

The keypad, model CA-10 KLED-M, is to be used for operation with the alarm control panel CA-10 plus, as well as with the previous model of the alarm control panel designated as CA-10, manufactured in version 3.0 (and next), working with LCD keypads. Full compatibility with LED keypad, model CA-10 KLED, is maintained - apart from the possibility of keypads parallel connection.

**FEATURES**

The keypad operates as a microprocessor-controlled device. Smaller size and new design make new capabilities in its installation. Horizontal arrangement of LEDs improves legibility of information displayed during programming the parameters of the alarm system.

In addition to all features of the previous model, CA-10 KLED-M keypad permits:

- simultaneous displaying the status of all 16 zones of the system,
- displaying the status of all partitions of the system,
- setting the keys backlit mode (no backlit, automatic, permanent),
- visualization when acoustical signalling (buzzer) is in operation,
- signalling the loss of communication with the alarm control panel.

**DESCRIPTION**

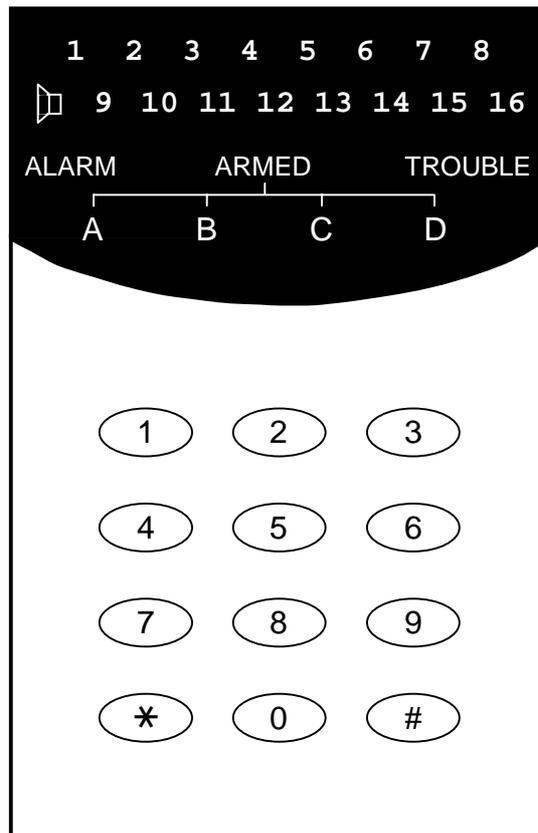


Figure 1. Keypad's view.

THE MEANING OF LEDs DISPLAY (during normal operation):

**LEDs 1-16** indicate the status of armed zones of the alarm system, as follows:

- extinguished - zone secured (not activated),
- steady light - zone violated (activated),
- steady light with short extinguishing every 2 seconds - violated anti-tamper circuit of zone,
- fast blinking - zone activated alarm,
- flashing every 2 seconds - alarm initiated by anti-tamper circuit of zone,
- slow blinking - zone bypassed.

It is possible to display the status of all zones of the system (programming the servicing functions FS-12 to FS-15). When a smaller number of zones to be displayed is selected, the zones are displayed on consecutive LEDs, beginning at LED 1 and ending at LED's number equal to the number of selected zones - the remaining LEDs, which symbolize zones are extinguished. The zones are displayed in the increasing order.

The LED marked by the symbol  is ON when the acoustical signalling (buzzer) is in operation.

**ALARM** diode signals the alarm occurrence.

**TROUBLE** diode blinks in case of detecting, by the control panel, technical problems in the alarm system.

Diodes designated as **ARMED (A, B, C, D)** indicate the status of particular partitions of the system - these diodes are equivalent to the diodes of LCD keypad:

- A - PARTITION 1**
- B - PARTITION 2**
- C - PARTITION 3**
- D - PARTITION 4**

Steady light - partition armed and supervised.

Slow blinking - counting down the time for exit (at ALARM diode extinguished).

Fast blinking - the keypad is switched over for operating a given partition by GOTO function (active signalling when the given partition is not armed and is not counting down the time for exit).

**The simultaneous blinking of all LEDs** (at 0.5s/0.5s rate) informs the user about the loss of communication between the keypad and the alarm control panel.

The LED's functions are changed at activating the servicing mode or at entering the user function mode.

## **NEW USER FUNCTION**

The keypad is equipped with a new user function (HOLD DOWN type). This is the function of „9” key, for setting the keys backlit - the function independent from the installer's settings.

After re-starting the system (switching on the power supply), the keypad always operates in the automatic backlit mode - initiated by pressing any key. To change the backlit mode, press „9” key and hold it until appropriate signal is heard, as follows:

- One beep - no backlit
- Two beeps - automatic backlit
- Three beeps - permanent backlit

## KEYPAD CONNECTIONS

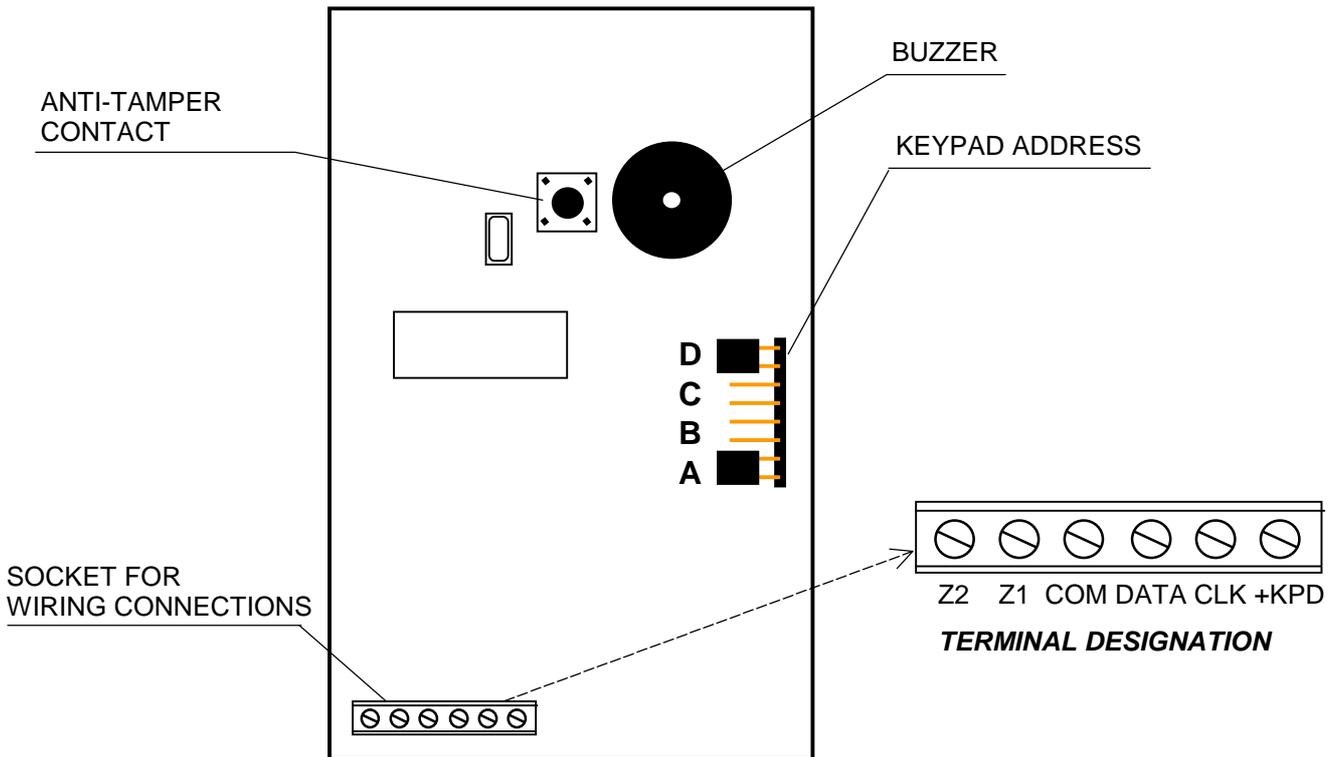


Figure 2. The view of the board with electronic elements.

The procedures for connecting the keypad to the main board and for using Z1 and Z2 terminals are described in the “Alarm Control Panel CA10 plus - Installation Guide” in chapter “Connection of Keypads”.

The permissible run length and cross-sections of the wiring are the same as those applicable for LCD keypad.

### CAUTIONS

- LED keypads designated as CA-10 KLED-M (described in this manual) - similarly as LCD keypads - **can not be connected in parallel.**
- After switching on the power supply to the keypad, and after the control panel exits the servicing mode - the keypad is interlocked for 5 seconds and does not respond to pressing any key. During this period, the readings of system settings takes place and key backlit blinks at high frequency.

### TECHNICAL DATA

Power supply voltage ..... 11-14V  
 Maximum current consumption..... 85mA

**LEDs 1-16 (zone status)**  
 steady light - zone violated  
 extinguished - zone non violated  
 fast blinking - alarm from zone  
 steady light with short extinguishing every 2 sec – anti-tamper circuit violated  
 flashing every 2 sec - zone tamper initiated alarm  
 slow blinking - zone bypassed

 - buzzer operation indicator

**ALARM** – diode signals the alarm occurrence

⑦ - pressing for 3 sec results in displaying **the failures currently detected**

Failure type display:  
 1,2,3 - 1,2,3 output failure  
 4 - 230 V AC power loss  
 5 - battery failure  
 6 - keypad power supply failure  
 7 - clock loss  
 8 - printer problem  
 9 - telephone line voltage loss  
 10 - erratic signal in telephone line  
 11 - signal loss in telephone line  
 12 - 4 output failure  
 no display - failure - system memory error

⊛ - pressing for 3 sec activates **FIRE ALARM**  
 CODE + [\*] = user functions:  
 CODE\*1 - code change  
 CODE\*2 - new code  
 CODE\*3 - code cancellation  
 CODE\*4 - bypassing the zones  
 CODE\*5 - silent arming  
 CODE\*6 - setting the clock  
 CODE\*7 - monostable switch  
 CODE\*8 - bistable switch  
 CODE\*9 - power supply reset  
 CODE\*0 - start of downloading

⑤ - pressing for 3 sec activates the **alarm memory review**

⑧ - pressing for 3 sec switches **ON/OFF chime signalling**

⊞ - pressing for 3 sec activates **PANIC ALARM**  
 CODE + [#] - armed on/off

⑩ - pressing for 3 sec activate **auxiliary ALARM**

**ARMED**  
 steady light - partition armed  
 blinking - counting down the time for exit  
 fast blinking - GOTO function activated  
 A - partition 1  
 B - partition 2  
 C - partition 3  
 D - partition 4

**TROUBLE** - indicates the detection of technical problem of a system - check it by pressing ⑦ key.

①②③④ - pressing for 3 sec switch over for operating a given partition

⑥ - pressing for 3 sec activates the trouble memory review.

Trouble type display:  
 1,2,3 - 1,2,3 output failure  
 4 - 230V AC power loss  
 5 - battery failure  
 6 - keypad power supply failure  
 7 - clock failure  
 8 - printer problem  
 9 - telephone line voltage loss  
 10 - problem with transmission to monitoring station  
 11 - not used  
 12 - 4 output failure

⑨ - pressing and holding the key selects the key backlit mode:  
 1 beep - no backlit  
 2 beeps - automatic  
 3 beeps - permanent

