

Ritenergy Pro

Access Control Systems

(Firmware Version 3.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.

USER FEATURES

- 1020 Users
- Pre-defined Administration User Levels including Master, Sub-Master and normal User
- User Code Lengths from 3 to 10 digits
- Supervised Use-requires both code and credential to gain access
- Buck load feature allows multiple Codes and/or user cards (within same group) to be added at same time
- Service Code-from one time up to 9 hours
- Toggle code-unlocks the lock indefinitely
- Pass through mode-allow access during lock-out mode
- User Lockout Mode with timer
- Users Assignable to 8 Groups
- Anti-damper – prevent code guessing

LOCK FEATURES

- Manual Key Override
- Grade 1 Cylindrical lock
- 12-button Heavy duty zinc die cast keypad
- Stainless Steel iButton reader
- Non-Volatile solid state Memory-never lose assigned users
- Real-Time Clock adjustable to within 1 second
- Pre-Wired Remote lock button
- Visual and Audible Keypad Feedback
- Low Battery Warning and Battery Status Indicator
- Powered by 4 AA Batteries with up to 3 years battery life
- 2 years manufacture Warranty

SCHEDULING

- 64 Scheduled Events
- Automated Unlock/Lock
- Enable/Disable Users
- Enable/Disable Groups
- Nine pre-programmed "Quick Schedules"
- Real-time clock and calendar
- Programmable Timeout Functions

USER ACCESS METHODS

- Code
- iButton
- iButton Plus Code
- Manual Key Override



DEFAULT VALUES

Parameters	Default Values
Lock Mode	Factory Mode
Factory Master Code	12345
Lock System ID	99912345
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

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 # key within 5 seconds until LED flashing red and beeps 6 times, release the # key.

Note: Enter the default master code (12345#) to confirm the reset.

BATTERY STATUS INDICATOR

Press “*” and “#” simultaneously

- 5.2V or higher -Green LED flashing -**normal**
- 5.1-4.8V -Green and red LED flashing-**low**
- 4.8V 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.



MANUAL PROGRAMMING GUIDE

PROGRAMMING PROCEDURES

1. Set Lock System ID:
12345 # 0 # 8 Digits Lock System ID
2. Set new Master Code(MC 4-9 digits):
12345 # 1 # MASTER CODE # MASTER CODE
3. Soft Reset:
Delete all the Codes and change the Master Code
Master Code # 1 # New Master Code # New Master Code
4. Add/Modify sub-master Code(SMC 4-9 digits):
Master Code # 2 # N # SMC # MM DD YY #; N 1-8, or
Master Code # 2 # N # SMC # # For permanent Code
N 1-8 Sub-master Code Group number
5. Add/Modify Service Codes (SC 4-9 digits):
Master Code # 3 # N # SC # H #, N 9-16, H 0-9 hours, 0 will be one shot Code
6. Add Toggle Code (TC 4-9 digits):
Master Code # 4 # N # Toggle Code #, N 17-19
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 # 3-10 Digits User Code # #, N 1-125

Delete a single user code
SMC# 8 # N # # #, N 1-125

* Sub-master Code (1-8 groups)



11. Buck Load User Codes:

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

12. Add/Modify/Delete a single iButton User:

Add/Modify a single iButton User

SMC* # 8 # N # Enter iButton (Touch Lock Reader)

Delete a single iButton User

SMC# 8 # N # # #, N 1-125

13. Buck Load iButton Users:

SMC* # 8 # 1 # (iButton1) 2 # (iButton2) 3 # (iButton3)...

14. Add/Modify/Delete a single iButton plus Pin:

SMC* # 8 # N # 3-10 Digits User Code # * Enter iButton*

15. Buck Load iButton plus Pin:

SMC* # 8 # 1 # UC1 # (iButton1) 2# UC2 # (iButton2)...

16. Delete All the Users within same Group:

SMC # 9 # SMC # SMC

17. Set Tamper Attempt Count:

Master Code # 10 # N #, N 1-9

18. Set Tamper Shutdown time:

Master Code # 11 # N #, 1-99 seconds

19. Set Date/Time:

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

20. Set daylight saving Starting Date:

Master Code # 14 # MM WW WD #; MM (Month of the year) 01-12,

WW (Week of the Month) 1-5, WD (Day of the Week) 0-6

21. Set daylight saving Ending Date:

Master Code # 15 # MM WW WD

22. Set Pass Time:

Master Code # 16# N #; 1-99 seconds

23. Set User Time Schedule for each group:

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

N 1-8 Sub-master Code Group number

S 0-9 Pre programmed Access Schedule

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

24. Schedule Passage Mode:

Master Code # 18 # S # hh mm hh mm #; S 0-9

25. Disable Passage Mode:

Master Code # 19

26. Enable auto unlock Mode:

Master Code# 20 #; will unlock when passage mode start

27. Disable auto unlock Mode:

Master Code# 21

28. Enable auto lock Mode:

Master Code # 22 #; will lock when passage mode end

29. Disable auto lock Mode:

Master Code # 23

30. Set Sounder On or Off :

Master Code # 24 # L #; S 0, 1 (Off/On)



31. Motor Running Time

Master Code # 25 # N #; N 1-225, 1 = 1/10 second

32. Lockout:

Master Code # 91 # N

N 1-9 Door Stays Close, 1=1 hour, ...8= 8 hours, 9=always

Master Code # 92 # N

N 1-9 Door Stays Open, 1=1 hour, ...8= 8 hours, 9=always

33. Disable Lockout Mode:

Master Code # 93

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/iButton	4-9Digits	17-19	Yes	Pin, iButton
Use Code Group 1	1-10 Digits	1-125	Yes	Pin, iButton, Pin+iButton
Use Code Group 2	1-10 Digits	1-125	Yes	Pin, iButton, Pin+iButton
Use Code Group 3	1-10 Digits	1-125	Yes	Pin, iButton, Pin+iButton
Use Code Group 4	1-10 Digits	1-125	Yes	Pin, iButton, Pin+iButton
Use Code Group 5	1-10 Digits	1-125	Yes	Pin, iButton, Pin+iButton
Use Code Group 6	1-10 Digits	1-125	Yes	Pin, iButton, Pin+iButton
Use Code Group 7	1-10 Digits	1-125	Yes	Pin, iButton, Pin+iButton
Use Code Group 8	1-10 Digits	1-125	Yes	Pin, iButton, Pin+iButton

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PROGRAMMING FUNCTIONS SUMMARY

Function Code	Function Code Description
0	Add 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	Reserved
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
24	Reserved
25	Motor Running Time
26	Reserved
27-90	Reserved
91	Lockout(Close)
92	Lockout(Open)
93	Disable Lockout
94-99	Reserved

TERMINOLOGY

Lock System ID (Facility Code)

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

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 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 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

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.

iButton

The iButton is a computer chip enclosed in a 16mm thick stainless steel can. Because of this unique and durable container, up-to-date information can travel with a person or object anywhere they go. The steel iButton can be mounted virtually anywhere because it is rugged enough to withstand harsh environments, indoors or outdoors. It is small and portable enough to attach to a key fob, ring, watch, or other personal items, and be used daily for applications such as access control to buildings and computers, asset management, and various data logging tasks.

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
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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		
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11		
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...

Up to 125 Users for Each Group