C 409 *with* ***Digiten*** *keypads*

Two relays control-box

Main Features:

- 2 relays: 1A-30V, resistive load. Do not apply to the relay's contacts voltages over 30V dc or 24 V ac. Otherwise you must connect an external relay.
- Power supply: 12/24 V ac/dc
- Maximum numbers of codes: **60** users version and **1000** users version (C409 1K).
- Impulsive or permanent contact of the relays (adjustable from ¼ sec. to 30'')
- "Present man" function.
- State memory of the relays.
- Outputs protected from overvoltages.
- PTE (Push to exit) function on both the relays.
- Storing of codes to the relay A or relay B or on both the relays.
- Output for LED of relay contact.
- Output for LED programming mode.
- Output for tamper alarm open collector (30 sec.)

Simplified instructions for systems operated only by *DIGITEN* keypads

(on request are available specific instructions for use with electronic keys or proximity readers)

Total erasing and codes programming

• Before programming new codes it is essential to carry out a memory reset. To clear the memories, press and hold down for 6 seconds both buttons P1 and P2 until the LED flashes slowly.
• You may store codes composed by a minimum of two digits up to a maximum of 7. All codes must have the same length.
• The length of the **first code** (**Master**) basically decides how many digits will the other codes have.
• When you finish typing the Master code, wait without pressing other buttons for at least 6 seconds to enable the unit to learn the length of the codes.
• After this time, the LEDs on DIGITEN and C409 emit short flashes.
• From this moment we proceed by introducing the second code and ending it with an **odd** digit, if it has to activate the **relay A** or a **even** digit, if it has to click the **relay B**, or with an even and then repeating the code with a odd if you want to activate both relays (you cannot get the simultaneous activation of two relays). In practice, the operating codes have an additional digit.
• Enter the other codes and wait for the fast flashing of the red LED to confirm the storage.
• In case of input error, do not insist pressing the buttons, but simply wait for 6 seconds to empty the buffer (the LED emits short flashes to indicate when you can do this).
• Once you finish to enter all the codes, enter a code already in memory to exit.
• To return to the programming mode, enter the Master Code, and end it with either an odd or even digit. Alternatively you can enter the procedure by pressing for 6 seconds P1 button on the decoder.
• Master code does not activate the relay; it is only used to access programming.
When storing the codes, we suggest you to log each stored code to the correspondent location in memory. This will allow you to make a single code erasing in the future, if needed.

Relay's timing setting

Storing relay A timimg:

- switch-off the power-supply of the decoder.
- Press P1 on the decoder and keep it pressed.
- Give power-supply to the decoder (and hold down P1 button) and count the flashes of red LED on the circuit.
- When the desired number of the flashes is reached, release P1 button (see the schedule for the timing of the flashes).

Storing the timing of the relay B:

- Do the same things as above, but working on P2 instead of P1 push-button.

Timing table of the relays:

Press P1 or P2 push-buttons on the decoder while the power-supply is off and, after, give power-supply to the decoder (always keeping one of the two buttons pressed), the red Led starts flashes: refer to the following table:

1° flash = PERMANENT (BISTABILE)
2° flash = PRESENT MAN (**)
3° flash = 0,25 sec.
4° flash= 1 sec.
5° flash= 2 sec.
6° flash= 3 sec.
And so on…..
31st flash = 28 sec.: max timing of the relay.

(*) PRESENT MAN: relay remains activated until the last digit of the code is kept pressed on the keypad.

PROGRAMMING EXAMPLE*: Storing code 1234 as Master code; code 3456 combined with Relay A; code 5678 combined with relay B and code 7890 combined with both relays; timing relay A = PRESENT MAN and timing relay B = pulse 2 sec.*

PROCEDURE:

Give power-supply to the decoder:

1. *Press and hold down together P1 and P2 on the circuit: LED flashes quickly for 6 sec.*
2. *After 6 sec., LED flashes slowly*
3. *Release the push-buttons*
4. *Enter 1234 and wait for some seconds.Then, LED flashes quickly*
5. *Enter 3456 + 1 to activate relay A : LED flashes quickly*
6. *Enter 5678 + 2 to activate relay B : LED flashes quickly*
7. *Enter 7890 + 1 to activate relay A : LED flashes quickly*
8. *Enter 7890 + 2 to activate relay B: LED flashes quickly*
9. *Enter again 7890 + 2 : LED switches off (exit programme mode)*
10. *Switch-off power-supply*
11. *Press and hold down P1 and give power-supply to C409*
12. *Count the flashes of LED; release P1 at 2nd flash: relay A timing = PRESENT MAN*
13. *Switch-off power-supply*
14. *Press and hold down P2 and give power-supply to C409*
15. *Count the flashes of LED; release P2 at 5th flash: relay B timing = pulse 2 sec.*

STORING NEW CODES IN MEMORY

EXAMPLE:store the new code 1357 to activate relay A

- *Press P1 on C409 for 6 sec., or enter **MASTER code** plus a further odd or even digit, for example 1234+1.*
- *LED flashes: C409 entered in programme mode (Master code does not activate the relay)*
- *Enter 1357+ 1 : LED flashes quckly and then slowly*
- *Enter again 1357 + 1 : LED switches off (exit from programme mode)*

ERASING CODES FROM MEMORY

At any time you can delete undesired codes, provided you know the location in memory.

For example, to delete the 5th code stored, operate as follow:

1. Press for 6 sec. P1 on C409, or enter the Master code, ending it with an odd or even digit (indifferent)
2. Enter 000005 (five zeros, followed by the location number of the code to delete)
3. LED will confirm this by quick flashes
4. Enter a code already in memory to exit.

PTE 1 & PTE 2 *(PUSH-TO-EXIT) remote exit buttons*

C409 has two inputs (Pink and yellow/red wires) to operate, via remote push-buttons the two relays. Pressing the remote PTE 1 you activate Relay A; pressing PTE 2 you activate relay B. The timing of the relays will remain identical to those previously set.

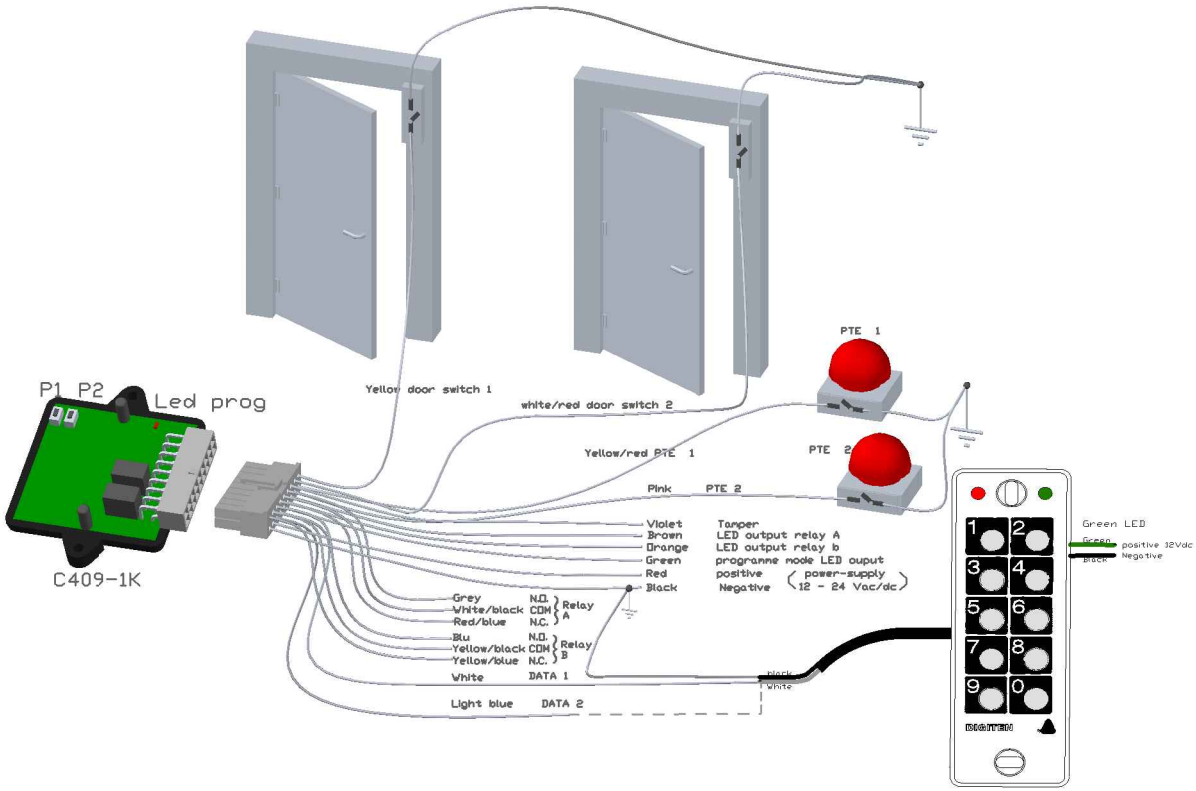
TAMPER

C409 responds to effraction generating an TAMPER Alarm signal transistorized (50mA), which lasts 30 sec.
This happens when, in the space of 30 seconds, you enter invalid codes or not enabled on the relays.
Entering a valid code, TAMPER alarm stops.

WARNINGS

• Maximum length of the connection between DIGITEN and C409: les than 200 meters.
• Do not use shielded cable for wirings.
• We strongly recommend using a normal type cable telephone in section 0.22 mm

CE


P1 P2
Led prog
C409-1K
Yellow door switch 1
white/red door switch 2
Yellow/red PTE 1
Pink PTE 2
PTE 1
PTE 2
Violet Tamper
Brown LED output relay A
Orange LED output relay b
Green programme mode LED ouput
Red positive
Black Negative
power-supply
12 - 24 Vac/dc
Grey N.O.
White/black COM
Red/blue N.C.
Relay A
Blu N.O.
Yellow/black COM
Yellow/blue N.C.
Relay B
White DATA 1
Light blue DATA 2
Green LED
positive 12Vdc
Negative
1 2
3 4
5 6
7 8
9 0