

## Operating & Installation Guide

# DIGITAL KEY



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## Features

- For switching Locks and Security Systems.
- Controls two built-in Relays.
- Master code + 16 Secondary Codes.
- Temporary (one-use) Secondary Code.
- Option to limit users to operate specific relay only.
- Up to 10 digits for each authorized Code.
- Up to 10,000,000,000 Combinations.
- Simple programming through the keyboard.
- Digital Display.
- Tone and Display indication for each pressing.
- EEPROM non-erasable memory - power failure protected.
- Relay activation time- programmable from 1 to 64,999 sec. (18 hours).
- Programmable tone indication to accompany the relay activation.
- Programmable dual position ON/OFF mode.
- Code deciphering protection- against random pressing of keys.
- "CONTROL" input- to operate the relay without using a code.

- Integrated TAMPER switch.
- Internal Master-code RESET switch.
- Green and Red indication LEDs, for Alarm System and Accessories.
- All programming features available only by using the Master-code.

## Introduction

DIGITAL-KEY is a microprocessor controlled multi-purpose and easy to operate coded keypad that monitors the entrance of people to different sites and discreetly controls alarm and security systems. After entering the secret authorized code, using the keyboard, it is possible to activate the integrated FIRST relay (by pressing digit No.1), or the SECOND relay (pressing digit No.2), or BOTH relays simultaneously (pressing digit No.3). The operating time of each relay may be programmed from 1 second to 64,999 seconds (18 hours). There is an option to program a tone indication to accompany the relay activation. For special needs each relay may be operated in a ON/OFF mode, so that entering the code once will lock the relay in ON position, and entering it

again will release the relay- i.e. any entering of the code changes the relay's position. On the front panel of DIGITAL-KEY there are Green and Red LEDs, to be connected to an alarm system or accessories.

17 authorized codes may be set:

- 1 MASTER code.
- 15 SECONDARY code.
- 1 TEMPORARY (one-use) secondary code.

All programming operations is accessible only to a person familiar with the Master-code.

The programmer may limit any user to operate only certain relay(s). Replacing any authorized code and other programming operations may be performed externally using the keyboard, so no dismantling is necessary as with models of other manufacturers.

DIGITAL-KEY has a DIGITAL DISPLAY located in the front of the keyboard designed to aid programming and operation.

Pressing any key on the keyboard will activate the middle segment on the display and will be followed by a short

tone- as an indication.

The available combinations are : 1 0 , 0 0 0 , 0 0 0 , 0 0 0 . Any power failure will not affect the data stored in memory, since it is a protected non-erasable EEPROM memory, independent of voltage. In order to increase the security and to further protect against anyone trying to decipher the code through random pressing of keys: any faulty pressing shall turn the instrument off for 7 seconds. Furthermore, each digit from the code should be entered within 2 sec., otherwise the device will be reset. DIGITAL-KEY has a special connection input called "CONTROL", which allows operation of the first relay (Relay-1) without using the code. For example, it may allow opening of the door from within the site without using the code. This may be done by connecting a regular switch, or automatically by connecting a motion detector.

In case the owner/user has forgotten the correct Master-code, he/she can reset it to the default (1; 2; 3) using the internal built-in RESET switch.

DIGITAL-KEY protected by an internal built-in TAMPER switch.

## Mounting

- Open the case.
- Punch out, with a screwdriver, the four mounting and one cable holes on the back panel.
- Run the cable through the cable entry hole.
- Mount the back panel to the wall or a door with four screws.
- Connect the wires to the Terminal Block according its diagram.
- After closing the case using two screws, it's possible to hide the screw's heads by covering the remaining space in their holes with the provided flat plastic pins.

## Specifications

- Voltage ..... 12V DC; 10V AC.
- Standby Current ..... 7mA.
- Operation Current ..... 40mA (Maximum).
- Relay contacts withstand ..... 25V / 2A.
- Operation Temperature ..... -10°C to 50°C (14°F to 122°F).
- Dimensions ..... 3.5x6x10 cm (1.38x2.36x3.93 inch).

Maximum reserved the right to change specifications without prior notice.

## Warranty

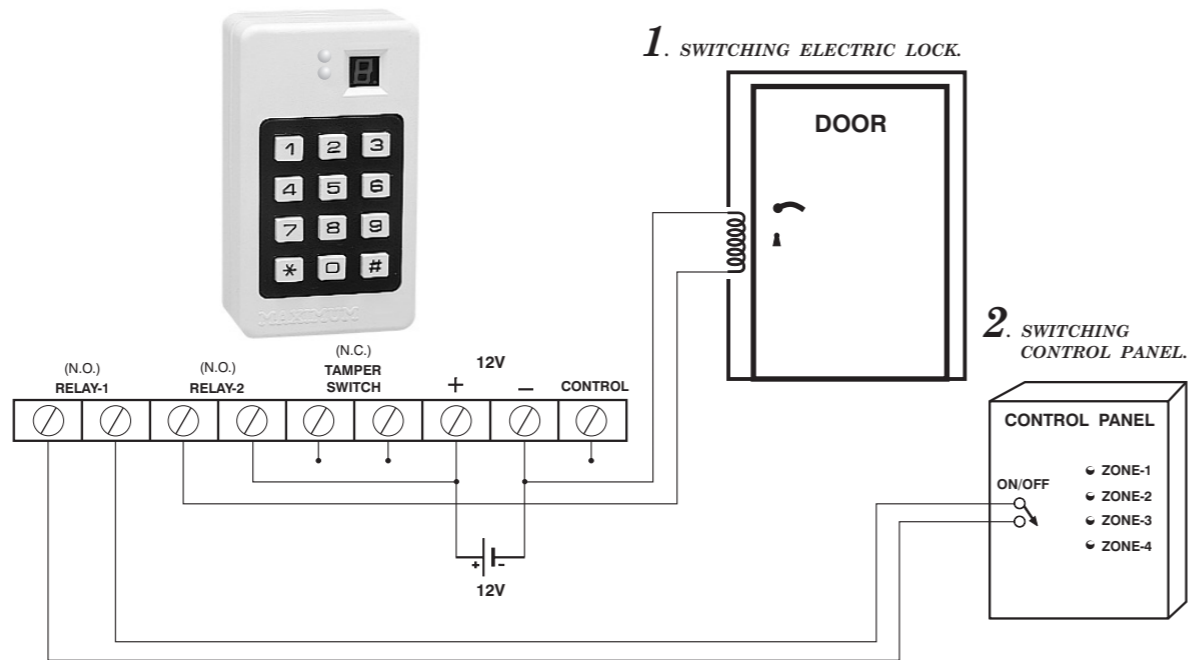
Manufacturer warrants this product against defects in material and workmanship for a period of two years from the date of purchase. This warranty is limited to the repair or replacement, at manufacturer's option, of products found to be defective as result of normal use during this period. This warranty is extended to the original purchase only.

Manufacturer, distributor, reseller, and agent liability is limited to the original purchase price and no payment will be made for related cosequential loss, including but not limited to labor costs incurred in inspection, replacement or repair of defective products. THIS WARRANTY IS GIVEN EXPRESSLY AND IN PLACE OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE AND THIS WARRANTY IS THE ONLY WARRANTY MADE BY MANUFACTURER.

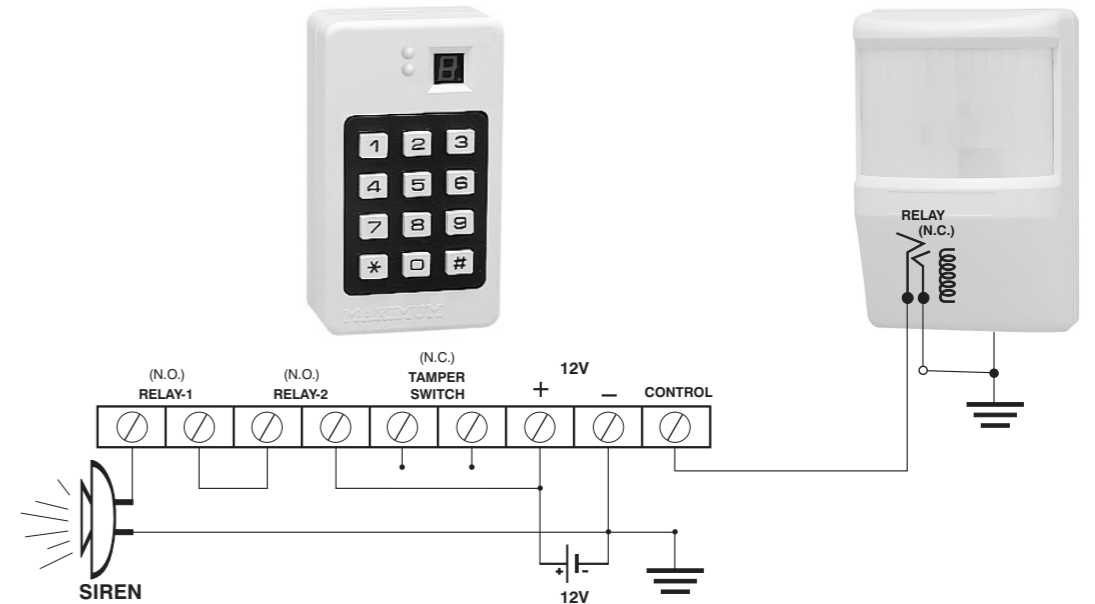
No agent, representative or employee of manufacturer is authorized to waive, alter, or add to this warranty, to make any representation or warranty not contained herein or to extend this warranty to anyone other than the original purchaser of the products.

This warranty dose not cover any damage caused by natural disaster, misuse, improper installation or use and installation in violation of manufacturer instructions. Manufacturer is not responsible for any direct or indirect damage caused by use or rely on its products. As with any electronic instrument, this instrument also may be neutralized maliciously, likewise may be influenced by external factors like: lightning, electromagnetic interferences etc. The installer and/or user of this product read and understood the warranty conditions and is given his/her agreement to them upon install and/or use this product.

## APPLICATION SUGGESTIONS FOR DIGITAL-KEY



## 3. CONVERTING ANY DETECTOR TO ALARM SYSTEM. (Siren activated time from 1 to 64999 sec., about 18 hours).



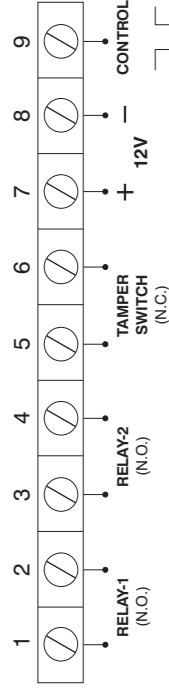
## Two important points

- Any programming operation is accessible only to a person familiar with the Master-code.
- The default value of the Master-code for DIGITAL-KEY is set to: 1; 2; 3; In the following explanation we shall always refer to this initial Master-code. In case you replace the initial Master-code, you will have to enter the new Master-code whenever programming.

### Basic Operation (default):

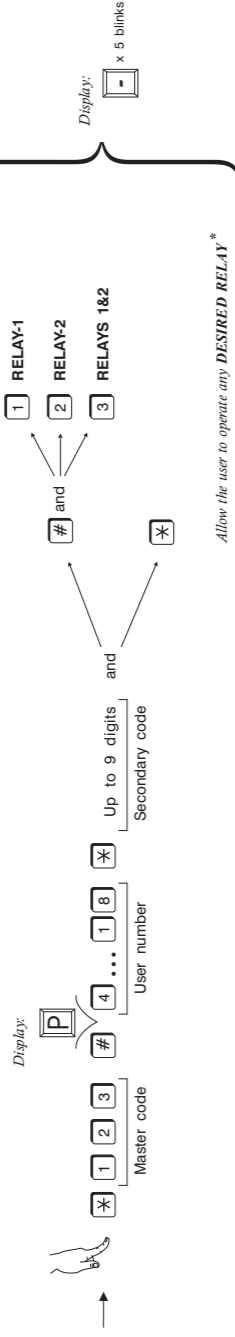


### TERMINAL BLOCK WIRING:



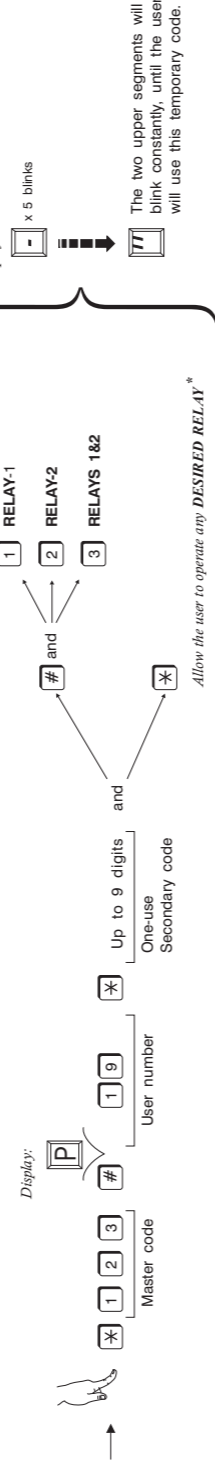
External **Negative** trigger (200msec. minimum) operates the RELAY-1, according to the operation time to which was adjusted.

### Programming permanent secondary codes (total-15):



\* (If decided to finish programming with \*, its possible to choose a code of up to 10 digits)

### Programming temporary "One-use" secondary code (total-1):



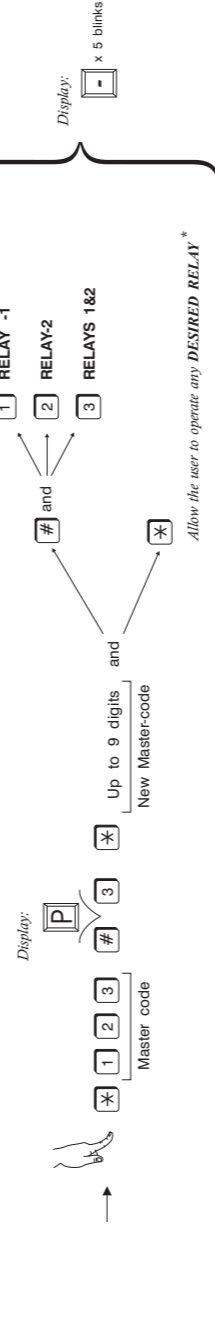
\* (If decided to finish programming with \*, its possible to choose a code of up to 10 digits)

### Operation by anyone of the 16 secondary codes (default):



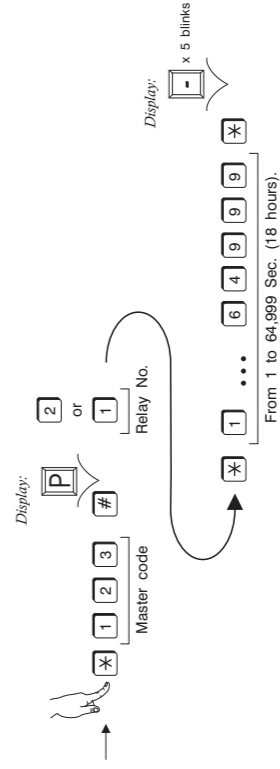
- If the secondary code was limited (during programming) to operate specific relay(s), there is no need to key the relay number after keying the code.

### Re-Programming the Master-code:

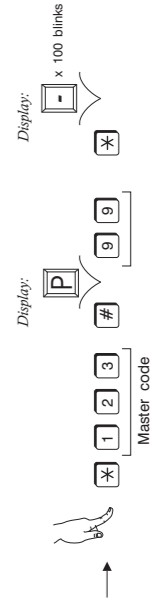


\* (If decided to finish programming with \*, its possible to choose a code of up to 10 digits)

### Re-Programming the relays activation time:



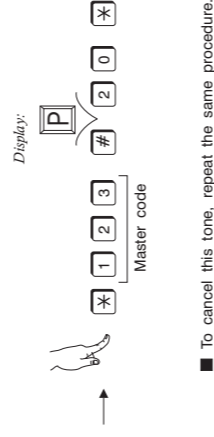
### RESET for all parameters except the Master-code:



### RESET the Master-code (to the default 1; 2; 3):

- Short circuit the two RESET plug contacts on the electronic circuit, using the "cap" placed on one of the contacts.
- Disconnect the power and then reconnect it.
- Disconnect the "cap" short circuiting the two RESET contacts, by returning it to one of the contacts only.
- Wait for 10sec. before any operation.

### Programming a tone to accompany the relays's activation:



- To cancel this tone, repeat the same procedure.

