CM-500 SK
500 USER CODES
KEYPAD

Wiring diagram
PCB front view

ST2

1 ▬▬▬ 3   N/C contact RL1 (magnet)

1 ▬▬▬ 3   N/O contact RL1 (strike)

ST1
3
2
1

ST2
1 ▬▬ 3

RL2 | RL1

| 2 | 1 | E | M | B | 3 | 5 | T | C | O | 12 | V |

Strike

V1

PB2   PB1

Input voltage
12V AC/DC
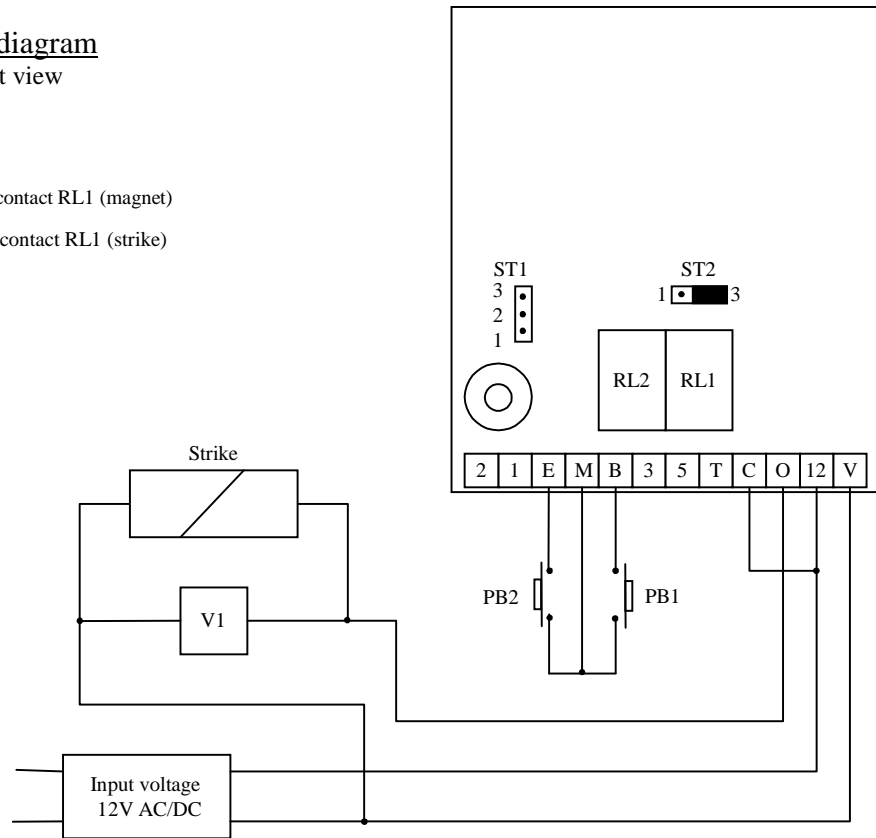
B	Request-to-exit PB1
E	Request-to-exit PB2
M	Common PB1 PB2
O	N/O contact relay 1
C	Common relays
T	N/O contact relay 2
V1	Varistor
ST1	Jumper for the reset
ST2	Jumper for relay 1
RL1	Door relay 1
RL2	Door relay 2

12	Input voltage
V	Input voltage
1	Data
M	Common M
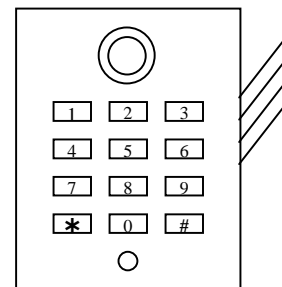
Auxiliary keypad (see wiring)

1 2 3
4 5 6
7 8 9
✱ 0 #

This device comes with a varistor, which must be connected to the strike terminal (or electromagnet) operated by the device.
If this product is connected to more than one strike, each of them should have a varistor. The varistor controls the overload produced by the strike coil – back emf.
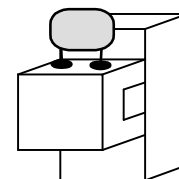
If you are using a « Shear Lock » electromagnetic lock, it is recommended to use a separate power supply than the one connected to the **CM-500SK**!

Technical specifications

Input voltage	12 VAC/DC
Outputs	2 relay outputs, contact N/O & N/C 3 amp@125V
User codes	500 user codes
Master code	5-digit programmable master code
Inputs	2 request to exit inputs
Keypad	12-digit keypad with built-in buzzer
Distance between CM-500SK and auxiliary keypad	Maximum 50 meter (recommended cable 4 x 0.6 mm^2)

Default values

Master code:	12345
Time outputs:	1 second
Key-in keypad time:	10 seconds

Audible signals

1 beep (short)	Pressing any key on the keypad
1 beep (long)	Validating data in programming mode: master code, user code or time outputs.
	Or user access code valid
2 beeps (short)	Entry in programming mode
	Or exit from programming mode
4 beeps (short)	Incorrect user number keyed in
	Or non valid user code or non valid time outputs

Visual signals

LED colour	Normal mode	Programming mode
LED off	Standby	
Green	Door relay activated	User number available
Red		User number taken
Orange		In programming mode
Orange flashing	Standby	Data computing error

Request to exit

THE REQUEST-TO-EXIT BUTTON ACTIVATES RELAY 1 AND RELAY 2 (THE OUTPUT, MOMENTARY OR LATCHED, AND THE TIME OUTPUTS ARE PROGRAMMABLE). THE GREEN LED LIGHTS ON WHEN THE DOOR RELAY IS ACTIVATED.

Setting a new master code

1. Enter the master code twice (for the first use the master code default value is 12345). 2 beeps sound and the LED lights on in orange to confirm entry in programming.
2. Enter ✶3 then the 5-digit of the new master code. The LED lights off during 1second and an audible beep indicate that the code has been accepted.
3. Enter # to exit from the programming mode. 2 beeps confirm that you went back to the reading mode.
4. 4 beeps indicate a data computing error.

User numbers group and relays

A user code programmed in the first group addresses (000 to 249) operates relay RL1. A user code programmed in the second group addresses (250 to 499) operates relay RL2. A user code can be programmed in the two groups. Therefore, the user code will activate the two relays at the same time.

Setting Time Delays

Enter the master code twice (for the first use the master code default value is 12345). The orange LED and two beeps sound to confirm entry in the programming mode.

Key-in keypad time	Enter ✶0 then the time in seconds: 10 for 10 seconds up to 99 for 99 seconds. The LED turns off during 1 second and a beep sounds to confirm that the time is accepted.
Programming User Codes	Enter address numbers from 000 to 249 to operate door #1 and address numbers from 250 to 499 to operate door #2.
Door release time	Enter ✶1, then the door release time in seconds: 01 for 1 second up to 99 for 99 seconds. Enter 00 for a latched output. The LED turns off for 1 second and a beep sounds to confirm that the time is accepted. Enter ✶2, then the door release time in seconds: 01 for 1 second up to 99 for 99 seconds. Enter 00 for a latched output. The LED turns off for 1 second and a beep sounds to confirm that the time is accepted.

Enter # to exit from the programming mode. 2 beeps confirm that you went back to the reading mode. 4 beeps indicate a data computing error.

Setting user codes

The user codes are programmed from the main unit (CM-500SK). The key # cannot be used in a code. To validate a user code faster, it is recommended to enter the user code starting by the first user number of each group.

1. Enter the master code twice (for the first use the master code default value is 12345).
    The orange LED and two beeps sound to confirm entry in programming mode.
2. Enter a user number (000 to 249) for door 1 and user number (250 to 499) for door 2.
    The LED lights off for 1 second and one beep sounds.
3. If the LED is green, enter the 5-digit code the LED lights off for 1 second and one beep sounds.
    The orange LED confirms that the code is accepted.
    Or,

    To skip the user number press #. The LED turns to orange and one beep sounds.

4. If the LED is red (the user number is taken), to delete the programmed code press * (star) twice, the LED turns green or else enter another user number.
5. To exit from the programming mode, press #. 2 beeps sound to confirm that you left the programming mode.

When the LED is green, press the # key to a) leave a user number empty and then enter another user number or, b) to continue programming. If the # key is not pressed while being in one of the user number and the LED is green, a data computing error signal sounds. Enter a new user number.
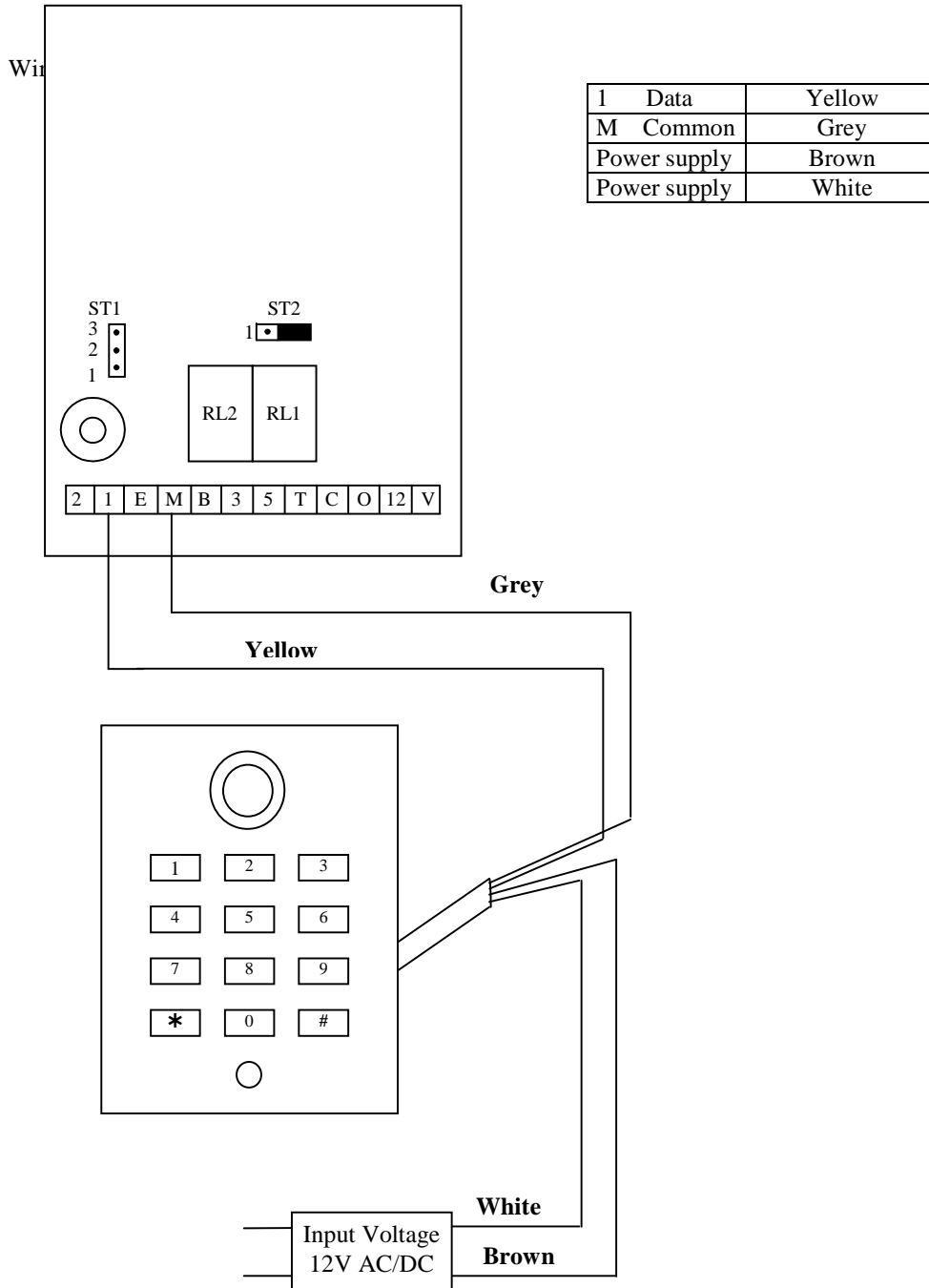
Deleting or replacing programmed codes

1. Enter the master code twice (for the first use the master code default value is 12345).
    The orange LED and 2 beeps sound to confirm entry in programming mode.
2. Enter the user number to delete (000 to 499). The LED turns off for 1 second and one beep sounds.
3. The LED turns red indicating that the current user number is not available.
4. Press **. The LED turns green to confirm that the user number is now available.
5. Enter the new 5-digit user code.
    Or,

    6. Press the # key to continue.
            7. Enter a new user number to program another user code.
    Or,

            8. To exit from programming mode, press #. 2 beeps confirm that the device is back to normal mode (standby).

Reset of the master code and of the user codes

1. Place the jumper ST1 in 2-+3 position.
2. The green LED flashes during 5 seconds. The master code 12345 is set back as the default code.
3. One beep sounds. The LED turns to red and flashes.
4. Remove the jumper from the 2 + 3 position to go back to standby mode.
    Or,

5. Keep the jumper in place 2 + 3 position to reset all the user codes.
6. The red LED flashes during 5 seconds and then stops during the deletion of the user codes.
7. Once all the user codes are deleted, the LED turns off.
8. Remove the jumper from the 2 + 3 position to go back to standby mode.

Wiring of the auxiliary keypad

Wir

1	Data	Yellow
M	Common	Grey
Power supply		Brown
Power supply		White

ST1
3
2
1

ST2
1

RL2 RL1

2	1	E	M	B	3	5	T	C	O	12	V

Grey

Yellow

1	2	3
4	5	6
7	8	9
＊	0	#

White

Input Voltage
12V AC/DC **Brown**

Operating the auxiliary reader:

Enter the 5-digit user code and press the # key. (Must enter 5-digits for the user code)
The # key is used as the ENTER key.

User codes list (make photocopy, if needed):

User number	Name	User number	Name	User number	Name	User number	Name

Time outputs	Function key	Values	Programmed values
Key-in keypad time	✱0	10 = 10 sec, 99 = 99 sec	
Door release time relay 1 RL1	✱1	01 = 1 sec, 99 = 99 sec	
Door release time relay 2 RL2	✱2	01 = 1 sec, 99 = 99 sec	
Master Code	✱3	5-digit	

Programmed by:		Date
Building:		
No.:	Street:	
City:		
Other information:		

CM-500SK Template

23 mm

135 mm

120 mm

105 mm

Wiring access
area
30 mm x 40 mm

43 mm

20,5 mm

15 mm

38 mm

61 mm

75,5 mm