

Ritenergy Pro

Access Control Systems

(Firmware Version 1.XX)

Manual Programming Guide

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INTRODUCTION

The Ritenergy Access Control System is a self contained, electronically controlled, battery powered, single door access control device. A keyless system, it has a 12-button keypad, an iButton reader, and a Schlage or Best SFIC cylinder. A control module containing the System electronics, batteries, keypad and iButton reader, is coupled to a heavy duty lockset. A patent pending low-power motorized locking mechanism in the lockset allows for years of reliable operation on a single set of batteries. To gain entry through a door secured with the Lock, a user enters an individual code at the keypad or present a credential at iButton reader. If both the access level and the code/credential are valid (i.e., the credential exists in an authorized section of the Lock's user list) the outside handle will unlock for a predetermined time, then re-lock when released. The door can always be opened from the inside, regardless of the locked status of the outside handle. The System maintains an audit log of all System activity for later retrieval by an administrator. The audit log stores the user ID, the date and time of each event. It even records unauthorized attempts to open the lock.

RITENERGY PRO series lock features a real-time clock/calendar that automatically adjusts for Daylight Saving Time and allows for automated programming of events. RITENERGY PRO serials lock features two methods of programming:

- (1) All functions can be programmed manually through the keypad;
- (2) You can transfer programming instructions directly from your PC by using the Ritenergy Pro software and a programmable iButton key fob. Data can be transferred from your PC to the lock and retrieved from the lock to your PC via the iButton key fob.

SET LOCK BACK TO MANUFACTURE DEFAULT

Unplug the battery pack, press and hold any numeric key for 10 seconds and release. Plug the battery pack back on with three beeps. Press and hold "Schlage" key within 5 seconds until LED flashing red and beeps 6 times, release the key.

BATTERY STATUS INDICATOR

Press "Schlage" and "0" simultaneously

- 7.8V or higher -Green LED flashing -**normal**
- 7.8-7.2V -Green and red LED flashing-**low**
- 6.3V or lower -Red LED flashing-**it's time to replace batteries.**
- Under 4.2V, **the lock will shut down** and locked (fail secure), Master Code or manual key must be used for the override

Low Battery Warning: When Batteries voltage drops below 4.8V, LED flashing red and sounder beeps 5 times when a valid code entered.



DEFAULT VALUES

| Parameters | Default Values |
|----------------------------|----------------|
| Lock Mode | Factory Mode |
| Factory Master Code | 12345 |
| Facility Code | 99912345 |
| Door No. | 0001 |
| Lock System ID | 999123450001 |
| User Code Length | 4 Digit |
| LED | On |
| Sounder (on/off) | On |
| Pass time (1-99s) | 5 seconds |
| Passage Mode | Off |
| Auto unlock mode | Off |
| Auto lock mode | Off |
| Tamper Shutdown Time | 60 seconds |
| Tamper Attempt Count (1-9) | 4 |
| Daylight Saving | Off |



MANUAL PROGRAMMING GUIDE

PROGRAMMING PROCEDURES

For Model R-300 and R-500, “Schlage” key equal to “#”

1. Set Lock System ID:

12345 # 0 # 12 Digits Lock System ID

2. Set new Master Code(MC 4-9 digits):

12345 # 1 # MASTER CODE # MASTER CODE

3. Master Code Reset:

Change the Master Code will delete all existing Codes

Master Code # 1 # New Master Code # New Master Code

4. Add/Modify sub-master Code(SMC 4-9 digits):

There are 8 sets of sub-master code; each sub-master will expire on given date

Master Code # 2 # N # SMC # MM DD YY #; or

Master Code # 2 # N # SMC # # For permanent Code

N is Sub-master Code slot number. Start from 1 to 8

5. Add/Modify Service Codes (SC 4-9 digits):

Master Code # 3 # N # SC # H

N is Service Code slot number, start from 9 to16, H is the duration of the Service Code,

From 0 hour to 9 hours, 0 will be one shot Code

6. Add Toggle Code (TC 4-9 digits):

Master Code # 4 # N # Toggle Code

N is Toggle Code slot number, from 17 to 19

7. Add Audit Code:

Master Code # 5 # Audit Code

8. Disable sub-master Code (user codes within the group will be disabled) :

Master Code # 6 # N #; N 1-8

9. Enable sub-master Code:

Master Code # 7 # N #; N 1-8

10. Add/Modify/Delete a single User Code:

Add/Modify a single user code



SMC # 8 # N # 4-10 Digits User Code #

N is User Code slot number from 1 to 125

Delete a single user code

SMC# 8 # N # # #,

N is User Code slot number from 1 to 125

11. Bulk Load User Codes:

SMC # 8 # 1 # UC1 # # 2 # UC2 # # 3 # UC3 # #...

12. Delete All the Users within same Group:

SMC # 9 # SMC # SMC

13. Set Tamper Attempt Count:

Master Code # 10 # N

N is 1-9 Tamper Attempt Count from 1 to 9

14. Set Tamper Shutdown time:

Master Code # 11 # N

N is Lockout timer from 15 seconds to 99 seconds

15. Set Date/Time:

Master Code# 12 # MM DD YY hh mm #, (Month/ Date/Year/hour/minute)

16. Set iCode Check in and Check Out timetable:

Master Code# 13 # N # hh mm hh mm

N is the iCode Access Level, from 1 to 5

17. Set daylight saving Starting Date:

Master Code # 14 # MM WW WD

MM is Month of the year (two digit), from 01 to 12,

WW is Week of the Month (single digit), from 1 to 5,

WD is Day of the Week(single digit), from 0 to 6

United State Daylight Saving time start on second Sunday in March

therefore, MM : 03 WW: 2 WD: 0

18. Set daylight saving Ending Date:



Master Code # 15 # MM WW WD

United State Daylight Saving time end on first Sunday in November

therefore, MM : 11 WW: 1 WD: 0

19. Set Pass Time:

Master Code # 16# N

N is the lock back time, from 1 second to 99 seconds

20. Set User Time Schedule for each group:

Master Code # 17 # N # S # hh mm hh mm

N is Sub-master Code slot number, from 1 to 8

S is Preprogrammed Access Schedule, from 0 to 9

| S | Schedule |
|---|----------|
| 0 | Su |
| 1 | Mo |
| 2 | Tu |
| 3 | We |
| 4 | Th |
| 5 | Fr |
| 6 | Sa |
| 7 | Weekly |
| 8 | Mo to Fr |
| 9 | Sa & Su |

For example: Set group 1 access schedule from Monday to Friday, 8:00AM to 5:00PM

Master Code # 17 # 1 # 8 # 08 00 17 00

21. Schedule Passage Mode:

Master Code # 18 # S # hh mm hh mm

S is Preprogrammed Access Schedule, from 0 to 9

22. Disable Passage Mode:

Master Code # 19

23. Enable auto unlock Mode:

Master Code# 20

The door will automatically unlock when passage mode starts



24. Disable auto unlock Mode:

Master Code# 21

25. Enable auto lock Mode:

Master Code # 22

The door will automatically lock when passage mode end

26. Disable auto lock Mode:

Master Code # 23

27. Set Sounder On or Off :

Master Code # 24 # 0 # Turn off

Master Code # 24 # 1 # Turn on

28. Lockout (shutdown)

Master Code # 91 # N

N is the lockout time, from 1 hour to 8 hours or N=9 lockout indefinitely. Only Master Code or manual key can override

29. Lockout (Passage)

Master Code # 92 # N

N is passage time, from 1 hour to 8 hours or N=9 passage indefinitely

30. Disable Lockout Mode:

Master Code # 93



USERS SUMMARY

| User Level | Code Length | User Slot # | Time restriction | User Type |
|----------------------|-------------|-------------|------------------|-----------|
| Master Code (MC) | 4-9 Digits | None | No | Pin |
| Sub-master Code(SMC) | 4-9 Digits | 1-8 | No | Pin |
| Service Code(SC) | 4-9Digits | 9-16 | Yes | Pin |
| Toggle Code | 4-9Digits | 17-19 | Yes | Pin |
| Use Code Group 1 | 4-10 Digits | 1-125 | Yes | Pin |
| Use Code Group 2 | 4-10 Digits | 1-125 | Yes | Pin |
| Use Code Group 3 | 410 Digits | 1-125 | Yes | Pin |
| Use Code Group 4 | 4-10 Digits | 1-125 | Yes | Pin |
| Use Code Group 5 | 4-10 Digits | 1-125 | Yes | Pin |
| Use Code Group 6 | 4-10 Digits | 1-125 | Yes | Pin |
| Use Code Group 7 | 4-10 Digits | 1-125 | Yes | Pin |
| Use Code Group 8 | 4-10 Digits | 1-125 | Yes | Pin |

PROGRAMMING FUNCTIONS SUMMARY

| Function Code | Function Code Description |
|---------------|--|
| 0 | Set Lock System ID |
| 1 | Set New Master Code |
| 2 | Add/Delete/Change Sub-Master Code |
| 3 | Add/Delete/Change Service Code |
| 4 | Add/Delete/Change Toggle Code/iButton |
| 5 | Add/Delete/Change Audit Code |
| 6 | Disable Group Users |
| 7 | Enable Group Users |
| 8 | Add/Delete/Change Users |
| 9 | Delete Group Users |
| 10 | Set Tamper Attempt Count |
| 11 | Set Tamper Attempt Lockout Time |
| 12 | Set Lock Time |
| 13 | Set iCode Check in/Check Out Timetable |
| 14 | Daylight Saving Time Start Date |
| 15 | Daylight Saving Time End Date |
| 16 | Set Pass Time |
| 17 | Set Group Users Access Schedule |
| 18 | Schedule Passage Mode |
| 19 | Disable Scheduled passage Mode |
| 20 | Enable Auto Unlock |
| 21 | Disable Auto Unlock |
| 22 | Enable Auto lock |
| 23 | Disable Auto lock |
| 25 | Motor Running Time |
| 28 | Set Code Length |
| 29 | Enable / Disable keypad background light |
| 91 | Lockout(Close) |
| 92 | Lockout(Open) |
| 93 | Disable Lockout |

TERMINOLOGY

Facility Code

Facility Code is a unique 8 digits code, so your locks will be operated independently from others who had same system. All the locks come out of the box are identical.

Door No.

A random 4 digits number will be created for each lock, so each individual unit will operate independently from each other within same system.

Lock System ID

The combination of the Facility Code and Door No. will be assigned to each lock. The Lock System ID is the most important parameter for iCode generator.

Factory Master Code

Factory Master Code 12345 is used to initialize the lock for a new installation or full reset. This Code must be entered to set the LOCK System ID and the MASTER CODE (MC). After the Master Code is set, the FACTORY MASTER CODE will no longer be valid and is only re-enabled after a full reset.

Master Code

Master Code is set for system administrator. The master Code has ultimate authority to control the system, this control include setting the lock parameters, editing users at all levels, setting time and date, setting up groups and controlling their access.

Audit Code

Audit Code is set strictly for download Audit log (requires program key and software kit). This Code does not operate the lock.

Sub-Master Code

The system can be programmed with up to 8 Sub-Master Codes. The Sub-Master Code can do everything except following limitations:

- Delete or modify Master Code
- Delete or modify sub-master Codes
- Modify system parameters
- Grant access when lock in lockout mode

Each Sub-Master Code associate with one group of similar users, so a large number of users can be managed all together rather than individually—saving time and effort.

User Group

It is convenient for large numbers of similar Users to be grouped together. By placing Users into Groups (assigning them to a specific range of User Slot Numbers), large numbers of Users can be controlled all at once rather than individually--saving time and effort. Groups are controlled via schedules, and a typical example involves enabling or disabling a Group at a certain time.

User Code Length

Code Length Can be defined by user, so when a valid code entered, the lock will automatically grant access. If the code length is different from defined code length, enter the valid code plus the "Schlage" key will also grant access.

User Code

User Codes are for the day-to-day users with certain restrictions, or access levels. Access level can be defined by its immediate sub-master Code.

Service Code

Service Codes are used for a special purpose such as maintenance personnel or vendors. Service Code grants from one time access to 9 hours unlimited access.

Toggle code

Toggle Code unlock the door indefinitely. When the same (or another) toggle code is entered, the door will immediately lock back. Master and Sub-master Code can override when the lock is in Toggle Mode.

Anti-damper

The system has an anti-tamper feature that helps frustrate any attempts to "guess" a valid code. If an invalid code is entered, the red light will flash. After four invalid codes are entered consecutively, the System enters the anti-tamper shutdown mode and the red light will stay on. The System will not accept any code for up to 99 seconds, after which time, the System resets and will allow a valid code to be entered. Each time the System enters the Anti-tamper mode, an entry is made in the Audit Log for later retrieval.

Audit Trail

Audit trail or audit log is a chronological sequence of audit records, each of which contains evidence directly pertaining to and resulting from the execution of access events.

Lockout

Lockout mode will freeze the lock at given state (Lock or unlock); temporarily disable all the users except master Code. Enter the function Code 93 to release the lockout, and resume back to normal operation.



APPENDIX A

MANUAL PROGRAMMING LOG SHEET

| | |
|-------------|-------|
| Master Code | 12345 |
|-------------|-------|

SUB-MASTER

| Slot Number | User Name | Sub-master Code |
|-------------|-----------|-----------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |

SERVICE

| Slot Number | User Name | Service Code |
|-------------|-----------|--------------|
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | | |

TOGGLE

| Slot Number | User Name | User Code/iButton |
|-------------|-----------|-------------------|
| 17 | | |
| 18 | | |
| 19 | | |

USER LOG



Group #:

| Slot Number | User Name | User Code/iButton |
|-------------|-----------|-------------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
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| 34 | | |
| 35 | | |
| 36 | | |
| 37 | | |
| 38 | | |
| 39 | | |
| 40 | | |
| ... | | |

Up to 125 Users for Each Group