

ALARM PANEL CA-4M

INSTALLATION MANUAL

The alarm panel CA-4M is designed for small alarm systems. It is dedicated to easy-use-by-user and to work with all motion detector and alarm siren types.

I. PANEL DESCRIPTION

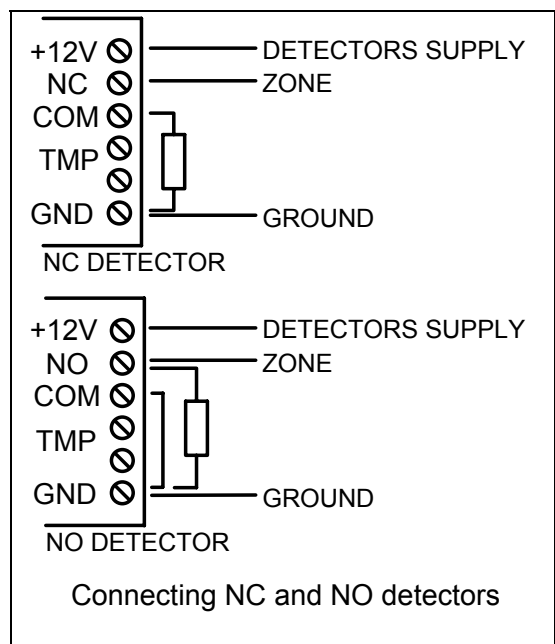
- The alarm panel CAf has 4 parametric zones (the parametric resistor value is 2200ohm) including one 24h zone. Any type of detectors can be attached to the zones (e.g. infrared, magnetic or ultrasound detectors) of both NO and NC types.
- The violation of the zones is indicated by red LED diodes. The non-violated state is determined by the 2200ohm resistor connection and the violated state is determined by opening or shortening the zone. The 24h zone is instantly connected with the panel casing, but it does not interfere with connecting other detectors or sensors to this zone. For each zone the responsible LED diode lights if the zone is violated (the lighting is of a higher priority than flashing upon alarm).
- Each panel zone is equipped with an individual alarm memory. In the case of a zone alarm the common ALARM LED diode lights and the LED diode corresponding to the alarming zone flashes quickly. Each zone causes an alarm upon the violation beginning (i.e. on the rising violation edge, not on the violation level). The common ALARM LED diode lights until the panel is disarmed, since the individual alarm memory LED diodes flash until the panel is armed again.
- Normal zones (i.e. all excluding the 24h one) can be bypassed. This can be done only in the disarmed state of the panel. The bypassed zones are indicated by a slow flashing of the corresponding LED diode. The indication disappears at the armed state of the panel, and in this state no bypasses can be manipulated.
- Zone bypasses are managed by switching the switches at the front of the panel casing. The upper position of the switch means the zone is bypassed (the according LED diode flashes slowly) and the lower position means the zone is not bypassed. The bypasses can not be altered while the panel is armed.
- The 24h zone can be utilised both as a tamper and a burglary one.
- For normal zones (i.e. all excluding the 24h one) the exit time can be adjusted in the range of about 5-120 sec. The exit time lasts from switching on the arming lock. The yellow LED diode indicates the panel state: it lights if the panel is armed, it flashes during the exit time and it is off if the panel is disarmed.
- The first zone can be a delayed one, if the **DLY** connector is shortened to the ground (**COM**). The entry time for this zone can be then adjusted in the range of about 5-120 sec. Other zones are always instant.
- The alarm panel CA-4M has two outputs for acoustic sirens and an independent output for an optical indicator.
- The sirens signal time can be adjusted in the range of about 10-300 sec. The output for optical indication remains in active state after alarm until the panel is disarmed.
- All outputs and detectors supply are fuse protected.

- The alarm panel CA-4M is supplied with 220V AC network and 12V accumulator for which a place is arranged in the casing (for 6.5Ah capacity accumulator).
- The panel power supply adapter charges the accumulator and supplies the detectors attached to the system.

II. MOUNTING

The alarm panel should be connected to the 220V AC network instantly. In this connection before installing the system it is recommended to analyse the wiring in the building in which the system will be placed. Select the wire which will be always supplied with the 220V AC power. To mount the panel follow the steps give below:

1. Take off the front of the casing, disconnect the ignition lock and fix the casing with the alarm panel.
2. Connect the detectors (zones and supply). The input of each detector must be shortened to the ground (COM) via a 2200ohm resistor in order to be seen by the panel as a non-violated. This resistor should be placed in the detector - parallely in NO detectors and serially in NC ones.
3. Connect sirens and optical indicator.
4. Connect the delay (DLY) initiator, if required in the system.
5. Connect 220V AC power.
6. Adjust the alarm, exit and entry times.
7. Connect the accumulator and ignition lock, then assemble the front part of the casing.



ATTENTION

Since the alarm panel is supplied with 220V AC power, an adequate precautions should be taken during the mounting in order to avoid the electric shock.

Turn off the power in the wire to which the panel will be connected before beginning the mounting operation.

After the mounting is finished, the power can be turned on.

III. REMARKS

- In order to avoid sirens activation at the instant of power turning on, remove adequate fuses first.
- It is wise to setting up the system with the use of the panel power supply adapter, which is protected from accidental circuit shorting - some of them can cause a large damages to the panel.
- Pay particular attention during the accumulator connecting to its poles.

- It is possible to control remotely the panel arming and disarming operations. In such a case the key in the ignition lock should be turned ON, since arming the panel is caused by opening the ignition lock circuit.
- The alarm panel CA-4M is adapted to use with bistable entry time initiators.

IV. TECHNICAL DATA

Zones number	4
Parametric resistors	2200ohm
Current consumption	40mA
Current efficiency of panel power supply adapter	0.7A
Max. detectors consumption current	400mA
Max. siren consumption current	2x1000mA
Max. optical indicator consumption current	1000mA
Dimensions	255x165x75mm
Weight	1.5kg

