

Code & Mifare CM1000

Mykey - Art. No: 480010 (black), 480011 (white)
Classic - Art. No.: 482010 (black), 482011 (white)

User manual





Table of contents

1.	Introduction	page 3
2.	Installation	page 3
3.	Programming users	page 4
3.1	User positions	page 4
3.2	Programming user codes	page 4
3.3	Programming Mifare tags	page 5
3.4	Programming codes/Mifare tags for special functions	page 6
3.5	Smart reading	page 6
4.	Configuration of CM1000	page 7
4.1	Service code	page 7
4.2	Configuration overview	page 7
4.3	Change the Master code	page 7
4.4	Change the Service code	page 8
4.5	LED Indications	page 8
4.6	Outputs	page 9
4.7	Special settings	page 10
5.	Backup card	page 11
6.	Blocking	page 11
7.	Manual reset	page 11
8.	Technical specifications	page 11
9.	Connection examples	page 12



1. Introduction

CM1000 is a flexible keypad and Mifare reader in one unit for many different applications.

In standby the yellow LED is lit LED (●○○)

Correct code/tag lights the yellow and the green LED (●●○○)

Incorrect code/tag lights the red LED (○○●)

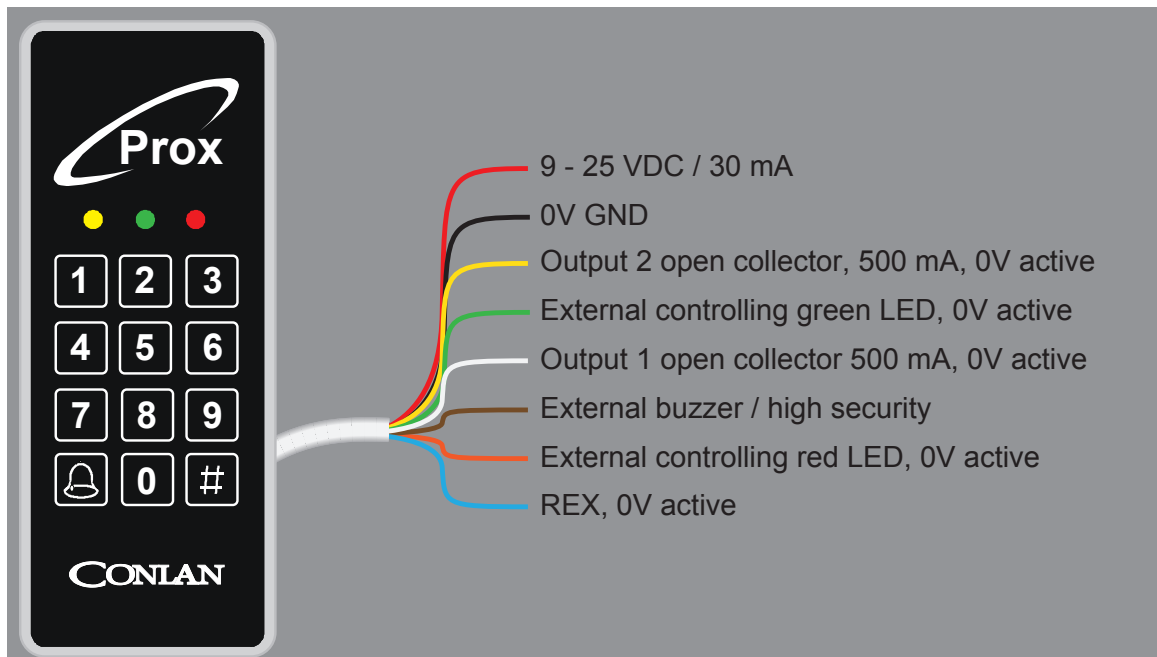
CM1000 has a buzzer for indicating while keying, correct code/tag, incorrect etc. and 2 transistor outputs, independent from each other, so the CM1000 can give access by code and Mifare tag. The CM1000 is a stand alone unit, and can be programmed directly by using the Master code and Service code.

2. Installation

Mount the reader on a even surface. (use the following drill template for precise fitting).

Connect the wires to power supply, door strike, assembly board etc.

Colour scheme



Note. Right after applying the voltage all LED's lights and the buzzer sounds **do not** touch the reader until the yellow LED lights and the buzzer is silent.

See connection examples on the last page.



3. Programming users

Programming the CM1000 is simple and easy to understand.

3.1 User positions

CM1000 has 200 positions, which can contain a code or a Mifare tag. The positions are divided as following:

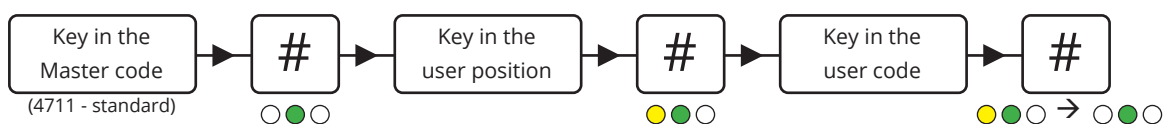
User position	Function
1 - 100	Activates output 2 (the code in position 1 is 1234 - default)
101 - 150	Activates output 1
151 - 190	Activates output 1 and 2
191 - 200	Reserved for special functions


3.2 Programming user codes

The Master code is used to program/change/delete the users. By default the Master code is **4711**.

LED indication: No light: ○ Light: ● Flash: ✱ Clear buffer: 

New users



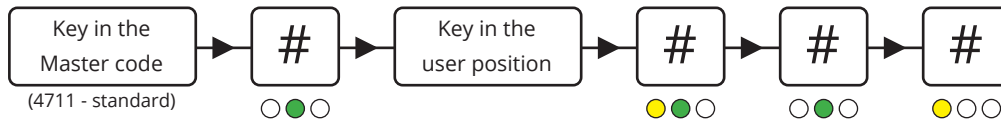
To program more users, continue from “key in the user position” or press  to exit.

Changing user codes

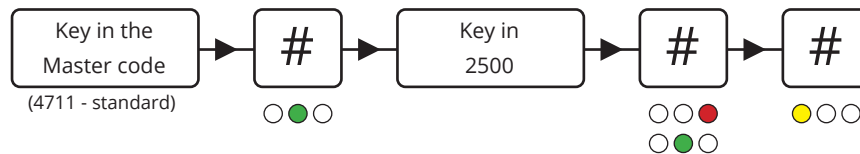
It's the same procedure as programming new users, just overwrite the user positions.



Delete specific users



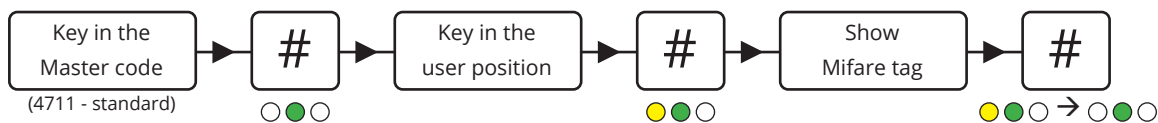
Delete all users



3.2 Programming Mifare tags

CM1000 can read Mifare classic 1K, classic 4K, Ultralight, Ultralight C, PLUS and DESFIRE.

Programming a new Mifare tag



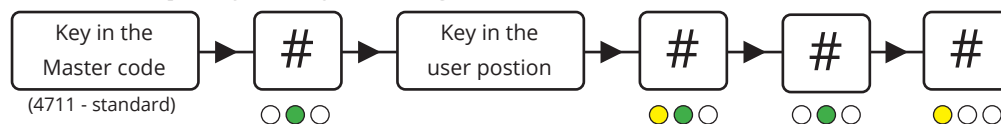
For more tags, continue from “key in the user position or type # to exit.

0 0 0

Changing Mifare tags

It's the same procedure as programming new users, just overwrite the position.

Delete a specific Mifare tag





3.4 Programming codes/Mifare tags for special functions

Programming the codes and Mifare tags is described in 3.2 and 3.3. This entry activates the output(s) for 5 seconds (factory setting). Only 1 user can enter at the time.

Programming the same user twice

By programming the same code/Mifare tag on the same position twice toggles the output.

(I.e. the code/Mifare tag is entered to unlock the door and entered to lock it again).

Programming the same user 3 times

By programming the same code/Mifare tag on the same position 3 times, the output is designated as switch on only.

(I.e. the door is permanently unlocked when the code/Mifare tag is entered).

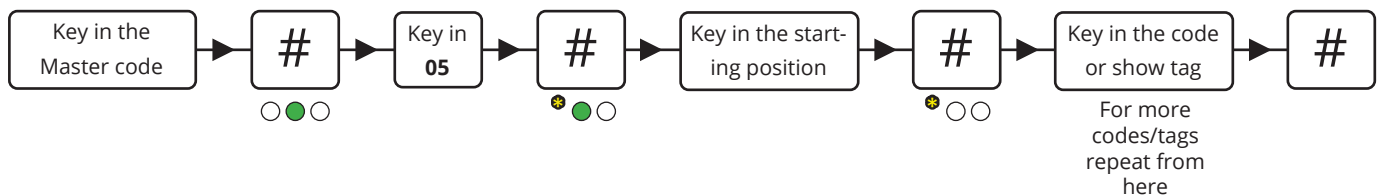
Programming the same user 4 times

By programming the same code/Mifare tag on the same position 4 times, the output is designated as switch off only.

(I.e. the door is only locked when the code/Mifare tag is entered).

3.5 Smart reading

This position makes it possible to program codes/Mifare tags quicker without entering new positions. Key in a position and it counts automatically to the next position. Codes and Mifare tags can be programmed alternatively as you see fit.



Note: This programming mode overwrites existing positions.



4. Configuration of CM1000

4.1 The Service code

The Service code is used for CM1000's advanced settings such as changing the Master code and Service code, LED indications and much more. The overview of the settings and the factory settings can be seen in 4.2 *Configuration overview*.

The Service code is **12347890** (factory setting).

Note: Before the Service code can be used must the voltage be turned OFF and ON (the Service code can now be entered within 10 seconds).

After entering the Service code the reader is in programming mode (the green LED lights). Each time a setting is made the CM1000 goes back to the previous point and the next setting can be made.

The navigation is by entering the position/ value followed by #.

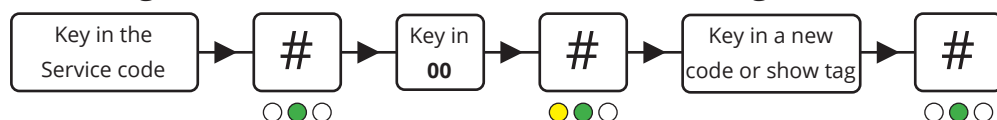
4.2 Configuration overview

Position	Setting	Factory default
00	Master code (1 til 8 cifre)	4711
01	Service code (1 til 8 cifre)	12347890
02	LED indications	Normal = Yellow, active = Yellow and green
03	Outputs	Output time for 1 and 2 is 5 seconds
04	Special functions	
05	Smart reading	
06	Background light	
08	Backup/cloning the settings	
2500	Alle codes/Mifare tags on the user positions are deleted	
0250	Reset to factory default	

4.3 Change the Master code

By default the Master code is **4711** and can only be used to program, change or delete users on the CM1000.

To change the Master code, enter the following:

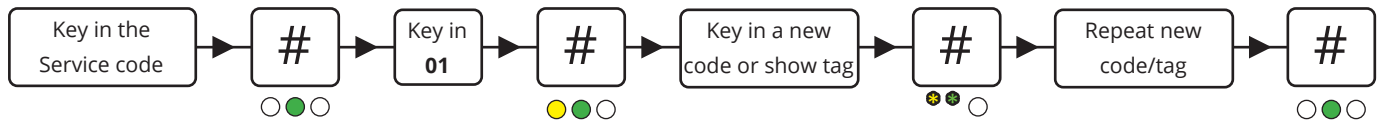




4.4 Change the Service code

The Service code is used to configure the CM1000's settings.

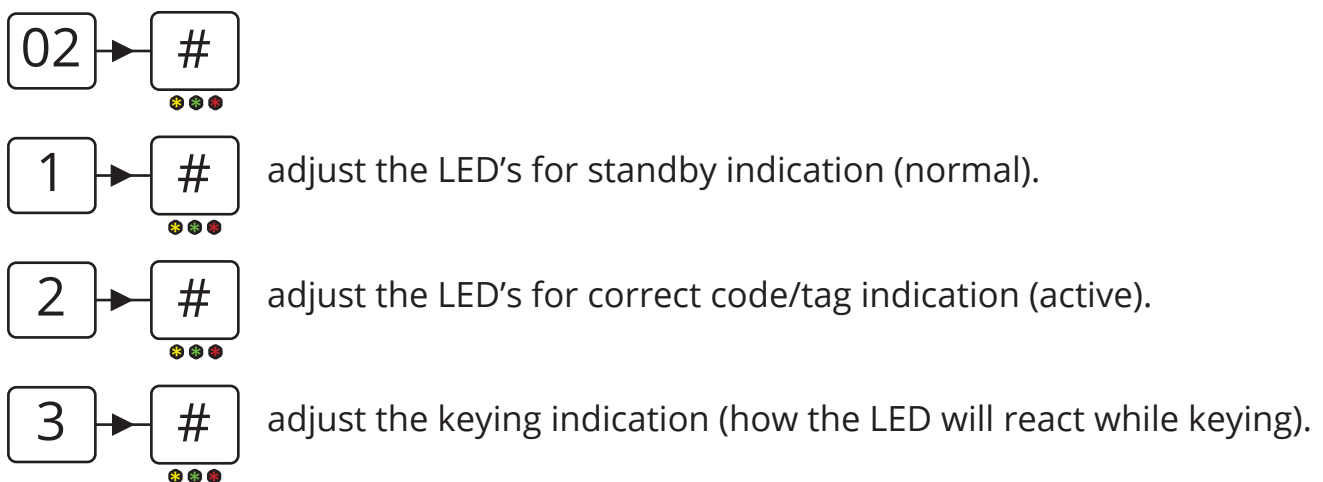
To change the Service code, enter the following within 10 seconds after power on:



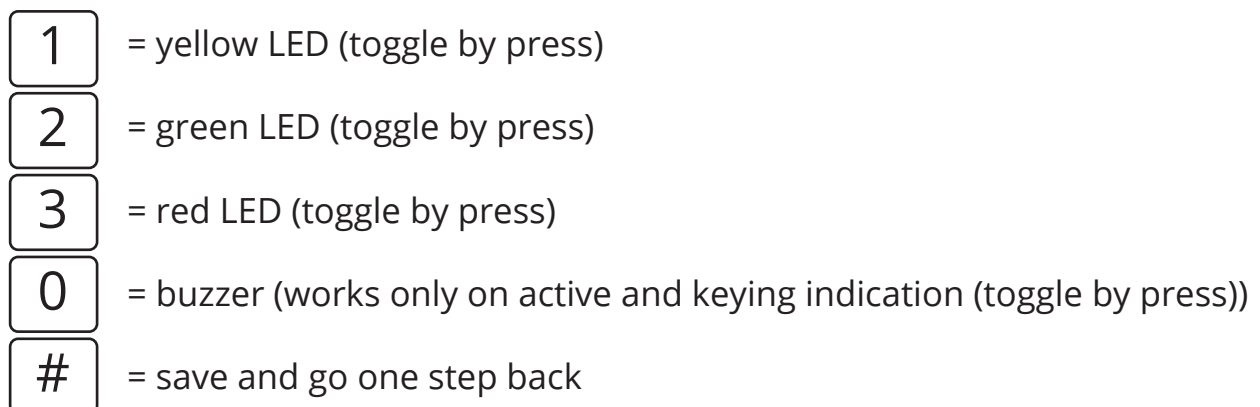
4.5 LED indications

The CM1000's 3 LED's can be adjusted at will.

To adjust the LED indications enter the following:



To adjust the LED's press on the following:



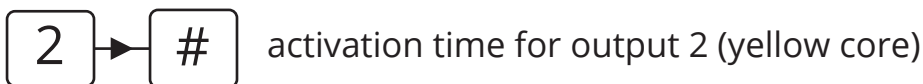
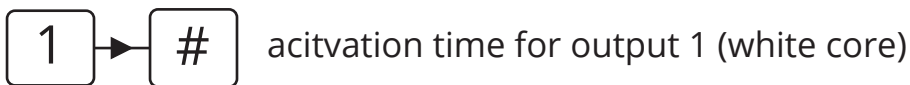
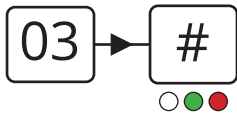
To save the settings press **#** or press / to go back to the previous point (not saving).



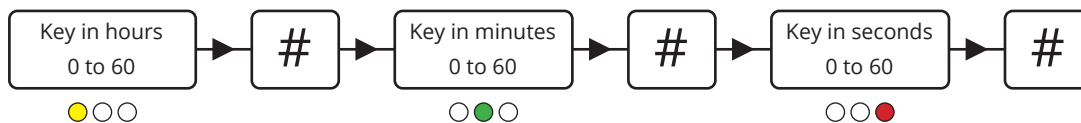
4.6 Outputs

The CM1000 has 2 transistor outputs, which both are activated for 5 seconds (factory default) when a correct code/Mifare tag is entered. The output activation time can be changed and inverted.

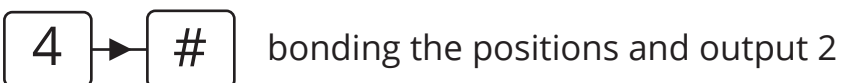
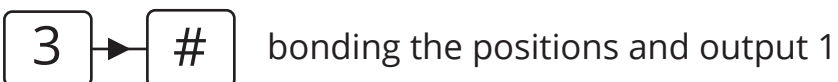
To change these settings key in:



The time is set as:



If no value is entered in *hours*, *minutes* or *seconds* is the value automatically 0 (which corresponds to set the output as toggle).



Both outputs are bonded to specific positions. By factory default positions 1 to 100 are bounded to output 2 and positions 101 to 150 to output 1.

The value can not be crossed.



To save the settings press or press / to go back to the previous point (not saving).



4.7 Special settings

These settings is used to change the CM1000's special functions such as turning the buzzer on/off, enable High Security etc.

To change these settings, key in: 04 → #
● ○ ○

- 1 = Service code without timeout (● = inactive / ● = active)
- 2 = Master code be changed by Master code (● = inactive / ● = active)
- 3 = Mute reader (● = off / ● = on)
- 4 = Brown wire function (● = external buzzer / ● = High Security)
- 5 = High Security (● = inactive / ● = active)
- 6 = Bell/star key (● = delete non-finished codes / ● = activates output 1*)

**When the bell/star key is set to activate output 1 can codes and Mifare tags only activate output 2.*

High Security

High Security increases the CM1000's security by ensuring 2 positions have to be activated before the output is activated (the positions must be next to each other).

Special positions

On positions 191 to 194 special functions can be activated by code/Mifare tag. The programming is like programming a new user.

191 = No buzzer

192 = Input 1 (brown wire) function (High Security or external buzzer)

193 = High Security

194 = Bell/star key function (activates output 2 by press)

To save the settings press # or press  / * to go back to the previous point (not saving).

Note: A power cucle puts the functions back to the settings made by the Service code.



5. Backup card

The CM1000's informations can be saved and loaded with a Backup card (Art. No.: 480080).

Please view the following configuration scheme for further information.

6. Blocking

The CM1000 is blocked for 1 minute after 4 incorrect codes/Mifare tags.

LED indication: ○○●

7. Manual reset

The CM1000 can be reset to factory default manually.

- Turn the voltage off.
- Connect the yellow and brown wire.
- Turn the voltage on (9 - 25 VDC) the readers LED's lights and the buzzer sounds.
- Turn the voltage off and disconnect the yellow and brown wire.

The CM1000 is now reset to factory default and the user codes/tags are deleted.

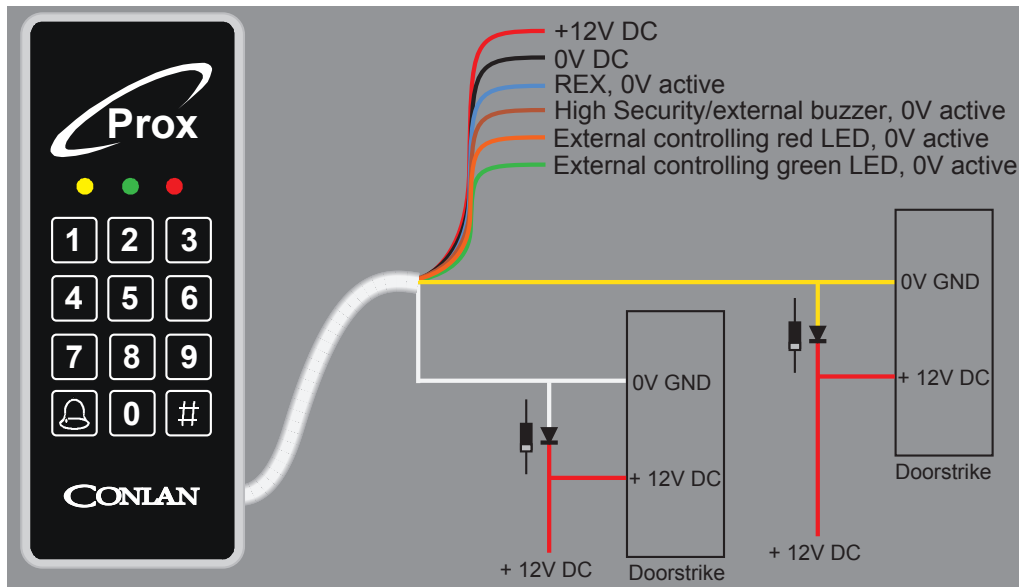
8. Technical specifications

Voltage:	12 VDC, 30 mA
Voltage range:	9 - 25 VDC
Mifare reading:	Max. 50 mm
Output:	2x open collector, max. 500 mA
Input:	External buzzer/High Security (brown) and REX, 0V active (blue)
Protection rate:	IP67
Color:	Black or white
Cable:	2,5 m white, 8 cores
Dimensions (HxWxD):	Mykey = 76x49x8 mm / Classic = 130x50x8 mm

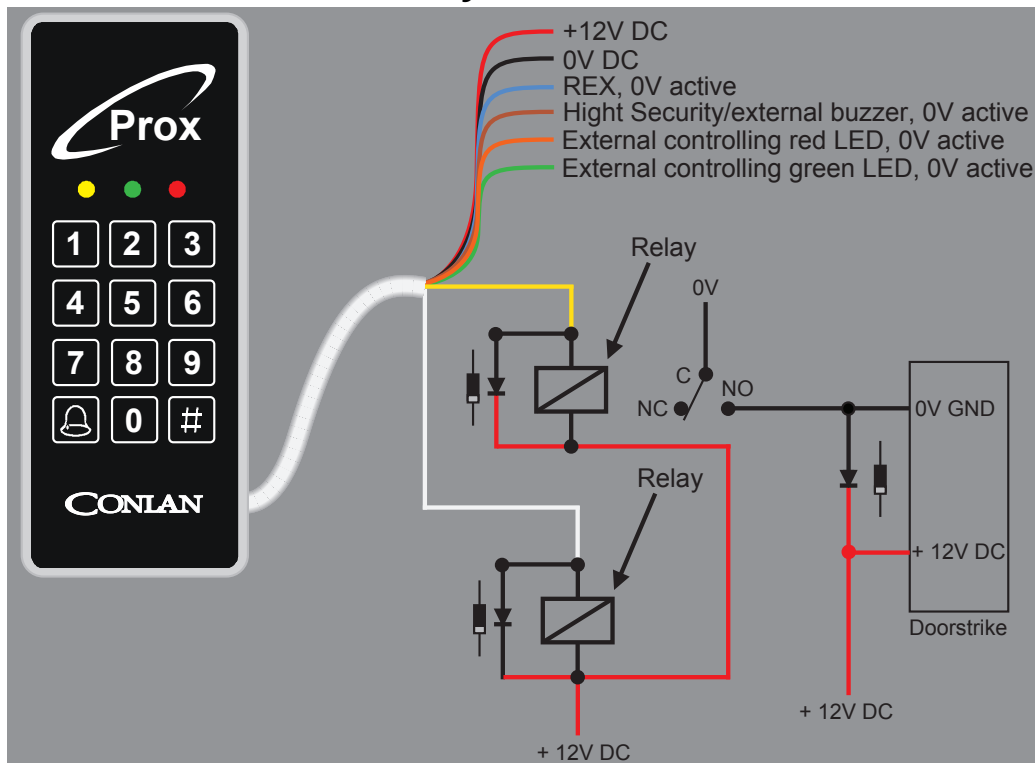


9. Connection examples

Direct connection



Relay connection



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