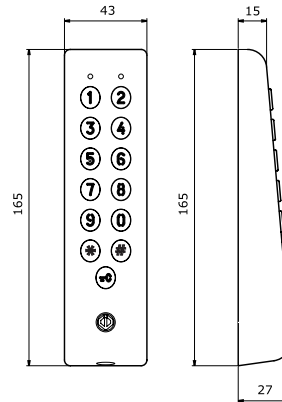


### 1] PRODUCT PRESENTATION

- Stainless steel.
- Narrow: Ideal for installation on a door frame.
- Backlit.
- 2 relays.
- Recommended for activating and deactivating your alarm system.
- Surface-mount.
- Free voltage.
- Supplied with security screws.
- 100 user codes.
- Audible and visual feedback.
- Dimensions (L x W x D):  
6-1/2" x 1-3/4" x 1"  
(165 mm x 43 mm x 27mm)
- Power supplies:  
12V to 24V AC or 12V to 48V DC.
- Consumptions: 30 to 100mA.



- WEEE & RoHS
- IP64
- CE certification
- Environmental tests: vibrations
- 13°F to 158°F  
25°C to +70°C

### 2] NOTES & RECOMMENDATIONS

#### Cable

- The distance between the CM-100SN-V.2 and the remote electronic can not exceed more than 33 Feet (10 meters).
- Make sure that the cable is not near high voltage cables (ex: 230V ac).
- Recommended cable between the CM-100SN-V.2 and the remote electronics: 2 twisted pairs (4 wires).

#### Mounting recommendations

Mount the keypad on a flat surface to avoid any vandalism and to insure the best mounting.

#### Security Recommendations

- For security reasons, change the factory default master code.
- When selecting a master code and user code avoid simple codes (example : 3 4 5 6 7).

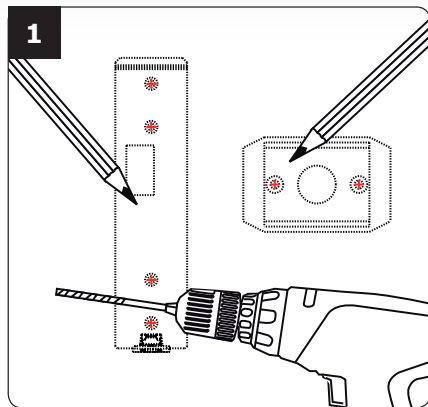
#### Installation recommendations

To protect against electromagnetic interference, be sure to install the varistor in parallel to the lock.

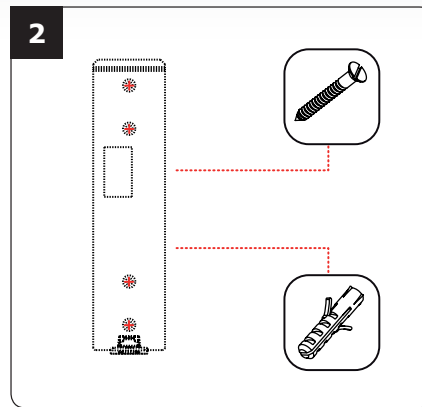
### 3] MOUNTING KIT

	Varistor	(M5x8 DiAx® screw)	T20 DiAx® Spanner	Plastic anchors	(M4x30) mounting screws
Remote electronics	-	-	-	2	2
CM-100SN-V.2	1	1	1	2	2

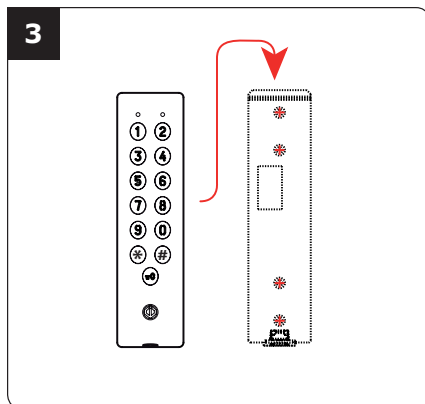
4] MOUNTING INSTRUCTIONS



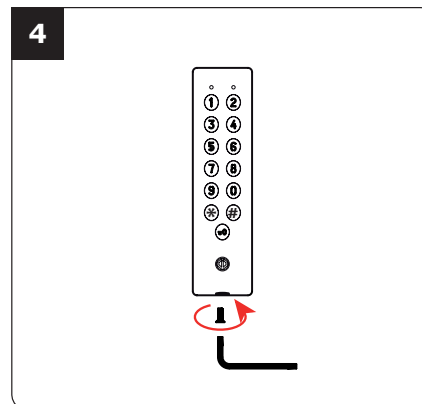
Verify the distance between the CM-100SN-V.2 keypad and the rcontroller (refer to page 3, Notes and Recommendations). Place the back plate of the CM-100SN-V.2 keypad and the bracket of the remote electronics on the wall, then mark the mounting hole locations and the wiring access hole with a pen. Then drill the 2 mounting holes, 3/16" (5 mm) in diameter and 1-3/8" (35 mm) hole depth, and the wiring access hole.



Insert the 2 plastic anchors into the holes. Mount the back plate of the CM-100SN-V.2 with the (M4x30) mounting screws.

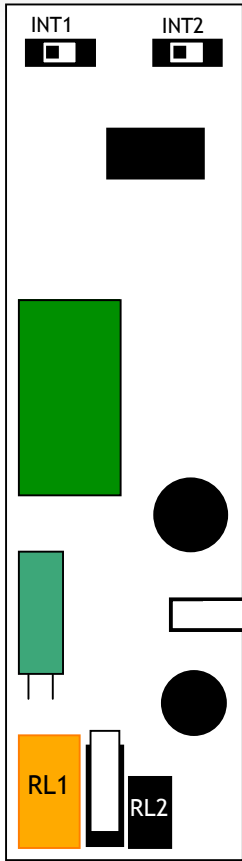


Insert the cable into the wiring access hole of the back plate. Then mount the keypad on the back plate, placing first the top in the hooks and then the bottom.



Fasten the CM-100SN-V.2 keypad to the back plate by using the supplied security screws and T20 security screwdriver.

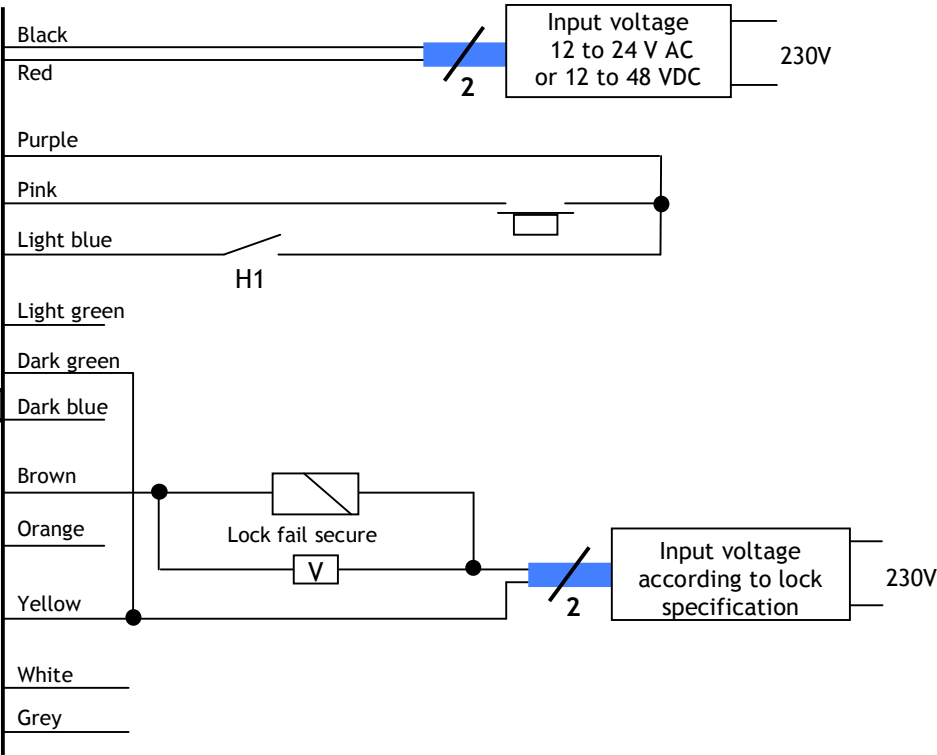
5] WIRING DIAGRAM



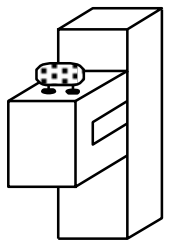
INT2: Switch for reset

INT1: switch to enable the user to change his own code

Terminals	Description
Black	Input voltage 12/24 VAC or 12/48 VDC
Red	Input voltage 12/24 VAC or 12/48 VDC
Pink	Request-to-exit input relay 1
Purple	Common
Light blue	H1 Timer Contact
Blue	N/C contact relay 2
Green	Common relay 2
Light green	N/O contact relay 2
Orange	N/C contact relay 1
Yellow	Common relay 1
Brown	N/O contact relay 1
White	Tamper switch output
Grey	Tamper switch output



This device comes with a varistor.  
 The varistor must be connected on the strike terminal (electromagnet...) operated by the device.  
 If this product operates more than one strike, each lock should have a varistor.  
 The varistor controls the overload produced by the strike coil - back emf.  
 It is recommended to use a separate power supply when using a Shear Lock Magnet.



**Default values**

- Without codes.
- Illumination time: 10 seconds.
- Relay release time: 1 second.
- Code length: 5-digits.
- Master Code: 1 2 3 4 5.
- Programming security time: 120 seconds.
- Code length for sub master code:
  - Version 1 relay (Group 1) = “\*=A” “#=B”
  - Version 2 relays (Group 2) = 13.

**Audible signal**

- The buzzer indicates different audible signals.
- It can be turned off by cutting the ST1 wire on the remote electronics.

- 1 short beep: Keypad powered.
- 1 long beep: Data computing in programming or access granted.
- 2 short beeps: Enter or Exit from programming.
- 4 short beeps: data computing error.

**Code length**

- The master code and the User codes can be 4 or 5-digits in length.
- All the keypad keys can be used to program a code.
- The master code and the Pin code can be 4 or 5-digit code.
- The master code CAN NOT be used as a PIN code

- (User Pin code).
- To delete a specific User pin Code replace it by 0 0 0 0 if code length is 4-digits format or replace it by 0 0 0 0 0 if the code is in 5-digits format.

**P2 jumper:**

Reset master code and user codes

**P3 jumper:**

Modification of individual code by the user

**A. Reset master code and user codes**

1. Enter the master code twice (1 2 3 4 5 default value master code). 2 beeps are emitted to confirm entry in programming mode.
2. Press \*6 to reset the Master Code and the User codes.
  1. One beep is emitted.
  2. Press on “A” and “B” to confirm reset of all memory of the keypad.
  3. Wait for two beeps.
  4. The master code is restored to its default value 1 2 3 4 5 and all the User codes are deleted from the keypad.
  5. Once the reset is completed then the keypad returns to a stand-by operating mode.

**OR**

1. Cut the power. Place the jumper on P2.
2. Put the power back.
  1. Wait approximately 3 seconds.
  2. Two beeps are emitted to confirm reset of the keypad.
  3. Remove P2 jumper.
  4. The master code is restored to its default value 1 2 3 4 5 and all the User codes are deleted from the keypad.

**B. Setting code length**

1. Enter the master code twice. (1 2 3 4 5 default value master code). 2 beeps are emitted to confirm entry in programming mode.
2. Press \*4 to program the code length.
  - One beep is emitted.
  - Press 4 or 5 for the digit code.
  - One beep is emitted to confirm programming of the code length.
3. Press \*5 to modify the master code.
  - One beep is emitted.
  - Enter the new 4 or 5-digits master code.
  - One beep is emitted to confirm programming of the new master code.
4. Press “#” to exit from programming mode. 2 beeps are emitted to confirm that the keypad is in stand-by operating mode.

**4 beeps indicate a data computing error.**



## C. Changing the master code

The master code is used only to enter in programming mode.

1. Enter the master code twice.  
(1 2 3 4 5 default value master code).  
2 beeps are emitted to confirm entry in programming mode.
2. Press \*5 to modify the master code.
  - One beep is emitted.
  - Enter the new 4 or 5 digits master code.
  - One beep is emitted to confirm that the master code is programmed.
3. Press “#” to exit from the programming mode.  
2 beeps are emitted to confirm that the keypad is in stand-by operating mode.

## D. Adding, changing or deleting a user code

Group 1: From address 00 to address 99, relay output 1

1. Enter the master code twice  
(1 2 3 4 5 default value master code).  
2 beeps are emitted to confirm entry in programming mode.
2. To add a user code, enter the user location (from 00 to 99).  
If the user location is used 4 beeps are emitted, enter the 4 or 5-digits User code.
3. To Change a User code enter the user location.
  - 4 beeps are emitted to indicate that the user location is already programmed.
  - Enter a new 4 or 5-digits code.
  - A beep is emitted to confirm the new user code.
4. To delete a User code enter the user location.
  - 4 beeps are emitted.
  - Press 0 0 0 0 0 in 5-digits length code or 0 0 0 0 in 4-digits length code.
  - A beep is emitted to confirm the user code has been deleted.

### Note:

*If the Pin code is already programmed or is identical to the master code, then 4 beeps are emitted. Press “#” to exit from the programming mode. 2 beeps are emitted to confirm that the keypad is in stand-by operating mode.*

## E. Time outputs

This section is for programming the illumination time and the Relay activation time.

1. Enter the master code twice  
(1 2 3 4 5 default value master code).  
2 beeps are emitted to confirm entry in programming mode.
2. Press \*0 to program the key-in keypad illumination time and the keys lit time.
  - 1 beep is emitted.
  - Enter the time in seconds, 10 for 10 seconds up to 99 for 99 seconds
  - The backlighting dims 10 seconds after the last keypress, or switches off after entering a valid code.
  - Press 00 for permanent illumination keys
  - One beep is emitted to validate the time.
3. Press \*1 to program relay 1 output time (door release time).
  - 1 beep is emitted.
  - For a latched output enter the time in seconds – 01 for 1 second up to 99 for 99 seconds.
  - Press 00 for a toggled output.
  - One beep is emitted to validate the time.
4. Press “#” to exit from programming mode.  
2 beeps are emitted to confirm that the keypad is in stand-by operating mode.

**4 beeps indicate a data computing error.**

## F. Reset master code

On stand-by operating mode, put a jumper on P2.

- Wait 1 second and then remove the jumper.
- One beep is emitted.
- The master code is restored to its default value 1 2 3 4 5 in 5-digits code and 1 2 3 4 in 4-digits code.

## G. Changing the code by a user

To authorize a user to modify his own User code place the jumper on P3 (to disable the function remove the jumper).

1. Enter the old user code. The relay is activated and a beep is emitted.
2. Enter the 2-digits sub master code (default sub master code “\*” “#”). A beep is emitted to authorise the modification.
3. Enter the new user code. 2 beeps are emitted to confirm the new code.
4. Check the new user code to be sure of the modification.

## H. Setting a sub master code

The Sub Master code allows the user to change its own code without entering in programming mode. For security reasons the code needs to be changed periodically. This feature makes it easier and faster to change the code.

1. Enter the master code twice (1 2 3 4 5 default value master code). 2 beeps are emitted to confirm entry in programming mode.
2. Press \*7 to program a sub master code for the user individual Pin code modification.
  - One beep is emitted.
  - Enter the new 2-digit sub master code.
  - One beep is emitted to confirm programming of the sub master code.
3. Press “#” to exit from the programming mode. 2 beeps are emitted to confirm that the keypad is in stand-by operating mode.

## I. Audible Feedback

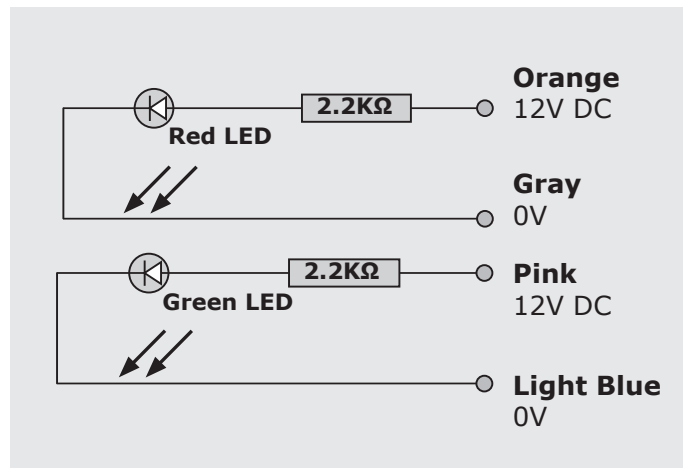
The audible signal is enabled in programming mode and when the relay is energized after a valid code.

To enable the audible feedback on a key press:

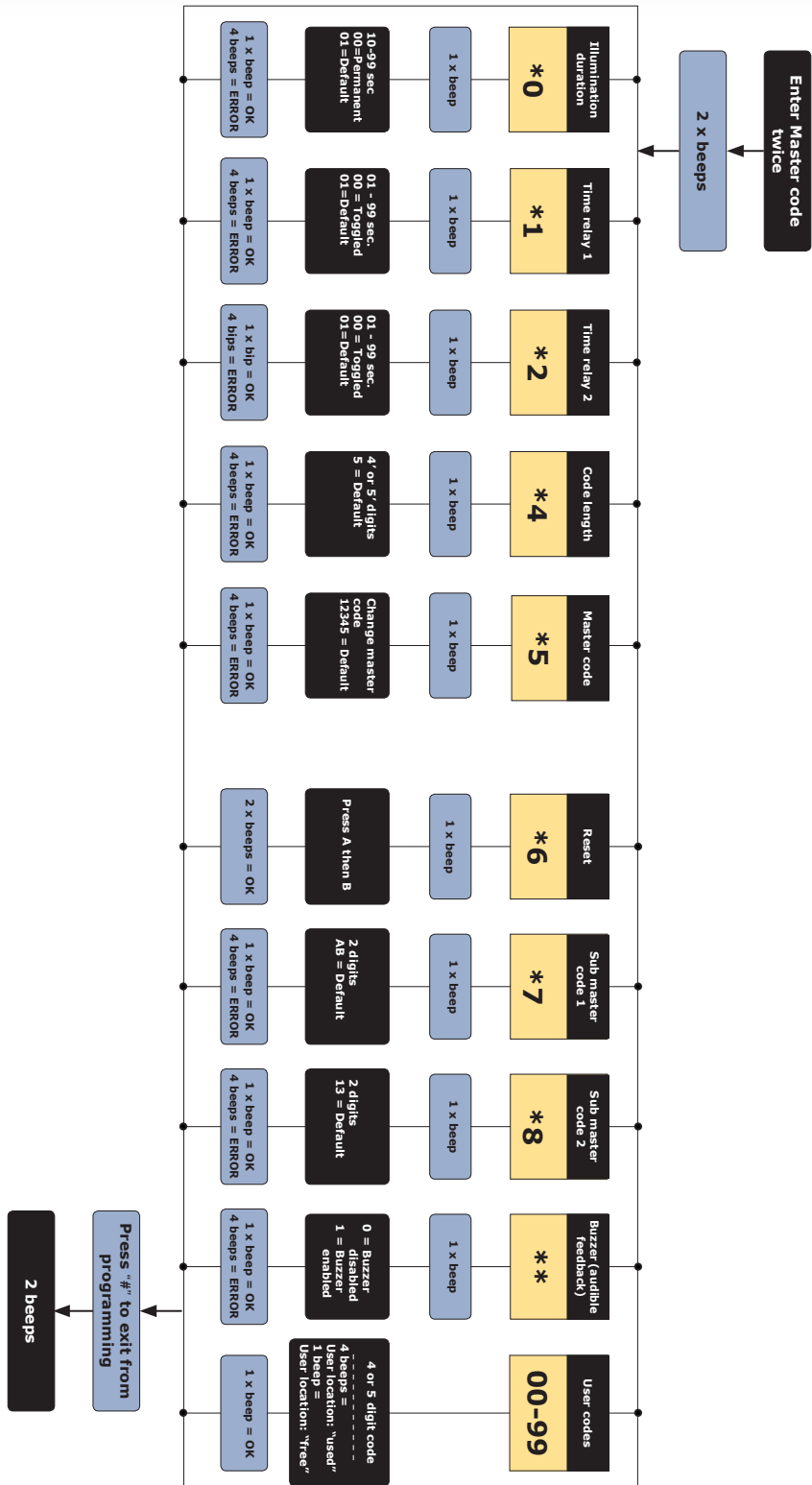
1. Enter the master code twice (1 2 3 4 5 default value master code). 2 beeps are emitted to confirm entry in programming mode.
2. Press “\*” “\*”
  - One beep is emitted.
  - Press 0 to disable the audible signal during a keypress.
  - Press 1 to enable the audible signal during a keypress.
  - One beep confirms the new setting.
3. Press “#” to exit from programming. 2 beeps are emitted to confirm exit from programming mode.

## J. Use of the red and green LEDs:

- They are wired as follows:



6] Chart



This spread sheet will help you keep track of the user codes programmed in the keypad

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

<b>NOTE</b>	<b>Relay 1 (1 output)</b>	<b>Relay 2 (2 output)</b>
	From user location 00 to 59.	From user location 60 to 99.



Push Buttons



Key Pads



Strikes



Magnetic Locks



Key Switches



Relays & Timers



Access Control