Control Box 3.0
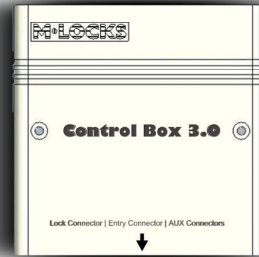
Operation Manual

General

The Control Box, drives a standard High Security Lock (HSL).
There are 3 options to setup the firmware. Both type and mode need to be selected:
Locktype 0: self-locking for locks EM1620, EM2020, EM3520, EM2520 (standard).
Locktype 1: not self-locking for lock EM3020.
Lockmode 0: key or code opening (standard).

Setting up the ControlBox 3.0 must be done by qualified people.

Normal functioning:
Code with or without i-Button, or i-Button only which is presented to standard entry like BR5010 or DE2010. When the code corresponds to the saved code in the Control Box, then a secret programmed analogue code is sent to the HSL. A locking code is available for locktype "1". (With lock EM3020)

Audit (log):
Function in the menu allows presenting i-Button 1996L to entry and a log file is automatically written to the i-Button. Saved information: opening with ID and time, failure opening with ID and time. Audit of users can be done with i-Button 1995 or i-Button 1993.

Mercurius Desktop 2010 software is written for presentation on the PC. To synchronize time between PC and ControlBox 3.0, the i-Button 1994L or i-Button 1904 can be used.

Connections:
Power supply: 9V block battery within housing (screw connection).
Entry: 4 pins standard.
                    An external power supply can be connected (outside scope or supply)
Lock cable: 4 threads, std. by M-Locks.
LED indication: Through the entry.
Sound indication: Double beep for positive acknowledgement
                    Long beep for negative acknowledgement

Codes
- A Master can: delete/install manager, perform audit. A Master cannot open.
- A Manager can: open, change the code, edit users and audit the lock.
- Up to 99 Users: can open and change their own code (when programmed). Number of codes per user doubles when silent alarm function is desired.
- Up to 256 only i-Button users can be installed.

In factory mode, ControlBox 3.0 contains Master Code 00 000000 and
Manager Code 01 111111.
To open, manager code must be changed.

Activate silent alarm:
In case of a hold up situation, a silent alarm
can be sent by entering the last code digit +1.

For example: valid Code 0-9-9-8-7-6-5-<u>4</u>,
alarm will be sent by entering 0-9-9-8-7-6-5-<u>5</u>.
This code works as a valid code.

For example

⓪ ⑨ ⑨ ⑧ ⑦ ⑥ ⑤ ⑤ ♪♪
Silent alarm

The code length is (6) digits plus ID of user: 00 for Master, 01 for Manager, 02 for User.
Codes for example: 00123456, 01111111, …, 99999999.

Dallas i-Button
During user installation (function #1) a Dallas i-Button can be related to any user simply by using the i-Button after entering the code. The user is than identified by the code plus the i-Button. Also i-Button users only can be installed (without code). I-Button type DS1990 is applicable to this function.

Audit
- A "basic audit" (last 2000 openings, time & date) is saved on the standard locking board. "Basic audit" can be downloaded by using the i-Button DS1996 on the entry with function #7.
- Audit of installed users can be downloaded by using i-Button function #7 and i-Button type DS1995 or DS1993.

System random
Generate random code between ControlBox3.0 and lock via function #4.

Block all users
All users can be blocked by the manager and actived again by function #2.

Block iButton users
Through PC management specific i-Buttons can be erased from the lock.

Lock configuration
Configuration of the lock is done by hand. To set mode, enter function # 8

Press 8 untill double beep	→ 8 ♪♪
- Enter Master code	→ 00 000000 ♪♪ (default)
- Enter Manager code	→ 01 111111 ♪♪ (default)
- Enter Lock mode (0..7)	→ LM ♪♪

M-LOCKS BV   ver. 1.0 2011 07 12   Tel: +31 (0)314 376 876
Vlijtstraat 40   2   Fax: +31 (0)314 376 878
NL-7005 BN Doetinchem   www.m-locks.com

Lockmode

Mode	Time delay override	Dual Combo	Silent alarm
0			
1	V		
2		V	
3	V	V	
4			V
5	V		V
6		V	V
7	V	V	V

NOTES:

- Time delay override user must have ID99.
- I-Button users can always open immediately, independent of lock mode.
- Dual combo is only applicable to opening of the lock, not to manager functions.
- Silent alarm is activated by entering a standard code and last digit is one (1) digit higher. The lock will open, but at the same time a switch is activated for the alarm.

M-LOCKS BV
Vlijtstraat 40
NL-7005 BN Doetinchem

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Operations

Function 0: Change code
Press 0 until double beep	→ 0 ♪♪
- Enter old code (f.e. 01 111111)	→ 01 111111 ♪♪
- Enter new code (eventually add i-Button)	→ 01 123456 ♪♪ (K♪♪)
- Enter new code (eventually add i-Button) to confim	→ 01 123456 ♪♪ (K♪♪)

Function 1: Add i-Button user
Press 1 until double beep	→ 1 ♪♪
- Enter Manager code	→ 01 111111 ♪♪
- Present i-Button (K)	→ K ♪♪

Function 1: Add User (f.e. 02)
Press 1 until double beep	→ 1 ♪♪
- Enter Manager code	→ 01 111111 ♪♪
- Enter User code	→ 02 222222 ♪♪
- Enter User code to confirm	→ 02 222222 ♪♪

Function 1: Add User (for example) 02 + i-Button
Press 1 until double beep	→ 1 ♪♪
- Enter Manager code	→ 01 111111 ♪♪
- Enter User code	→ 02 222222 ♪♪
- Present i-Button (K)	→ K ♪♪
- Enter User code	→ 02 222222 ♪♪
- Present i-Button (K)	→ K ♪♪

The master can add the manager, provided that manager is not excisting.
Adding can only be done assigning code 01 111111 to the manager.
The master can not add users.

Function 2: blocking and de-blocking users
Press 2 until double beep	→ 2 ♪♪
- Enter Manager code (Toggle function)	→ 01 111111 ♪♪

Function 3: Delete i-Button
Press 3 until double beep	→ 3 ♪♪
- Enter Manager code	→ 01 111111 ♪♪
- Present i-Button type DS1995 or DS1993 (K) (loaded with i-Button code to delete)	→ K ♪♪

Function 3: Delete User (for example 02)
Press 3 until double beep	→ 3 ♪♪
- Enter Manager code	→ 01 111111 ♪♪
- Enter User ID number	→ 02

The master (00) can delete manager
The master (00) cannot delete users
Manager (01) can delete users

Function 3: Delete manager
Press 3 until double beep	→ 3 ♪♪
- Enter Master code	→ 00 000000
- Enter User ID number	→ 01

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Function 3: Delete all users
Press 3 until double beep   → 3 ♪♪
- Enter Manager code   → 01 111111
- Enter "00"   → 00

Function 4: New opencode to lock (lockmode 0 and 1)
(secret code between ControlBox and lock)
Press 4 until double beep   → 4 ♪♪
- Enter Manager code (or Master code) → 01 111111 ♪♪ (or 00 000000 ♪♪)
- Press 4 to confirm   → 4 ♪♪

Function 4: Reset opencode to lock (lockmode 0 and 1) in case of installing a new lock
Press 4 until double beep   → 4 ♪♪
- Enter Manager code (or Master code) → 01 111111 ♪♪ (or 00 000000 ♪♪)
- Press 8 to reset to 123456   → 8 ♪♪

Function 5: Keyboard test
Check in sequence key 1 till 0. When key is mal-functioning a long beep is heard and function switches off.

Function 7: audit LOG
Press 7 until double beep   → 7 ♪♪
- Enter Manager code (or Master code) → 01 111111 ♪♪ (or 00 000000 ♪♪)
- Present i-Button type DS1996 (K)   → K (wait) ♪♪

Function 7: Audit user
Press 7 until double beep   → 7 ♪♪
- Enter Manager code (or Master code) → 01 111111 ♪♪ (or 00 000000 ♪♪)
- Present i-Button type DS1993 or DS1995 (K) → K (wait) ♪♪

Function 7: set clock
Press 7 until double beep   → 7 ♪♪
- Enter Manager code (or Master code) → 01 111111 ♪♪ (or 00 000000 ♪♪)
- Present i-Button type DS1994 or DS1904 (K) → K (wait) ♪♪

Function 8: Warm reset
To change lock mode only; Users, Time Delay and Open Window remain:

Press 8 until double beep   → 8 ♪♪
- Enter Master code   → 00 000000 ♪♪
- Enter Manager code   → 01 111111 ♪♪
- Enter Lockmode (0..7)   → LM ♪♪

Master and Manager Code remain the same
Secret code to the lock is set back to 123456

Function 8: Warm reset to return to factory mode;
TD and OW back to 0, no users except for Manager and Master:

Press 8 until double beep   → 8 ♪♪
- Enter Master code   → 00 000000 ♪♪
- Enter Manager code   → 01 111111 ♪♪
- Enter „8"   → 8 ♪♪

Master and Manager Code are set back to factory codes (00 000000 and 01 111111)
Secret code to the lock is set back to 123456. Set lockmode remains unchanged.

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Function 9: set Time-delay and Openwindow (lockmode 0)

Press 9 until double beep	→ 9 ♪♪
- Enter Manager code	→ 01 111111 ♪♪
- Enter Timedelay and Openwindow	→ 0102 ♪♪
- Enter Timedelay and Openwindow	→ 0102 ♪♪

For example: 1minute time-delay and 2 minutes open window
If programming 00 and 00 function is not active. (programmation in open window following standard procedure)

Times can always be increased, but only reduced in open window.

After entering code the time-delay starts. A beep is heard every 10 seconds.
After time-delay the open window starts. The lock can be opened during open window by entering the code again. Open Window is indicated by a beep every 2 seconds.

By pressing any key, time-delay will be aborted. When installed, user 99 can override time-delay.

General:
Opening the lock with user 02 (for example)

- Enter User code	→ 02 222222 ♪♪

Opening the lock with user 02+ i-Button (for example)

- Enter User code	→ 02 222222 ♪♪
- Present i-Button (K)	→ K ****** ♪♪

Opening the lock with I-Button

- Present i-Button (K)	→ K ****** ♪♪