acceptance of code. Batteries should be replaced as soon as this happens.

Remote Switch/Release Options:

The unit has 2 sets of terminals for remote release, labeled REM1 and REM2 on the printed circuit board.

REM1 can be connected to a push button. Pushing the button will cause the unit to unlock. The BLUE LED will light and at the same time a beep can be heard twice.

REM2 is intended for alarm systems such as fire alarms. When activated the unit will stay unlocked for 30 minutes and RED LED will flash once every 2 seconds while an audible alarm sound will be heard indicating that the unit is in the unlocked condition.

The lock will automatically revert to normal after 30 minutes. If necessary, the Master Code, Sub-Master Code or Manager Code can be programmed to revert the unit to normal before the 30-minute period ends.

Initial Setup:

1. Remove batteries. Press and hold (#) while connecting the batteries back.
Release after hearing 5 beeps. Within 3 seconds, press (#) keypad 3 times. The BLUE LED will continuously light for 3 seconds and 2 beeps will be heard.
2. The unit is now clear of all programmed data and will have reverted to the factory default Master Code 12345.

NOTE: Please follow procedures above exactly otherwise unit will function abnormally. In this case, please repeat the procedure.

No other programming commands will be accepted until default Master Code has been changed.

Codes:

- Codes may be 3, 4 or 5 digits long. The length of the Master Code determines all the codes format.
- Once the numbers of digits are selected, it cannot be changes unless all programming is erased and the default factory settings are re-loaded.
- No other programming commands will be accepted until default Master Code has been changed.

MASTER CODE and SUB-MASTER CODE

- This unit is delivered with the Master Code set to 12345 (default).
- The Master Code cannot be deleted.
- Master Code performs all programming functions.
- Sub-Master Code performs all programming functions except delete or change Master code.

MANAGERS CODE

- All Managers Code location ends in zero. (00, 10, 20, 30, 40, 50, 60, 70, 80, 90)
- Manager Codes are capable of programming and deleting user codes under his Bank. Managers are also capable of accessing the next higher Bank until another Manager Code appears.
- USER CODES
- Does not have programming privileges. Codes are used for entry only.

SERVICE CODES

- Service Codes are one-time codes only. It cannot be used again. Once a service code is entered, the unit will unlock but it will automatically delete the code.

VALID CODES and PASS TIME (DOOR UNLOCK)

- Pass Time is the time the unit is unlocked after a valid code is entered.
- BLUE LED will flash (with 2 beeps) after a valid code is entered.
- Pass Time also determines the amount of time between two key presses. If the succeeding entry (or key press) was pressed after the Pass Time, it is now considered as a new entry. Should this happen, wait 5 seconds for the unit to reset by itself then try entering the code again.

INVALID CODES

- The RED LED will flash for .5 seconds with one beep after an invalid code is entered

Keypad Anti-Tamper Lockout

- If an invalid Code is entered 3 times in succession, the unit will turn off for 30 seconds to prevent tampering.
- The unit will emit 2 beeps with flashing BLUE and RED LED at the end of the anti-tamper period.
- CR3000 will exit the anti-tamper period, even within the 30 second duration, if the remote switch is activated (REM1 or REM2).

Tones and LED Indicators (Default Setting)

- ❖ Key press: A beep will sound and a BLUE LED will flash.
- ❖ Access Granted: 2 beeps and BLUE LED will flash. When Pass Time ends, the unit relocks with a beep and a RED LED.
- ❖ Invalid Code Entered: 1 beep and 1 RED LED Flash
- ❖ Disabled Code entered: 1 beep and both RED and BLUE LED flashes.
- ❖ New Access Code accepted: 2 beeps and 2 BLUE LED flashes.
- ❖ Programming Error: 1 beep and 1 RED LED flash.
- ❖ Return from anti-tamper lockout: 2 beeps and both RED and BLUE LED will flash.
- ❖ Low Battery: 5 beeps and 5 RED LED flashes before access is granted.

Changing the Master Code: Program 991

Assuming that the current Master Code is (1) (2) (3) (4) (5) and you want to change it to (4) (4) (4) (4) (4).

[Current Master Code] (#) (9) (9) (1) [Length of new Master Code] [New Master Code] [Length of new Master Code] [New Master Code]

EXAMPLE :Assuming that the current Master Code is (1) (2) (3) (4) (5) and you want to change it to (4) (4) (4) (4) (4).

1. Press (1) (2) (3) (4) (5) • (#) (9) (9) (1) • (5) • (4) (4) (4) (4) (4) • (5) • (4) (4) (4) (4) (4) ••
2. Wait for at least 5 seconds before trying your new Master Code.

Note: The BLUE DOTS (•) indicates the flashing BLUE LED on the unit.

The unit will unlock upon entering the Master Code and will remain unlocked while initiating the program sequence.
Once the number of digits is selected, it cannot be changed unless unit is reverted back to its factory default settings.

Add/Change Sub-Master Code: Program 981

[Current Master Code] (#) (9) (8) (1) [New Sub-Master Code] [New Sub-Master Code]

EXAMPLE:

Assuming that the current Master Code is (1) (2) (3) (4) (5) and you want to add a Sub-Master Code of (2) (3) (4) (5) (6).

1. Press (1) (2) (3) (4) (5) • (#) (9) (8) (1) • (2) (3) (4) (5) (6) • (2) (3) (4) (5) (6) ••
2. The unit will unlock upon entering the Master Code and will remain unlocked while initiating the program sequence.
3. Wait at least 5 seconds before trying your new Sub-Master Code.

Deleting Sub-Master Code: Program 982

Assuming that the current Master Code is (1) (2) (3) (4) (5) and you want to delete a Sub-Master Code.

[Current Master Code] • (#) (9) (8) (2) • (9) (8) (2) ••

1. Press (1) (2) (3) (4) (5) • (#) (9) (8) (2) • (9) (8) (2) ••
2. Sub-Master Code is deleted.

PROGRAMMING LIMITATIONS/SCHEDULE						
PROGRAM NO.	FUNCTIONS	MASTER	SUB-MASTER	MANAGER	USER	SERVICE
	Unlock (Entry Only)	✓	✓	✓	✓	✓
	Unlock and Enter Programming Mode	✓	✓	✓		
000	Next Free Code Access Locator	✓	✓	✓		
009	Code Location Function	✓	✓	✓		
011-015	Add Service Codes	✓	✓	✓		
021-025	Delete Service Code	✓	✓	✓		
02#	Delete All Service Codes	✓	✓	✓		
1xx	Add/Change Manager Code or User Codes	✓	✓	✓		
2xx	Deleting Manager or User Codes	✓	✓	✓		
3xx	Disable 1 Manager or User Code	✓	✓	✓		
3x#	Disable User Codes in 1 Bank	✓	✓	✓		
3##	Disable All	✓	✓	✓		
4xx	Enable 1 Manager or User Code	✓	✓	✓		
4x#	Enable User Codes in 1 Bank	✓	✓	✓		
4##	Enable All	✓	✓	✓		
902	Pass Time (Door Unlock)	✓	✓			
93#	Disable Users Only	✓	✓			
961	Enable Passage Mode	✓	✓			
962	Disable Passage Mode	✓	✓			
971	Key press Sound option: Normal	✓	✓			
971	Key press Sound + LED (Default)	✓	✓			
972	Key press Sound Option: Click!	✓	✓			
972	Key press Sound + LED	✓	✓			
973	Key press sound Option: LED Only	✓	✓			
981	Add/Change Sub-Master Code	✓	✓			
982	Delete Sub-Master Code	✓				
991	Change Master Code	✓				

Add/Change a Manager Code: Program 1xx

Manager Codes are located at locations 00, 10, 20, 30, 40, 50, 60, 70, 80 and 90 (see table 1A on page 11).

NOTE: New Manager Codes must use the same number of digits as the (new) Master Code.

[Current Master/Sub-Master Code] (#) (1) [2-digit Location Code] [New Manager Code]

EXAMPLE:

Assuming that the current Master or Sub-Master Code is (1) (2) (3) (4) (5) and you want to add a new Manager Code of (3) (4) (5) (6) (7) in location 20.

1. Press: (1) (2) (3) (4) (5) • (#) (1) (2) (0) • (3) (4) (5) (6) (7) ••
2. The unit will unlock upon entering the Master Code and will remain unlocked while initiating the program sequence.
3. Wait at least 5 seconds before trying your Manager Code

Deleting a Manager Code: Program 2xx

Manager Codes are located at locations 00, 10, 20, 30, 40, 50, 60, 70, 80 and 90 (see table 1A on page 11).

[Current Master/Sub-Master Code] (#) (2) [2-digit Location Code]

EXAMPLE:

Assuming that the current Master or Sub-Master Code is (1) (2) (3) (4) (5) and you want to delete a Manager Code located at location 20.

1. Press: (1) (2) (3) (4) (5) • (#) (2) (2) (0) ••
2. Manager Code at the specified location is deleted.

Deleting a User Code: Program 2xx

User Codes are located at locations 01-09, 11-19, 21-29, 31-39, 41-49, 51-59, 61-69, 71-79, 81-89 and 91-99 (see table 1A on page 11).

[Current Master/Sub-Master/Manager Code] (#) (2) [2-digit User Location number]

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to delete a User Code located at location 21.

1. Press: (1) (2) (3) (4) (5) • (#) (2) (2) (1) ••
2. User Code at the specified location is deleted.

Add/Change a User Code: Program 1xx

User Codes are located at locations 01-09, 11-19, 21-29, 31-39, 41-49, 51-59, 61-69, 71-79, 81-89 and 91-99 (see table 1A on page 11).

NOTE: New User Codes must use the same number of digits as the (new) Master Code.

[Current Master/Sub-Master/Manager Code] (#) (1) [2-digit User Location] [New User Code]

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to add a new User Code of (3) (4) (5) (6) (7) in location 21.

1. Press: (1) (2) (3) (4) (5) • (#) (1) (2) (1) • (3) (4) (5) (6) (7) ••
2. The unit will unlock upon entering the Master Code and will remain unlocked while initiating the program sequence.
3. Wait at least 5 seconds before trying your User Code

Disabling a Manager Code: Program 3xx

Manager Codes are located at locations 00, 10, 20, 30, 40, 50, 60, 70, 80 and 90 (see table 1A on page 11).

[Current Master/Sub-Master Code] (#) (3) [2-digit Location Code]

EXAMPLE:

Assuming that the current Master or Sub-Master Code is (1) (2) (3) (4) (5) and you want to disable a Manager Code located at location 20.

1. Press (1) (2) (3) (4) (5) • (#) (3) (2) (0) ••
2. Manager Code at the specified location is disabled.

Disabling a User Code: Program 3xx

User Codes are located at locations 01-09, 11-19, 21-29, 31-39, 41-49, 51-59, 61-69, 71-79, 81-89 and 91-99 (see table 1A on page 11).

[Current Master/Sub-Master/Manager Code] (#) (3) [2-digit Location Code]

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to disable a User Code located at location 21.

1. Press (1) (2) (3) (4) (5) • (#) (3) (2) (1) ••
2. User Code at the specified location is disabled.

Disable Users in One Bank: Program 3x#

Banks are designated as numbers from 0-9. For instance, Bank "0" will have its manager "00" and users 01-09; Bank "1" has Manager "10" and Users 11-19 and so on.

[Current Master/Sub-Master/Manager Code] (#) (3) [1-digit Bank Number] (#)

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to disable "Bank 1".

Press (1) (2) (3) (4) (5) • (#) (3) (1) (#) ••

NOTE: If Master or Sub-Master Code was used to unlock the unit prior to the program sequence, all 9 Users and 1 Manager Code in that Bank are disabled.

If the Manager Code was used to unlock the unit prior to the program sequence, only the 9 users in that bank are disabled.

Disable All: Program 3##

If Master or Sub-Master Code was used to unlock the unit, it will disable all 100 Users/ Managers and will clear all 5 Service Codes.

[Current Master/Sub-Master Code] • (#) (3) (#) (#) ••

If Manager Code was used to unlock the unit, it will disable the users under that manager.

[Manager Code] • (#) (3) (#) (#) ••

NOTE: Managers cannot disable themselves.

Enable One Manager or User Code: Program 4xx

This feature can be used by Master, Sub-Master or Manager Codes. User Codes can only be enabled by the Manager in charge of his Bank. Master and Sub-Master can enable all Managers and Users.

[Master, Sub-Master, Manager Code] (#) (4) [2-digit Location]

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to enable a User Code located at location 21.

1. Press (1) (2) (3) (4) (5) • (#) (4) (2) (1) ••
2. User Code at the specified location is enabled.

Enable User Codes in One Bank: Program 4x#

This feature can be used by Master, Sub-Master or Manager Codes. Banks can only be enabled by the Manager in charge of his Bank. Master and Sub-Master can enable all Banks.

[Master, Sub-Master, Manager Code] (#) (4) [1-digit Bank Number] (#)

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to enable Bank 1.

1. Press (1) (2) (3) (4) (5) • (#) (4) (1) (#) ••
2. Users at specified Bank are enabled.

Enable All: Program 4##

[Master, Sub-Master, Manager Code] (#) (4) [1-digit Bank Number] (#)

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5).

Press (1) (2) (3) (4) (5) • (#) (4) (3) (#) ••

NOTE: If Master or Sub-Master Code was used to unlock the unit prior to the program sequence, all 100 User/Manager Codes are enabled. (Service Codes must be reprogrammed)

If the Manager Code was used to unlock the unit prior to the program sequence, only the 9 users under that manager is enabled

Pass Time (Door Unlock): Program 902-920

Pass time determines the amount of time between two key presses. It can be set between 2 to 20 seconds. Factory default is 5 seconds.

[Master/Sub-Master Code] (#) (9) [Value between 02 to 20]

EXAMPLE:

Assuming that the current Master or Sub-Master Code is (1) (2) (3) (4) (5) and you want to set the Pass time to 7 seconds.

1. Press (1) (2) (3) (4) (5) • (#) (9) (0) (7) ••
2. Pass time is now set to 7 seconds.

Disable Users Only: Program 93#

Disable all 90 Users and 5 Service Codes, while managers remain active. If a new user is added while the unit is in "Disable Users" mode, the new user will overwrite the previous stored code and will automatically be enabled.

[Master/Sub-Master Code] (#) (9) (3) (#)

EXAMPLE:

Assuming that the current Master or Sub-Master Code is (1) (2) (3) (4) (5) and you want to disable all the Users.

1. Press (1) (2) (3) (4) (5) • (#) (9) (3) (#) ••
2. All Users are now disabled.

Add Service Codes: Program 011, 012, 013, 014, 015

Service Codes are single-entry Codes. They can only be entered or used once. This unit can be programmed to accept 5 Service Codes. It may be the same code used 5 times, or it may vary from each. Service Code numbers are 011, 012, 013, 014 and 015.

Service Code 1:

[Master, Sub-Master, Manager Code] (#) (0) [Service Code Number] [Enter new Service Code]

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to program Service Code 1 with (3) (4) (5) (6) (7).

1. Press (1) (2) (3) (4) (5) • (#) (0) (1) (1) • (3) (4) (5) (6) (7) ••
2. Service Code 1 is now programmed for 1 entry with (3) (4) (5) (6) (7) passcode.
3. Repeat procedure for other Service Codes.

Delete Service Codes: Program 021, 022, 023, 024, 025

[Master, Sub-Master, Manager Code] (#) (0) [Service Code Number]

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to delete Service Code 1.

1. Press (1) (2) (3) (4) (5) • (#) (0) (2) (1) • •
2. Service Code 1 is now deleted.
3. Repeat procedure for other Service Codes.
See table below for quick reference.

Service Codes	Add	Delete
1	011	021
2	012	022
3	013	023
4	014	024
5	015	025

Delete All Service Codes: Program 02#

Master, Sub-Master and Managers can delete all Service Codes.

[Master/Sub-Master/Manager Code] (#) (0) (2) (#)

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to delete all Service Codes

1. Press (1) (2) (3) (4) (5) • (#) (0) (2) (#) • •
2. All Service Codes are now deleted.

Enable Passage Mode: Program 961

Master and Sub-Master can enable this feature. Once enabled, the unit is unlocked continuously.

[Master/Sub-Master Code] (#) (9) (6) (1)

EXAMPLE:

Assuming that the current Master or Sub-Master Code is (1) (2) (3) (4) (5) and you want to enable passage mode.

1. Press (1) (2) (3) (4) (5) • (#) (9) (6) (1) • •
2. Unit is now unlocked until "Disable Passage Mode" is initiated.

Disable Passage Mode: Program 962

Master and Sub-Master can disable the "Passage Mode" feature. Once initiated, the unit is back to its normal operation.

[Master / Sub-Master Code] (#) (9) (6) (2) , [Master / Sub-Master Code] , [Master / Sub-Master Code]

EXAMPLE:

Assuming that the current Master or Sub-Master Code is (1) (2) (3) (4) (5) and you want to disable passage mode.

1. **Press (1)(2)(3)(4)(5) • (#)(9)(6)(2) • (1)(2)(3)(4)(5) • [WAIT FOR THE RED LIGHT AND BEEP] • (1)(2)(3)(4)(5) • [WAIT FOR THE RED LIGHT AND BEEP]**
2. Unit is now in its normal operation.

Code Locator Function: Program 009

It is important to record all Codes in TABLE 1A for future reference. In the event of losing your records, this feature will help you locate as to where a certain Code is located in the lock's memory. The unit will identify the Bank number (0-9) and User location (09) by flashing both the RED and BLUE LED accompanied by a beeping sound.

[Master/Sub-Master/Manager Code] (#) (0) (0) (9) [Enter Code to be located]

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to search for code: (1) (2) (3) (4) (5).

1. Press (1) (2) (3) (4) (5) • (#) (0) (0) (9) • (1) (2) (3) (4) (5) ••
2. If the code entered is recognized, the following sequence will occur:
 - a) At the start of the Code Locator sequence, the unit will flash both the BLUE and RED LED and emit one long beep.
 - b) The unit will identify the Bank number by flashing the BLUE LED (with beeps) from 0 to 9 times.
 - c) To signify the end of the Bank ID sequence, the unit will flash both the BLUE and RED LED with a long beep.
 - d) The unit will identify the User number by flashing the BLUE LED (with beeps) from 0 to 9 times.
 - e) To signify the end of the Bank ID sequence, the unit will flash both the BLUE and RED LED with a long beep.
3. If the Code is not recognized, the lock will sound one long beep with a RED LED.

Note: If the Bank or User Number is zero, the BLUE LED will not flash and no beep can be heard.

Next Available Location finder: Program 000

When programming a User Access Code and you are not sure of the next available location, you can use this feature to exactly locate the next available slot using the same procedure as the "Code Locator Feature".

[Master/Sub-Master/Manager Code] (#) (0) (0) (0)

EXAMPLE:

Assuming that the current Master, Sub-Master or Manager Code is (1) (2) (3) (4) (5) and you want to locate the next available location.

1. Press (1) (2) (3) (4) (5) • (#) (0) (0) (0) ••
2. At the start of the "Next Available Location finder" sequence, the unit will flash both the BLUE and RED LED and emit one long beep.
3. The unit will identify the Bank number by flashing the BLUE LED (with beeps) from 0 to 9 times.
4. To signify the end of the Bank ID sequence, the unit will flash both the BLUE and RED LED with a long beep.
5. The unit will identify the User number by flashing the BLUE LED (with beeps) from 0 to 9 times.
6. To signify the end of the Bank ID sequence, the unit will flash both the BLUE and RED LED with a long beep.

No flash or tone means the corresponding number is zero.
If no available location is found, the unit will a programming error tone.

Key press Sound Option: Program 971, 972, 973

- **Normal Key press Sound + LED (Default)**

[Master/Sub-Master/Manager Code] (#) (9) (7) (1)

- **Click! Key press Sound + LED**

[Master/Sub-Master/Manager Code] (#) (9) (7) (2)

- **LED Only**

[Master/Sub-Master/Manager Code] (#) (9) (7) (3)

TABLE 1A

MASTER										
SUB-MASTER										
BANKS	0	1	2	3	4	5	6	7	8	9
MANAGERS	00	10	20	30	40	50	60	70	80	90
USERS	01	11	21	31	41	51	61	71	81	91
	02	12	22	32	42	52	62	72	82	92
	03	13	23	33	43	53	63	73	83	93
	04	14	24	34	44	54	64	74	84	94
	05	15	25	35	45	55	65	75	85	95
	06	16	26	36	46	56	66	76	86	96
	07	17	27	37	47	57	67	77	87	97
	08	18	28	38	48	58	68	78	88	98
	09	19	29	39	49	59	69	79	89	99

BANKS:

Banks are designated group of locations in the lock's memory. This lock has 10 banks (0-9) and each bank consists of 1 manager and 9 users under it.

MANAGERS:

1 manager is assigned to each bank. There are 9 User Codes that each Manager can program in its bank. For instance, Manager "00" in Bank "0" can input User Codes at locations "01" to "09". Manager "10" in Bank "1" on the other hand can input User Codes at locations "10" to "19".