

# CONTROL PANEL

## CA-64

(software version 1.03.xx)

### User's manual

Przedsiębiorstwo Produkcyjno-Usługowe

Satel®

GDAŃSK

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Thank you for choosing the product offered by us. High quality, large number of functions and simple operation are main advantages of the control panel offered by SATEL s.c.. Hoping that you will be fully satisfied with this choice, we declare to provide you with professional assistance and information on our products. We would like to inform that, besides control panels, SATEL s.c. produces many other components of alarm system. Look for detailed information on our full offer in retail outlets dealing with our products, at our website [www.satel.pl](http://www.satel.pl) or directly at our site, tel: (58) 32 09 410; fax (58) 32 09 401.

We kindly ask you to read the entire Manual carefully, since detailed knowledge on the control panel functions will allow you to fully utilise all included possibilities. This Manual is very general, and deals with the basic operation of a typical alarm system installation. The control panel may carry out functions that are not related directly to monitoring. We are not able to foresee all possible ways of use of all the control panel functions available. The use of all control panel functions and efficiency of operation of the entire system depend on the installation itself and the software installed by the installer. The control panel may perform its functions in many ways, which are defined when installing the system and its software. Due to the above, the installer should give you more detailed information regarding the operation of the alarm system and procedures of its using.

All situations, where the way of the control panel operation depends on previous installer decisions (made at the time of programming), are additionally marked with text in brackets: **(service setting)** (following the description of situation). The term **"service"** used in this Manual relates to the user who maintains and takes care about the alarm system and uses the service code (see page 12). It may be the installer, maintenance person, the employee caring for protection of the object, etc.

### **ABOUT THIS MANUAL**

This Manual describes the basic operation of modules used for controlling the system operation, as well as the control panel functions.

The first part of this Manual, titled *"Operation of Control Panel CA-64"* contains descriptions of modules used for controlling the operation of the control panel and their way of use. Also some functions related to the alarm system operation are described here. Furthermore included are the basic information on system functioning and use of the telephone line by the control panel.

The second part of this Manual, titled *"Description of user functions"* contains full specification of functions accessible from alphanumeric LCD keypad. Each function is described in detail and shown in a block diagram.

The text in this Manual contains some technical terms, please, use APPENDIX C at the end of Manual for explanation.

This Manual refers to **the control panel program, version 1.03.12**, and the **DLOAD64 installer's program, version 1.03.15**, up-to-date on the day of preparation hereof.

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## INTRODUCTION

The control panel CA-64 is intended for controlling operation of alarm systems, which monitor and supervise the security of medium-sized and large objects. Supervision is not limited to protection against burglary, but may also include monitoring the correct functioning of the object for 24 hours per day. The status of the alarm system is monitored continuously. Violation of any alarm system component results in a so called tampering alarm. The control panel responds to signals from individual detectors and decides whether to activate alarm or not. Since various detectors may be connected to the control panel, type and way of alarming depends on the control panel software installed (the control panel may respond in a different way to a signal from fire detector than to a signal from a water level detector).

The control panel allows grouping of detectors (zones) to obtain so called partitions, as well as free choice in determination, which partition is to be monitored (armed). Activation of any detector from such a group (called "zone violation" in the below text) may trigger an alarm. High flexibility of the control panel in determination, which partitions may be armed at the moment, is its great advantage.

### **BASIC FUNCTIONS OF THE CONTROL PANEL:**

- signalling burglary, attack, fire, technical and auxiliary alarms,
- monitoring – communication with telephone monitoring stations (real time sending detailed information on selected events in the protected object),
- messaging on alarm by telephone – either with the use of a vocal message or to a pager,
- answering phone calls (this function is protected with a separate code) that makes possible:
  - to inform the user on a system status,
  - to control some of the control panel functions via telephone; these functions are programmed by the service,
- real time printout of information on all or selected events occurred in the alarm system,
- supervision of access to rooms through doors provided with electromagnetic locks,
- monitoring the correctness of operation of individual alarm system components (power supplies, batteries, wiring).

### **CONTROL PANEL USAGE PROPERTIES:**

- operation by means of keypads provided with LCD text display (2x16 characters) to facilitate the use of the system,
- descriptions of zones and partitions defined by the installer make easy to find the alarm source,
- visible date and time of the system clock allow controlling the correctness of functions that depend on the real time,
- accessible are: viewing the alarm memory and failure memory (or detailed memory of all events) with event description in words, zone, module and partition

name or name of the user who operates the system, together with accurate time of the event occurrence,

- control and monitoring (up to) 8 independent alarm subsystems and (up to) 32 partitions armed independently,
- control of individual system parts from independent keyboards (maximum 8 LCD keypads and 64 partition LED keypads),
- control and supervision of the system by means of a computer (program GUARD64),
- dynamically changing menu (dependent on access level) to provide access to a range of user functions – the selection is made by accepting the function at the list shown in the LCD keypad screen,
- key short cuts to facilitate calling frequently used functions.

## OPERATION OF CONTROL PANEL CA-64

### **BASIC INFORMATION**

**LCD keypads** and **partition keypads** are used for operation of alarm system based on control panel CA-64. Moreover, the control panel supervises and registers usage of **code locks** and **proximity card** as well as **Dallas chip readers**, located adjacent to doors in individual rooms of an object. Partition keypads may be also used as code locks.

Individual control devices are assigned to selected partitions by the installer. LCD keypads may operate many partitions of different subsystems. Partition LED keypads operate a single partition only. Individual users may operate the control panel when they are provided with **access** to partitions operated by specific keypads. That means, the partitions assigned to the user at the stage of a new user creation or edition (see *Description of User Functions* → *Users*) must correspond to partitions operated by a keypad. The installer defines the list of partitions operated by individual LCD keypads.

**Example:** A LCD keypad controls operation of partitions: 1,2,3,4,5 and 6. The user has access to partitions: 5,6,7 and 8. It is seen from comparison, that by using this LCD keypad the user may control operation of partitions 5 and 6.

A similar rule applies to partition LED keypads, code locks and proximity card readers. With keypads, the user may control these partition to which he has access, he may open these doors with code locks and proximity card (or DALLAS chip) readers, for opening of which he has been authorized. The installer defines the list of users of individual partition keypads, coded locks and proximity card readers (separately for each module).

The access to functions controlling the operation of the control panel and more important information on the system status are protected with a **CODE** (code – combination of 4 to 8 digits). It is possible to obtain some information on system and call some functions without using a code (service setting) – by keeping depressed one of the following keys for a longer time (approximately 3 seconds):

- ▼ 1 – zones status viewing,
- ▼ 2 – keypad tampering viewing,
- ▼ 3 – expander tampering viewing,
- ▼ 4 – partitions status viewing,
- ▼ 5 – alarm memory viewing,
- ▼ 6 – failure memory viewing,
- ▼ 7 – current failure viewing,
- ▼ 8 – switching on / off gong signal in LCD keypad,
- ▼ 0 – auxiliary alarm (for example, calling medical aid),
- ▼ \* – fire alarm,
- ▼ # – attack alarm.

Functions of keys from 1 to 8 are accessible from LCD keypad only, and other functions may be accessible (service setting) from each keypad installed in the system (LCD keypad, partition keypad, code lock). The functions called this way provide information on all partitions operated with specific LCD keypads. Also, they are accessible via the User Menu (see: *Description of User Functions – Tests, Event History, Failures, Change of Option*), however, when called via the User Menu they provide the information on partitions accessible for the individual user, who called that function, only.

It is recommended that this way of calling functions be accessible in LCD keypads fully protected against access of unauthorised persons.

An “attack alarm” (called by #) may be signalled externally, in a similar way to an alarm of “burglary” type (buzzers, lights), it also may be arranged not to activate any signalling and remain as a “silent alarm PANIC” (service setting).

Also, the installer may render accessible the function of **quick arming** of certain partitions (so called QUICK ARM) to be called by pressing two keys: 0 and # in sequence:

- ▶ **0 #** quick arming of partitions. This function may be accessible from an LCD keypad and a partition keypad. When called from an LCD keypad, the function may arm several partitions, and when called from a partition keypad, it may arm only this partition, to which the partition keypad is assigned.

Moreover, keeping depressed the key marked ↓ displays LCD keypad name, and depressing two key: ↑ and ↓ (for approximately 40 seconds) causes the keypad processor to restart and display the keypad software version number and the control panel software version number.

## LCD KEYPAD

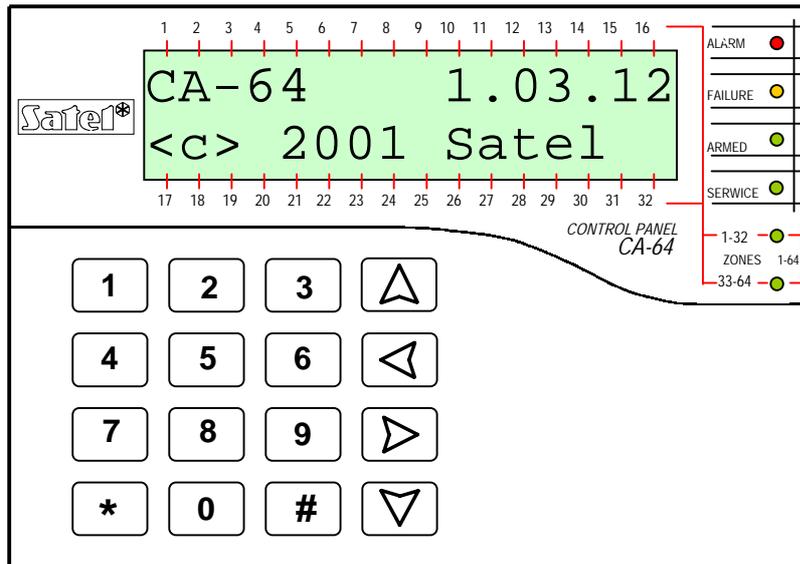


Figure 1

An LCD keypad is provided with a large LCD display (2 x 16 characters) with permanent or temporary backlighting, the latter is activated either by pressing any key or by violation of any zone (service setting).

16 keys (lighted similarly to the keypad screen) are located beneath the display, which are used for:

- entering the code,
- moving along menu and selecting appropriate functions from the list,
- entering data for functions called.

Six LEDs are located at the right-hand side of the display to indicate current system status.

- **ALARM** (red) – continuous light informs on alarm signalling activation at this moment. When the LED blinks, it means that, in partitions operated with this keypad alarm signalling occurred again since the last reset of the alarm memory.
- **FAILURE** (yellow) – the LED blinking informs on presence of a technical problem in the system. Failures, which activate this LED, are described further in this Manual (see *Description of User Functions* → *Failures*).  
The LED does not light when the LCD keypad operates in partially armed mode (at least one partition accessible for the LCD keypad is armed) or armed mode (all partitions accessible for the LCD keypad are armed) (service setting).
- **ARMED** (green) - the LED blinks when some partitions are armed and lights steadily when all partitions operated by the keypad are armed.
- **SERVICE** (green) - the LED blinks when the control panel operated in the service mode (function accessible for the user provided with the service code only).

**Note:** *Service mode limits normal operation of the control panel. Alarms from most of zones (except for zones of the following types: attack, cash point, and vibrating) and tampering alarms are not signalled. In order to restore the normal control panel operation mode, just exit the service mode, for the control panel does not return to its normal operation mode automatically.*

- **Zones 1-64** (two green LEDs) – they are used when viewing and testing status of zones and “expander” type modules – they indicate which group of zones (or which expander bus) is currently displayed on the LCD keypad screen (see *Description of User Functions → Tests*).

In addition to visual signals, the LCD keypad may generate audible information (service setting). The following signals, specific to some situations, may be heard when using the keys:

- One long beep - refusal of arming - the zone, which shouldn't be violated at the time of arming, is violated (option - "PRIORITY"). The refusal includes all zones selected for arming.
- Two long beeps – the control panel did not recognise the code; function is not accessible; erratic data; confirmation of abandoning the selected function (after pressing \* on the keypad keyboard); the key pressed is not active.
- Three long beeps – the code is recognised, but the called function is not accessible (for example, temporary partition bypass is activated or the user has no access to partitions operated from the keypad; the zone, which should not be violated when being armed, is violated – refusal of arming).
- Two short beeps – selection accepted – entering more detailed menu level.
- Three short beeps – confirmation of arming or disarming.
- Four short beeps and one long beep – acceptance of execution of the selected function.
- Three pairs of short beeps – it is necessary to change the code (for example, another user, when changing his code, has given an identical combination of digits as the combination in the code of the user; the code validity is expiring).

Moreover, the installer may program audible signalling in an LCD keypad for the following situations:

- Alarm for a partition – continuous sound for the total alarm duration (time programmed by service).
- Fire alarm – series of long sounds every second for the total alarm duration.
- Count down of time for entering – short sounds every 3 seconds.
- Count down of time for exit – long sounds every 3 seconds, completed with a series of short signals (for 10 seconds) and a single long sound. The way of signalling of “time for exit” informs that the count-down is finishing.
- Signaling the auto arming delay time countdown (timer-controlled partitions) - a series of 7 sounds (of diminishing length).
- Gong in the LCD keypad – five short sounds – this is a response to activation of some detectors when the zone is disarmed.

### **THE USE OF LCD KEYPAD**

Operation of the system from LCD keypad starts with entering the user **CODE** and pressing the key marked # or \*. Note that the control panel response (functions accessible) after pressing the # key is different from that generated after pressing the \* one. The specific feature of the control is the dynamic changing of the accessible menu, dependant on the system programmed parameters, as well as on the authorisation level of the user who entered the code. The designers of the control

panel have chosen such a way of its control to facilitate operation by users who do not know the system very well. Also, taking into account the safety of the object, it is not recommended that most of users have access to all control panel functions.

The system incorporates **the hierarchy system for access** to the control panel functions and partitions defined for the object by the installer.

Generally, typing at the keyboard:

- ▶ **CODE #** gives access to functions of arming/disarming type,
- ▶ **CODE \*** gives access to all functions in the User Menu, to which the user is authorised

**Note:** *When an erratic code (not recognised by the control panel) is typed three times, the alarm will be activated (service setting).*

The list of the control panel functions for user access is formed in a dynamical way. The contents of the list depends on system parameters, code type, user authorisation and alarm system status and situation.

**Example:** When you type your code and press #, the control panel makes accessible functions of partition arming (provided there are no partitions, operated from the LCD keypad, already armed) or disarming (if any of partitions is armed). In the event of alarm occurrence in the system, the control panel may cancel this alarm and make accessible the function of partition disarming (if the user has authorisation to do that). When the function of messaging by telephone is activated – function *Cancel messaging by telephone* may appear in menu. When the user has access to a single partition only, typing the code and pressing # causes immediate arming or disarming (if the partition is armed).

Typing code and pressing \* causes that the list of functions accessible from the User Menu is displayed. From this menu also the functions of the following type may be accessed: *arming* and *disarming* (if some partitions are armed). When all partitions are armed, the function *Arm* will not be accessible.

As you can see in the examples described above, the control panel, in an intelligent way, makes accessible those functions only, which may be executed by a specific user.

All user functions, which are accessible from LCD keypad, are described in section "Description of User Functions".

## SELECTION OF FUNCTION

When the control panel accepts the code, the first user function (from all functions accessible currently) appear in the upper line of the display. You can move through the list of functions rendered accessible by the control panel by pressing key  $\uparrow$  and  $\downarrow$ , and select the item in the list (single-selection list) by pressing the key # or  $\Rightarrow$ . If the selected function requires making further selection (submenu, options), the next list appears on the display, from which you can select required item in a similar way.

Some functions may need selection of few items from the list (multi-selection list). To do that, scroll the list by pressing  $\uparrow$  and  $\downarrow$  key and „mark“ all items in the list, which should be selected. The item is marked by pressing any numeric key, the symbol  $\blacksquare$  appears in the upper display corner next to the text. Press the numeric key again to cancel marking.

By scrolling the list upward or downwards (list contents is displayed in a cyclic way), you can see all list items and check marking. Pressing the key # or  $\Rightarrow$  accepts the selection (execution of function may be confirmed with beeping), and the control

panel returns to previously displayed menu or displays the adequate message and returns to the **basic status** (waiting for code). Then, current **date** and **time** is displayed. Date and time display format is defined by the installer (service setting).

There is the control panel setting option, which activates the procedure of double acceptance of some user functions. After pressing the key # or ⇨ (normal way of selection of function), the prompt appears on the screen asking to confirm the function, together with information: **1 = Yes**. Press the key with digit **1** to confirm this function. This procedure protects against accidental double pressing the key # (or ⇨) and execution of function, which should not be executed. The description of user functions in this Manual relates to situation when this option is switched off.

If you want to abandon the selection of function after opening the User Menu, press key \*. In the event no keypad button is pressed (within 2 minutes) after menu opening, the control panel automatically closes this menu and returns to its basic status.

## GRAPHICAL MODE

Partition selection functions allow also another way of multiple selection from the list (for example, selection of partitions for arming). It is called a **graphical mode**. When you have already entered the selection list, press key ⇨ or ⇩ to enter this mode. Dots under the number of each accessible partition (numbers 1 - 32 around the display) appear on the keypad screen. The dash under the dot (cursor) indicates which item may be marked. Use key ⇨ and ⇩ to move the cursor to the item required. Pressing any numeric key causes the symbol **■** to appear at the item selected. Press the numeric key again to cancel marking. Press key ↑ or ↓ to restore the previous way of display (with name).

## ALARM SOURCE NAME READING

The installer may also render accessible the function of displaying the name of the alarm source at the LCD keypad screen, without necessity of entering the code. In such an event, the partition or zone name is displayed at the keypad screen, when an alarm occurs. When there are few alarm causes, you may scroll zone names, for which alarm occurred, and names of partitions, where the alarm is (or has been) signalled. Arrow keys: ⇩ and ⇨ allow viewing partition names (if an alarm occurred for few partitions), and keys ↑ and ↓ allow viewing zone names, for which an alarm occurred. These names (entered initially by the installer) are displayed in a cyclic way in the lower display line, and they are shown in numeric order of zones (or partitions) in the system. The information on alarm activation is stored in so called "*temporary alarm memory*", until the contents of this memory is cleared by an authorised user (see "*Description of User Functions*" → *Alarm clearing*). The contents of this memory may be checked many times after resetting the alarms, until it is deleted.

## PARTITION KEYPAD

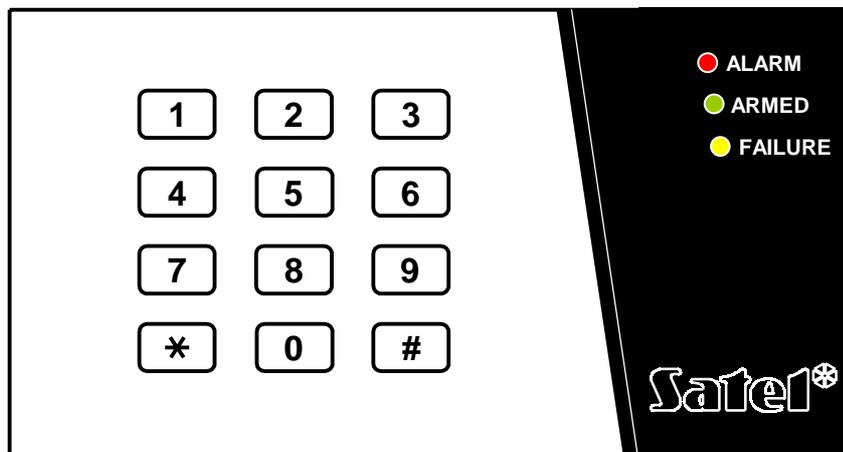


Figure 2

Partition keypad is provided with 12 keys with permanent or temporary backlighting (service setting), and three LEDs described as follows:

- **ALARM** (red) – steady light indicates an alarm in the partition operated with this partition keypad, and blinking indicates that alarm occurred in this partition earlier.
- **ARMED** (green) - steady light informs, that the partition assigned to this keypad has been armed. The LED blinks when the time for exit is being counted down.
- **FAILURE** (yellow) – the LED blinks when a technical problem has been detected in the **system**. Check the LCD keypad for the type of failure. Indication of this LED relates to the entire system, not only to the partition operated with this keypad. Arming of a partition switches off the LED, and disarming causes the LED to lit again.

When all of three LEDs (ALARM, ARMED, FAILURE) flash in sequence, this indicates missing communication between the keypad and the control panel. This situation may occur when program STARTER runs in the control panel or the cable connecting the partition keypad to the control panel is damaged.

There is a possibility to program a partition to be armed or disarmed after entering two codes (service setting). In this event after entering the first code, LEDs ARMED and FAILURE start to blink, and the control panel waits for entering the second code.

Similarly to the LCD keypad, the partition keypad may generate audible signals. This way the control panel confirms the function called, since there is no display at the partition keypad.

- One long beep - refusal of arming - the zone, which shouldn't be violated at the time of arming, is violated (option - "PRIORITY").
- Two long beeps – the code is not known to the control panel.
- Two short beeps – acceptance of the first of two codes needed to arm or disarm.
- Three long beeps – the code cannot control this partition.
- Three short beeps – confirmation of partition arming and disarming.
- Three pairs of short beeps – it is necessary to change the code - for example, a user, when changing his code, has entered an identical combination of digits as in the code of another user, or end of code validity is approaching.

- Four short beeps and one long beep – the confirmation of the performance of a control function, code change and of a guard round.
- Five short beeps - the dependent door are open - the door control has not been performed. To operate the lock it is necessary to close the dependent door and reenter the code.

Blinking of the back-lit may substitute the audible signalling (service setting). Beeps correspond to keypad lighting off pulses, when the lighting is on, or light on pulses, when normally it is off.

Also, the partition keypad may indicate alarm occurrence in the partition concerned (service setting).

- Alarm in the partition – steady sound for total alarm duration.
- Alarm memory – long sounds every two seconds until alarm is reset. The sounds are synchronised with ALARM LED flashing. Press any numeric key to silent the sounds for approximately 40 seconds.
- Fire alarm – a series of long sounds every second for total alarm duration.
- Fire alarm memory – short sounds every two seconds until alarm is reset. The sounds are synchronised with ALARM LED blinking. Press any numeric key for approximately 40 seconds to silent the sounds.
- Count down of time for entering – short sounds every 3 seconds.
- Signaling the auto arming delay time countdown (timer-controlled partitions) - a series of 7 sounds (of diminishing length).
- Door are open for too long - short beeps repeated with high frequency till the door are closed (the function of door control is activated).

Operation of the system from the partition keypad is very limited, and it relates to the partition, to which the keypad has been assigned by the installer. There is a possibility to operate an electromagnetic door lock from the partition keypad by means of the user's code. Several partition keypads may be assigned to a single partition.

Functions accessible from the keypad are as follows:

- ▶ **CODE #** arming and disarming of partition and alarm reset.
- ▶ **CODE \*** electromagnetic door lock opening.

Similarly to the LCD keypad, the user, who wants to start functions mentioned above, need to have access to the partition concerned and proper authorisation. Besides, he need to be authorised to use the partition keypad concerned (these rights are assigned by the administrator with in the GUARD64 program, or the installer (service) in the DLOAD64 program).

When the erratic code is typed three times, the alarm may be activated (service setting).

Other functions accessible from the partition keypad (without code entering) are as follows:

- ▶ **0 #** quick partition arming,  
and functions of calling special alarms:
  - ▼ **#** panic alarm,
  - ▼ **0** auxiliary alarm (calling for medical aid),
  - ▼ **\*** fire alarm.

The last three functions are started by longer keeping depressed (for approximately 3 seconds) the key described above.

**Note:** *When arming is on for the partition, and the partition keypad also controls the electromagnetic door lock, typing: CODE \* causes disarming and door opening – if the partition is not bypassed temporarily. However, if the user has no authorisation for disarming, the door remains closed.*

**Code change** by the user is another, additional partition keypad function (service setting). User partition change is carried out as follows:

- Press and keep depressed (for approximately 3 seconds) the key with digit "1" (LEDs ALARM and ARMED – red and green – start to flash alternately).
- Type the old CODE and press # (LEDs: ALARM and FAILURE – red and yellow - start to flash alternately).
- Type new CODE and press # (LEDs stop blinking and the module generates confirmation signal of function execution).

In the following four cases the control panel cannot accept the change of code (it is signalled with two long beeps):

1. the new code is too short or too long (acceptable are codes of length from 4 to 8 digits)
2. the new code is too simple ( the function of refusal of simple codes is activated)
3. the new code is identical with a code of another user of the alarm system (someone's code has been "guessed")
4. change of the code has been blocked, because another user "guessed" the code trying to change his own code. If the function of reminding about the necessity of code change is activated, each usage of such a "guessed" code will be signalled with three double beeps. In this event the change of the code will be possible only by means of the LCD keypad with the requirement of confirmation of the code change (see: the description of the function "change own code") by the administrator of the subsystem. It makes impossible to "take over" the code by a user who accidentally "guessed" the code.

**NOTE:** *With a big number of users it is advisable to use longer codes, at least 5-digit ones, to reduce the chance of "guessing" the code of another user.*

## **CODE LOCK**

The coded lock looks similarly to the partition keypad. The code lock is provided with 12-key backlit keypad. Keypad backlit may be permanent or temporary (service setting). The lock is provided with three LEDs marked as follows:

- **STAND BY** (green) – LED is on when the lock is operated by the control panel, and the door may be open.
- **ACCESS** (red) – LED is on when the door lock is being unlocked.
- **DOOR** (yellow) – this LED shows the status of zone, which monitors the door status. The LED is ON when the door is open.

When all three LEDs (STAND BY, ACCESS, DOOR) flash alternately, that means there is no communication between the code lock and the control panel. This situation may occur when program STARTER is running in the control panel or the cable connecting the code lock keypad to the control panel is damaged.

The basic code lock function is **to control the access to the room**, where the door provided with electric catch, bolt or electromagnetic interlock are installed. Also, the lock may be used for partition checking when sentry round in the object.

To open the door, type **CODE** at the lock keypad and press key # or \*. The user must have access to use this code lock.

- ▶ **CODE #** door opening
- ▶ **CODE \*** door locking

When an erratic code is typed three times, the alarm may be activated (service setting).

It is possible to call special alarms using a code lock keypad. These three functions are called by longer keeping depressed (for approximately 3 seconds) the key:

- ▼ **#** panic alarm,
- ▼ **0** auxiliary alarm (calling for medical aid),
- ▼ **\*** fire alarm.

Confirmation of the function called by the control panel (with sound or blinking) is identical as for partition keypad.

### **PROXIMITY CARD AND DALLAS CHIP READER**

Proximity card and DALLAS chip readers have the same role to play in the system as code locks. Proximity card readers are provided with two-colour LED and buzzer for communication of the control panel with the user. DALLAS chip heads are not provided with any signalling of this type, but the installer has a possibility to provide such an external signalling.

Each alarm system CA-64 user (administrator, sentry, ordinary user) may be assigned with one proximity card and/or DALLAS chip at the stage of user creation or edition. Also, it is possible to remove the previously assigned card (chip) to a user from the control panel memory. In order to provide a new user with a card (chip) with a code already known to the control panel, first remove this card (chip) from memory (see: USER MANUAL, CA-64 → Description of user functions → Users), and then assign it to another user.

Use the card as follows: bring the card close to the card reader and hold it there for approximately 0.5 sec. The distance between the card and reader, when reading, may be up to 12 - 14 centimetres, depending on reading head type. DALLAS chip should be pushed into the head slot to close the zone electric circuit. The control panel receives the code from the expander operating the reading head, recognises the user, to whom the card (or chip) is assigned, and operates according to settings programmed, when the user has authorisation to open the door (to activate the relay).

In the alarm system CA-64, the proximity card reader signals have the following meaning (DALLAS head may generate identical signals):

- ◆ Meaning of audible signals generated after proximity card readout:
  - single short beep – card code readout,
  - Two short beeps – start of card code writing function, confirmation of first writing,
  - Two long beeps – control panel have not recognised the card,
  - Three long beeps – card code is recognised, but the user has no access to the lock (relay control),

- Four short beeps and one long beep – card code accepted, the relay activation, second correct readout of a new user card,
  - Five short beeps – dependent door open (relay has not been activated).
  - Short beeps (without time limitation) – door opened for a too long period.
- ◆ Meaning of visual signals emitted during armed status and after proximity card code readout:
- LED blinks red in a uniform way – missing communication with control panel (this situation may occur when the special system initialisation program STARTER is running in the control panel, the reader module has not been identified or the cable connecting the module to the control panel is damaged.)
  - LED lights red steadily – module is correct, lock operation (relay control) is possible.
  - LED changes colour from red to green once a second:
    - single short changes – waiting for first card reading,
    - double short changes – waiting for second reading of a new card.
- ◆ The installer may activate the option of confirming with a LED the messages sent from the control panel to the user. In this case, after the card is read, the change of LED colour from red to green goes on in accordance with audible signalling described above.

## CODES AND USERS

The functions of control panel operation is possible after entering a proper code and pressing key \* or #. Three basic code types are used:

- 1) **Service code** – this code identifies the user with special rights: he controls all partitions, he may open all doors controlled by the control panel, he has access to most of control panel functions (except for the “Service access” and “Users” functions – see *Description of User Functions*), he may enter and delete subsystem administrators. Factory programmed service code : 12345.
- 2) **Administrator (supervisor) code** – this code identifies the user with highest authorisation for subsystem. The administrator has access to all partitions within his subsystem. There is a function which unlocks the service access (see *Description of User Functions – Service access level*). This function is always accessible for the administrator and not for the service. Factory programmed administrator code for a first subsystem: 1111.  
Other administrator rights may be limited by the service (installer). If few subsystems are defined in the system, each subsystem has its own administrator code. This user has the right to enter new users into the system.
- 3) **User code** – the remaining codes entered to the system by administrators or users (with rights to edit the user). These are the codes for everyday operation of the system. 192 user codes may be entered in the CA-64 control panel.

**Notes:**

- ◆ *Service code is rejected by the control panel, when service access is locked. The administrator may unlock the service access to the alarm system by using the function „Service access” (see: Description of the User functions).*
- ◆ *If there is no administrator code in the system (all administrators are removed), service access to the system is unlimited.*
- ◆ *It is recommended not to use the administrator code everyday (unauthorised persons may peep the code). The administrator should enter an ordinary user code, with “strategic” functions blocked, and he should use it in everyday work. Protection of access to the service mode and prevention of entering codes by unauthorised persons are main purposes of that.*

An additional possibility is to assign specific control function to a code. This function will be executed after the code is followed with the # key (see: *Description of User functions - Users*).

The installer (using the service code) defines administrator codes and names (one administrator per each subsystem), as well as he defines their rights.

The administrator has the right to enter ordinary system users. He provides them with rights, type and defines the partitions, to which the users will have access. Also, the ordinary user may have the right to enter other users. New user may have access to these functions and partitions only, to which the user, who enters the new code has access.

**Note:** *If the user has authorisation for changing the code, he should change it after first usage of the code. The control panel reminds by means of a message on the keypad display and an audible signal that this operation should be performed (service setting).*

The system stores the sequence order of entering users into memory. The person with authorisation to enter and delete the users may remove from the memory the users entered by him/her or his/her subordinates only. The service has the right to edit all administrators (as well as to change codes). The administrator has such rights for users in his/her subsystem. Ordinary users have rights to edit the users they entered. This possibility is convenient when the code is lost. The supervisor of the user concerned may enter a new code and make controlling the system available for him (of course, within the range limited by his authorisation).

The control panel assigns numbers to the users to identify them in the system. This number is used in messages transmitted to the monitoring station and in event descriptions (see: *Description of User functions – Event history*).

**SYSTEM ARMING**

“Armed” is the basic status, for which the control panel was designed. In this mode, the control panel detectors monitor the protected object, and any violation of the protected partition is signalled by the control panel with all means accessible (programmed by the installer). Control panel CA-64 enables individual control of armed status in each partition. A single partition, several partitions and all partitions may be in armed status. Each partition may be disarmed individually (by means of partition keypad, LCD keypad) or totally (LCD keypad).

Typing the following at the keypad is a normal way of arming:

- ▶ **CODE #** partition keypad arms a single partition, and keypad gives the possibility to arm all (or selected) partitions accessible.
- ▶ **0 #** quick arming – the partition keypad arms a single partition, and keypad arms partitions programmed by the installer (no selection possible).

If one of partitions accessible for the user is already armed, he/she may arm other partitions when he/she types at the keypad:

- ▶ **CODE \*** arming by selecting „arm” from the function menu (see: *Description of User functions*).

There are some **special methods of system arming** possible in a partition (available from the LCD keypad):

- activate without internal zones – the control panel does not respond to violation of zones defined as internal by the installer. This possibility allows user to stay in the object and arm. The object is protected externally in normal way, and the system performs all functions programmed.
- arm without delayed zones – arming is performed in a way similar to the previous case, but additionally the delayed zones act as immediate ones.

To arm the system in one of the presented modes, proceed as follows:

1. Enter ACCESS CODE and press the \* key.
2. Call the „Arming mode” function.
3. Using the ↑ and ↓ keys select one of the suggested arming modes and press #.
4. Call the „Arm” function and select (highlight) the partition to be armed.
5. Press the # key.

Disarming the partition will cancel the special mode of its arming. To re-arm the partition in a special mode, the procedure described above must be repeated.

The procedure of arming the system from a LCD keypad in the partition where the type (10) „**24h vibration**” zone belongs and the testing function of vibration sensors is activated (service setting) is slightly different.

When the arming function (**access code #** or quick arming **0#**) is called, the following message appears on the LCD display:

„*Vibration sensors test xx s (1 = arm)*” where the xx field indicates the number of seconds before the end of test.

During the test, the control panel is waiting for the violation of vibration zones in a given partition. If all the vibration zones of the given zone are violated, the alarm control panel switches over to counting the exit delay time and arming the system. In case some of the vibration zones are not violated during this time, the control panel will display a list of faulty zones (number and name of zone) and will not arm the system.

Pressing the digit **1** key during the process of countdown will interrupt the test and arm the system in normal mode, while pressing the **★** key will make it possible to cancel the arming.

Arming the system from the partition keypad will bypass the testing of vibration sensors in the particular partition.

Also, special control ways of partition status are possible

- partition arming and disarming by means of timers. Timer is an internal control panel logic unit, which measures time. Timer operation is programmed by the service.
- partition arming and disarming by means of a “partition user timer”. This timer may be programmed by the user, without necessity of asking the installer (or the service) for that. There is a single timer of this type for a partition, this timer may be programmed in daily or weekly cycle (see: *Description of User functions* → *Change of option*).
- partition arming control by means of a special zone programmed (by the installer) as arming control zone. In practice, it may be a mechanical switch; key switch, pushbutton, radio switch. Also, such a zone may be controlled via telephone – with the use of DTMF system (see: *Answering phone call*).

## **ALARMS**

The system may signal alarms as the response for various situations occurred in the protected object. Basic control panel alarms are as follows:

- Burglary alarm – activated when the zone is violated in the partition where arming is on. The violation of the “delayed zone” starts to count down the delay time, after which alarm is activated if the partition will not be disarmed.
- Fire alarm – activated by fire detectors, from keypad or in another way (for example, pressing the pushbutton).
- Tampering alarm – activated by violation of any anti-tampering contacts in the alarm system (located in detector and module casings), damage to cable(s), etc.
- Attack alarm – activated from keypad or in another way defined by the installer (for example - pushbutton).
- Auxiliary alarm – activated from keypad (for example, call for medical aid) or in another way defined by the installer (for example - remote controller or pushbutton).
- Technical alarm – activated by various specialist detectors.

The way of signallisation of individual alarms may be different, and it is defined by the system installer. It may be an alarm buzzer, information to a monitoring station, visual alarm, audible alarm and (or) keypad message, telephone message, activation of other external devices.

## **MESSAGING ON ALARM BY TELEPHONE**

The telephone communicator integrated in the control panel CA-64 allows transmission of information on **alarm** through the telephone line to any telephone number. The message transmitted may be adapted to the alarm type (the system

installer may install voice synthesizers to allow up to 16 messages to be replayed) The installer defines, who and on which alarm will be informed by the control panel, by programming relevant telephone numbers and defining rules of messaging.

Also, the control panel may transmit the information on missing **220 V power supply** in the form of voice message (or pager message). Power supply failure is a serious danger for the protected object and the alarm system, therefore, this information has been recognised as equally important as information on alarms.

The person, whom the control panel calls, may confirm message receipt. Special code is used for that, programmed (by the installer) individually for each telephone number. When the message is not confirmed, the control panel may repeat the message transmission (number of repetitions is programmed by the installer). The telephone set must be set to the DTMF tone dialling.

If the code is not correct, the control panel signals that with two long beeps. Correct code is confirmed by four short and one long beeps.

When, instead of sounds described above, you hear a single short beep every three seconds, the code is correct, but you must wait, because there are several messages about different alarms.

If you make a mistake when entering the code, press any numeric key to supplement the code to four digits (then the control panel signals erratic code), and next enter the correct code.

**Note:** *The control panel analyses telephone signals in order to recognise whether the phone call is answered. Therefore, it may occur that you will hear the message after few seconds (up to 4 seconds) from picking the earphone. This effect is not an error – it results from phone call confirmation signal. When you say „halo...” to the earphone, the message will be communicated immediately.*

## ANSWERING PHONE CALLS

The control panel CA-64 is able to answer phone calls and communicate information on the system status. Also, you may call control functions with the use of telephone. Each ordinary user may (at the stage of user entering or edition) be assigned with a **telephone code** (do not mix this code with the code for confirmation of receipt of a telephone message on alarm). The control panel recognises the system user with this code and passes an information on partition status (armed, alarms) for partitions accessible for this user. Also, the user may control the status of control panel relay outputs programmed as „telephone relays”. The installer has a possibility to program up to 16 telephone relays. Also, the installer decides which relays may be controlled by individual users. To use this function of the control panel, you must have the telephone set operating in DTMF tone system.

**Note:** *Not all cellular telephones allow control in DTMF tone system.*

### How to use this function:

- Dial the telephone number (line) of the control panel. The way of dialling is defined by the installer. The control panel may communicate after a defined number of dialling signals (rings). Dialling may be single or double. When double dialling is used, wait a defined number of “rings”, put the handset off, and then dial the control panel telephone number again. After the number is dialled the second time, the control panel should answer immediately.

- After the communication is started, the control panel is ready to receive the user telephone code – three short beeps (prompt).
- Type code at the telephone set keypad (in the tone system). The control panel accepts the correct code with series of beeps: four short and a single long one. An incorrect code is followed with two long beeps.
- Now the control panel operates in the mode of informing on partition status. It waits for user's response for 15 seconds and generates one short beep every two seconds. Now It is required to enter the partition number at the telephone set keypad (two digits – for example, 01; 05; 12; 25). If the user does not respond within this time, the control panel will ring off. After the partition number is entered, the control panel generates the message. Three short beeps inform that the partition is disarmed and four short and one long beeps mean that the partition is armed.
- Alarm memory is an additional information given by the control panel. If an alarm occurred in the partition, the control panel generates series of double beeps – first is lower and second is higher – following the information on the partition status. Where no alarm occurred, the control panel generates single short beep every two seconds.

In order to move to the control mode of the telephone relays status, press **2** and **#** at the telephone set keypad.

- Now the control panel waits for the relay number (two digits). To trigger the relay status to the reverse one, type the relay number at the telephone set keypad. Two short beeps mean that the relay has been switched off and four short beeps and one long beep mean that the relay has been switched on. Each time you type the relay number, you change its status to the reverse one.

You may move back to the partition status indication mode by pressing keys **1** and **#** one after one.

When you press keys **0** and **#** one by one, you exit the function and terminates the phone call.

### ***OTHER FUNCTIONS USING TELEPHONE LINE***

If the alarm system uses functions of the control panel telephone communicator, the line from the local exchange to the object is connected directly to the control panel, and all telephone sets are located downstream the control panel. Therefore, no signals are heard in telephone sets, when the control panel uses the telephone line. This situation may occur frequently in multi-partition system, where monitoring is activated. Moreover, the control panel will disconnect the telephone conversation, when taking over the telephone line in order to transmit an information on a new event. It should be said that control panel phone calls do not last for a long time (from several to tens seconds, depending on the selected format data transmission).

Another function, where the control panel occupies the telephone line, is programming by the telephone (“downloading”). This function may be initiated by the service. The telephone line may be occupied for a long time, when data are transmitted. Even if the programming is initiated by the user, the service may hold communication with the control panel for cost saving reasons, and then restore it without engaging the user.

**Note:** Access to the control panel in programming mode by telephone is protected with ten-byte code (more than  $1.2 \times 10^{24}$  combinations). This is a very good protection against hacking to the control panel by telephone aiming to block it. Additionally, three sequential trials to call programming from outside block the mechanism of answering to modem signals for 30 minutes.

## DESCRIPTION OF USER FUNCTIONS

### MAIN MENU

The list of functions accessible from LCD keypad is shown in *Table 1*. First table column contains names of functions, and specific function properties are given in the second column. There are functions accessible for the service only, and one function is accessible for the administrator only. The functions are described by means of block diagrams (see Figures below). Function names are extended with function properties, as in *Table 1*.

Some functions are present in the menu alternately, only one of such functions – for example, *Service mode* and *SM take-over* – is accessible at the moment. Pairs of functions of this type are marked with a bold line section (at the left-hand side) – part of table frame, function name column.

Symbols in column PROPERTIES (table 1):

- ↕ - function has submenu
- I** - multi-selection function
- xxx** - function requires data to be entered (code , name, time)
- graph** - graphical mode of zone, partition and module information display is accessible
- service** - function accessible for the service only
- master** - function accessible for the master (administrator) only

FUNCTION NAME	PROPERTIES
Disarm	⇅ <b>K</b> graph
Clear alarm	
Clear other alarms	
Abort voice messaging	
Arm	⇅ <b>K</b> graph
Arm (2 codes)	⇅ xxx
Disarm (2 codes)	⇅ xxx
Defer auto-arm	⇅ xxx
Set auto-arm delay	⇅ xxx
Arming mode	⇅
Change own code	xxx
Masters	⇅ xxx <b>K</b> service
Users	⇅ xxx <b>K</b> graph
Zone bypasses	⇅ xxx <b>K</b>
Set time	xxx
Failures	⇅
Events	⇅ xxx <b>K</b> graph
Reset zones	
Change options	⇅
Tests	⇅ xxx graph
Service access	xxx master
Service mode	⇅ service
Take SM (service mode) over	⇅ service
Downloading	⇅

Table 1

## BLOCK DIAGRAMS AND DESCRIPTION OF USER FUNCTIONS

User functions are shown in block diagrams. The texts, which appear on the LCD keypad display, or name of list accessible in the form of menu for scrolling, are shown in frames. The list is scrolled by means of keys: ↑ and ↓. The function, which may be selected, is marked with arrow at the left-hand side of the function name (on the keypad display) (→ *Function name*). Press key # or ⇨ to move to the next block in the diagram (function execution stage) according to direction shown with arrows. The return from some menu levels to previous menu level is possible by pressing the key marked ⇩. Pressing the key \* at each menu level means (mostly) abandoning execution of the function selected and return to the main menu. The user must be authorised to use the function to make it displayed by the control panel. Execution of each function is confirmed with proper message, which is shown with a symbol at the block diagrams describing functions:

- K** - end of function execution – the control panel displays a proper voice message and returns to the basic status.

**DATA ENTERING**

Some functions require typing of a new code or a user name. The way of entering new data that relate to system users is described below. When changing the code, the control panel does not show the old code, unless the user has not changed the code assigned for him by the person introducing him to the system yet. But the old name always is shown on the display when changing the old name. The user name entered appears in selection lists, printouts and when viewing the event memory in the computer.

- **new code, time limit:** numeric data are entered by means of numeric keys. Arrow keys are used for modification of numbers being entered. Below the text field, where digits entered appear, the cursor (dash) is seen. Arrows: ← and → are used for moving the cursor to show digits in sequence. Press the key with digit to enter the digit required at the left side of cursor, and press the arrow ↑ to delete the digit at the left side of cursor. The arrow ↓ change cursor type – blinking, dark rectangle appears. Cursor of this type allows changing the digit above the dash to the digit typed at the keyboard. Press key ↓ again to return to the previous cursor type.
- **user name:** user name is entered by means of numeric keys, which change their meaning and allow entering text data (letters) to the control panel. *Table 2* contains characters accessible at the keypad keyboard. Subsequent pressing of the key with a digit changes the characters in a cyclic way. The new user is entered by changing the factory-entered name. You may delete the old name by pressing the arrow key ↑ (each single pressing deletes a character at the left side of the cursor). Press arrow key ↓ to enter space at the left side of the cursor; use arrow keys ← and → to move the cursor under the user name backlighting the position to be changed. To change the character at the position indicated by the cursor, repeat pressing the key with the proper digit so many times, until the proper character appears. Then, move cursor to the next position and repeat the procedure.

Pressing # accepts data entered.

1	!	?	'	`	←	"	{	}	\$	%	&	@	\	^		⌞	#	1
2	A	a	Å	å	B	b	C	c	Ć	ć	2							
3	D	d	E	e	Ę	ę	F	f	3									
4	G	g	H	h	I	i	4											
5	J	j	K	k	L	l	Ł	ł	5									
6	M	m	N	n	Ń	ń	O	o	Ó	ó	6							
7	P	p	Q	q	R	r	S	s	Ś	ś	7							
8	T	t	U	u	V	v	8											
9	W	w	X	x	Y	y	Z	z	Ż	ż	Ź	ź	9					
0	.	,	:	;	+	-	*	/	=	_	<	>	(	)	[	]	0	

*Table 2 Characters accessible for the text mode of data entering.*

## DISARMING

The function allows disarming in a single partition, several partitions selected or all partitions accessible to the user, from a specific keypad.

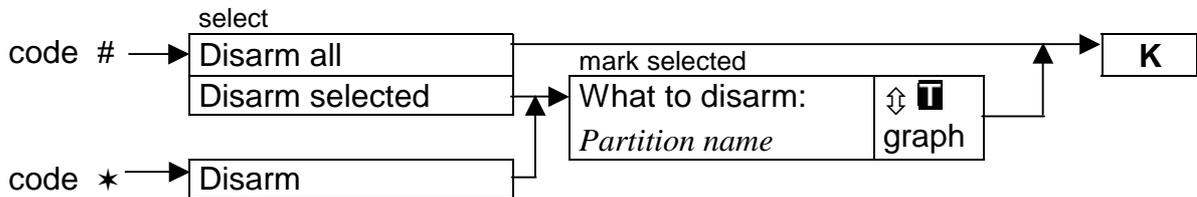


Figure 3

## CLEAR ALARM

The function clears alarm signalling and clears memory of alarms occurred since the last alarm memory clearing. Alarm memory clearing does not include the event memory, where the facts of alarm occurrence and cancelling are registered and kept fully described. The function is executed automatically (when the system is armed and alarm occurs) after the code is entered and key # is pressed. Then, the control panel displays the menu of the function *Disarm*, and, after this function is executed, it displays an adequate message.



Figure 4

## CLEAR OTHER ALARMS

The function allows cancelling alarms from other subsystems, to which normally the user has no access.

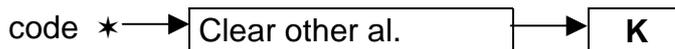


Figure 5

## ABORT VOICE MESSAGING

When this function is called, messaging by telephone is stopped - the control panel should ring off. If the telephone line is still occupied, that means, that messaging for the partition non-accessible for a given user is carried out.

Messaging by telephone may be cancelled automatically together with an alarm clearing (service setting).

**Note:** *If the installer has not specified the partition for a selected telephone number, the users of which can cancel messaging by telephone, the procedure of messaging by telephone to this phone number will be carried out till the end, without possibility of stopping it.*



Figure 6

**ARM**

The function allows arming of a single partition, few partitions selected or all partitions accessible to the user.

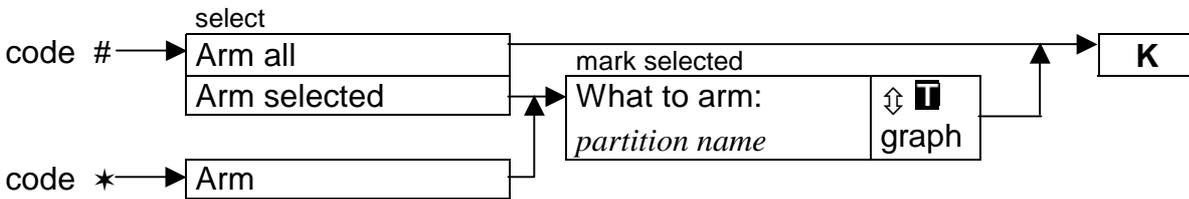


Figure 7

**ARM (2 CODES)**

The function arms special partitions. Two different codes must be used to arm them. The presence of such partitions is declared (programmed) by the installer. The second code must be entered within 40 seconds after entering the first one; after that time the control panel returns to the basic menu.

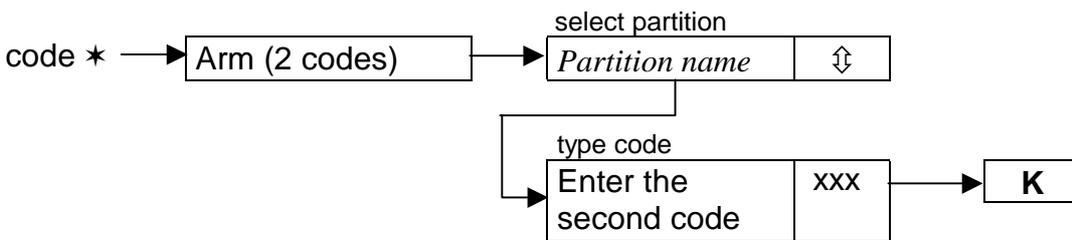


Figure 8

**DISARM (2 CODES)**

The function disarms in special partitions. Two different codes must be used to disarm them. The presence of such partitions is declared (programmed) by the installer. The second code must be entered within 40 seconds after entering the first one; after that time the control panel returns to the basic menu.

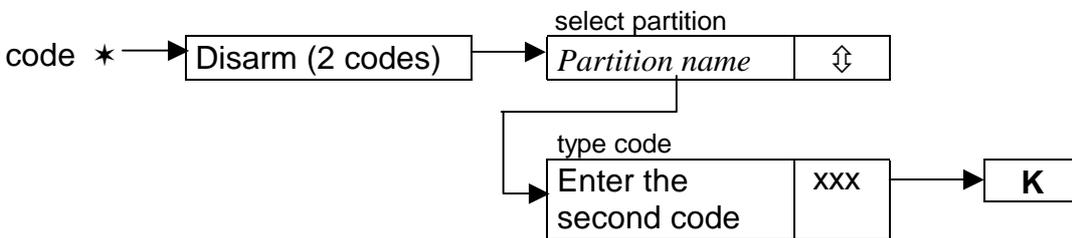


Figure 9

**DEFER AUTO-ARM**

The function puts off (delays) the arming of a timer-controlled partition (auto-arming). It is intended for programming the value of time interval by which the moment of automatic arming of a partition is to be delayed. The maximum postponement time value is 4 hours, 33 minutes and 3 seconds. Entering a higher value will set the maximum permissible value, while entering the zeros alone will cancel the timer-

controlled arming until the particular timer is activated again. Operation of this function pertains both to the „*Partition user timer*” and the „*Timers*” programmed by the installer.

**The function makes it possible to select the partitions, where the countdown of the „auto-arming delay” has begun.** This very feature distinguishes the said function from the described below user function „Set arming postponement”, which gives access to all the partitions armed automatically with time delay which are available to the individual user. In view of a low value of the auto-arming time (max. 255 seconds), it is important that a quick option of the partition arming postponement be available in case it is necessary to stay inside.

Upon commencement of the countdown, the control panel presents on the LCD keypad display the partition name and the delay time which remains to arming. If the time is simultaneously counted in a few partitions, the display shows the name of the partition which will be armed first.

The postponement time is programmed individually for each partition for which the auto-arming delay countdown has begun.

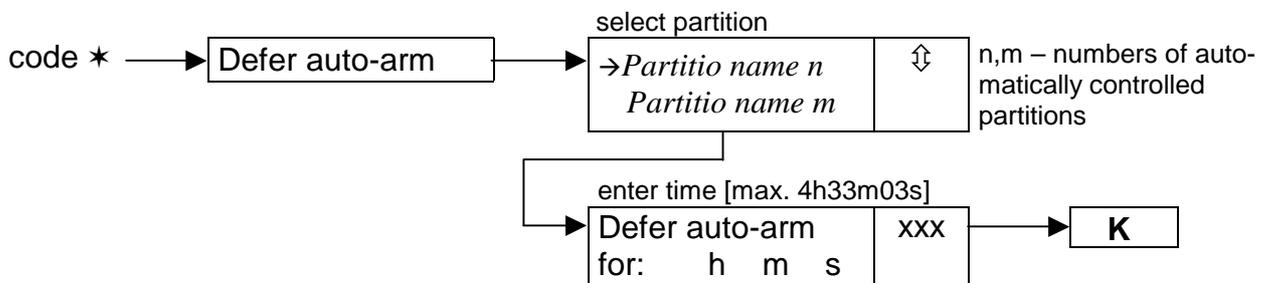


Figure 10

## SET AUTO-ARM DELAY

The function puts off (delays) the arming of a timer-controlled partition (auto-arming). It is intended for programming the value of time interval by which the moment of automatic arming of a partition is to be delayed. The maximum postponement time value is 4 hours, 33 minutes and 3 seconds. Entering a higher value will set the maximum permissible value, while entering the zeros alone will restore the partition control according to the installer’s settings. Operation of this function pertains both to the „*Partition user timer*” and the „*Timers*” programmed by the installer.

The postponement time is programmed individually for each automatically controlled partition.

The function is available in the user menu if the user is authorized to get access to at least one partition for which a **non-zero „auto-arming delay” time** has been set (service setting). The value of such a delay may vary from 1 to 255 seconds.

Activation of the timer controlling the particular partition triggers the process of counting the auto-arming delay time. Then, countdown of the partition exit time takes place (if provided), followed by arming the partition.

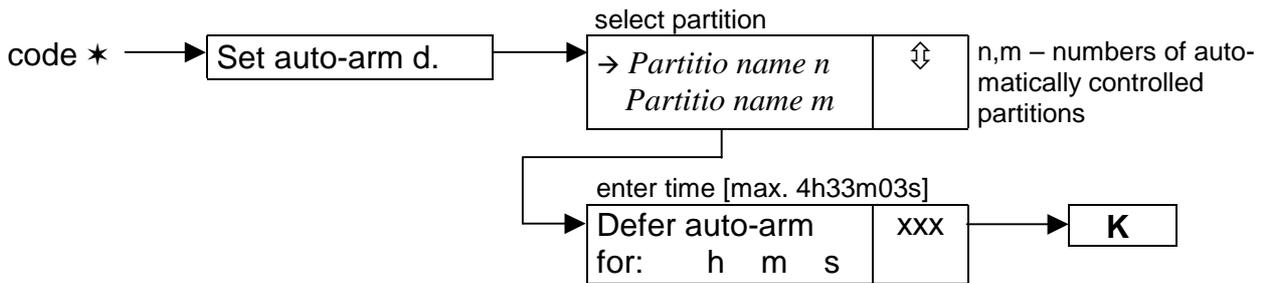


Figure 11

## ARMING MODE

This function provides for selection of a special mode of arming. There are three options of arming modes:

- Full
- Stay
- Stay, delay = 0 (off)

Details concerning the use of functions are discussed on page 16 of this Manual, Section „System Arming”.

Upon selection of the arming mode, the control panel returns to the user function menu, thus enabling the selected partitions to be armed.

Exiting the menu without arming (key **\***) will cancel the selection made by using this function.

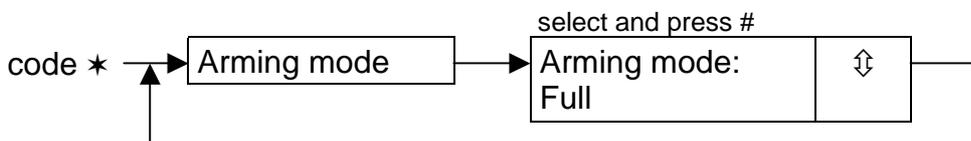


Figure 12

## CHANGE OWN CODE

This function makes possible to change the code of the user, who called this function. To increase the safety of the system, it is recommended to change user code periodically.

The control panel requires code change from a newly entered user, who has the right to change it (because his/her code is known to the person, who entered the new user to the system). Each time the new user enters his/her code, the message “Change code” appears on the display. This message appears until the code is changed to another one. Access to rights and partitions assigned is not blocked when the code remains unchanged.

The requirement of code change may be arisen by guessing this code by another user. The situation that the user code is guessed may occur when entering a new user or during normal code change procedure by any system user. The guessed code is rejected when changing the code, and „the owner” of this code is asked to change it (see: *Notes*, page 22). Also, the control panel suggests to change the code for the users assigned with the type *Temporary, renewable*. The function does not accept a code already existing in the system.

It is possible for the service to activate the option of blocking creation of codes easy to guess. When this option is activated, the control panel does not allow to create codes of type: 1111, 1234, 1122 etc. These codes are rejected, and the control panel waits for another combination of digits.

**Notes:**

- ◆ The control panel does not accept the code identical to the old code as a new one.
- ◆ Change of a guessed code requires more complicated procedure – code change with confirmation – Figure 13.
- ◆ The administrator may confirm user code change (with his administrator code), and the administrator code must be confirmed by the service personnel (with the service code). The use of the service code is possible after unblocking the service access by the administrator.

Basic procedure.

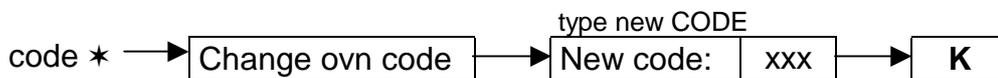


Figure 13

Change procedure for a code guessed.

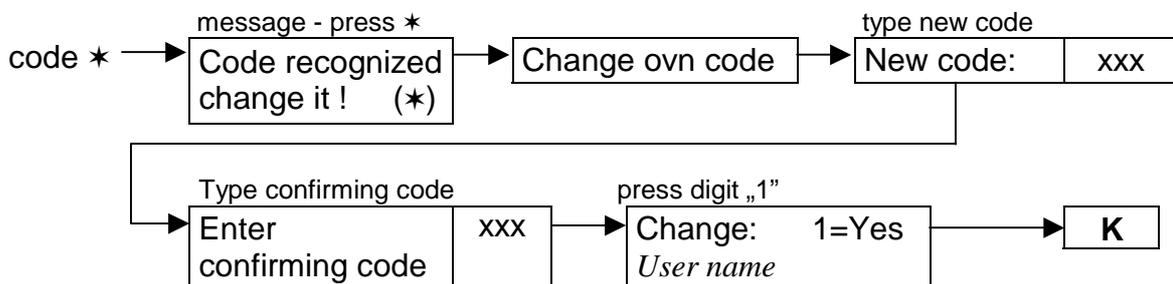


Figure 14

## MASTERS

This function is used for entering the new user with administrator authorisation, changing data related to the existing administrator, or for removing the administrator. Only the installer (service) is authorised to use this function. Only one user with such authorisation may be assigned to the subsystem. The list of rights, which may be assigned to the administrator, is identical with the list shown in the description of the function *Users*. The changes made become valid in the system since the moment of exiting the function using the command “Save”.

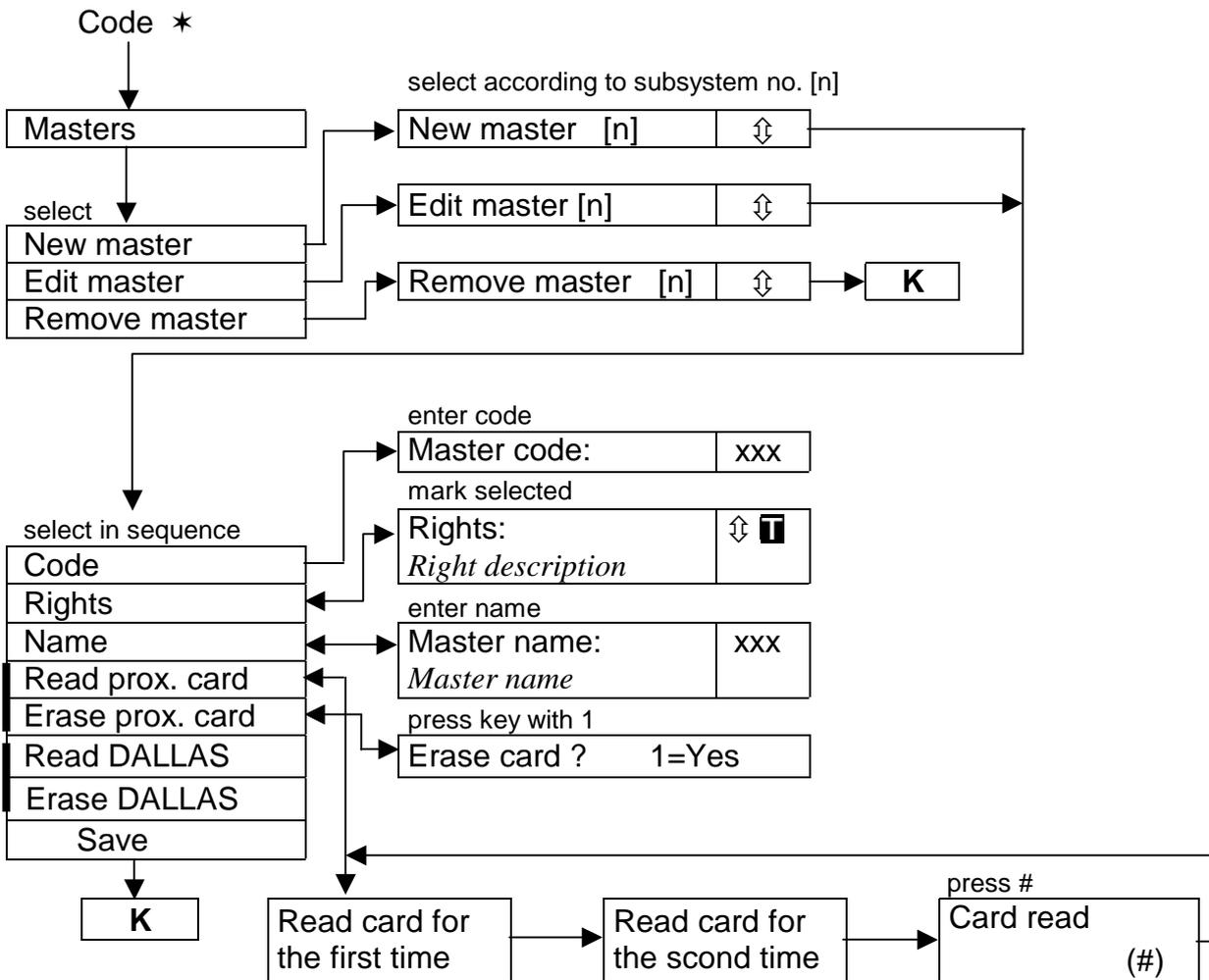


Figure 15

**Note:** The way of reading in and removal of DALLAS chip are identical with proximity card reading in and removal (see: „Notes” in description of function USERS).

## USERS

The function that gives the right to enter new alarm system users. Define the user **authorisation** and **type** when entering him to the system.

The type is an additional code property to be assigned to an ordinary user of the alarm system. If proximity card readers are installed in the system, read in the card, which will be used by the new user.

**Authorisation (rights) list** to be assigned to the new user is as follows (it indicates the functions, which the user will be allowed to execute):

- |                         |                                |
|-------------------------|--------------------------------|
| - Arming                | - Failures viewing             |
| - Disarming             | - Events viewing               |
| - Alarm clearing        | - Zones resettings             |
| - Object alarm clearing | - Options changing             |
| - Other alarm clearing  | - Tests                        |
| - Arm deferring         | - Downloading                  |
| - Code changing         | - Disarming after              |
| - Users editing         | - Voice messaging clear        |
| - Zones bypassing       | - Guard64 using                |
| - Clock setting         | - Access to blocked partitions |

**Note:** *The right „Switch off for somebody else” defines whether the user always may disarm (marked option) or only when he previously armed by himself (marking cancelled).*

**The list of user code types** is as follows:

1. **Normal** – basic code type assigned to the user.
2. **Single use** – code for use once only.
3. **Temporary renewable** – code, for which the validity time period is given when entering a new user. Before the validity period elapses, the control panel reminds the user with such a code that he must change the code. After this change, the validity period is counted down from the beginning. After this user code type is chosen (when entering or editing), the function *Validity period* appears in menu (see Figure 16), where number of code validity days should be defined.
4. **Temporary non-renewable** – code, for which the validity time period is limited to the number of days specified when entering a new user. After this user code type is chosen (when entering or editing), function *Validity period* appears in the menu (see Figure 16), where the number of code validity days should be defined. Validity period may be changed for this code type by the user, who entered a new user, or by the administrator or the service.
5. **Duress** – code similar to the normal user type, but the use of this code generates additional event, which is sent to the monitoring station (“Alarm – forced activity”). At the same time, this code may activate a special alarm adequate for the situation (programmed by the installer). This code is intended for use in the case of attack.
6. **Monostable output** – code, which switches on the “MONO-switch” type outputs. This function may be executed in partitions assigned to a code of this type.
7. **Bistable output** – code, which changes the status of the “BI-switch” type outputs, when used. This function may be executed in partitions assigned to a code of this type.  
**Note:** *The control panel makes possible to define outputs used for controlling equipment of different types, for which access must be controlled. Such control is carried out by means of codes „Monostable output” and „Bistable output”. The installer should inform the user about devices controlled this way.*
8. **Temporary partition bypassing** – code, which de-activates partition detectors for a certain time period (assigned to the code) when the partition is armed. After this user code type is chosen (when entering or editing), function *bypass period*

appears in menu (see Figure 16), where partition bypass time period should be defined.

9. **Access to cash point** – code, which activates the procedure of access to a cash point. Cash point is protected 24 hours per day, but activities connected with the cash point service need detectors to be bypassed. The control panel automatically restores detector activation after a strictly determined time (service setting).
10. **Sentry** – global code, which may be used for making rounds by sentries in the whole system. Typing this code (CODE #) into the keypad at the partition, to which the specific user has access, generates an event “Sentry Round” and, eventually, activates partition bypass. Typing of this code into an electric lock keypad or access trial by means of a proximity card or DALLAS chip generates the event the “User Access” type. When the sentry is provided with access to partitions, the partitions may be controlled in a way similar to the control with a normal code. Typing of the sentry code, the use of a sentry card or DALLAS chip at the equipment assigned to the partition, where a sentry round is programmed, starts counting down the time to the next sentry round from the beginning. The installer defines the keypads, with the use of which the sentry should type his code when performing sentry round in the protected object, and maximum time period between subsequent sentry rounds. The time period between sentry rounds is determined for each partition individually, both when the partition is armed and disarmed.

It is also possible to plan the sentry round in one of situations described above only (for example, when the partition is armed). Missing sentry round generates the event “*alarm – no sentry*”, which may be signalled at one of control panel outputs.

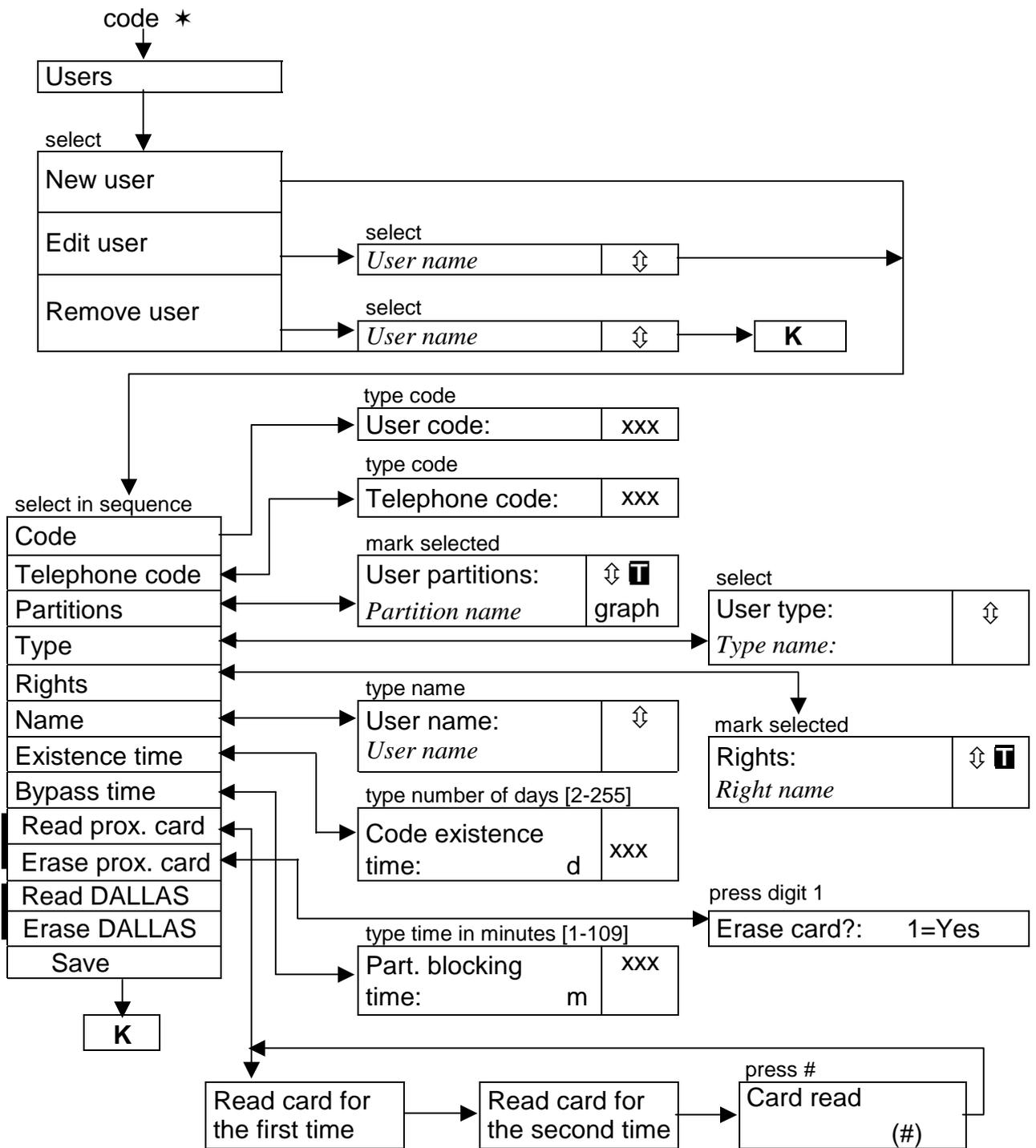


Figure 16

**Notes:**

- ♦ “Telephone code” is to be typed in this case only, when the user wants to use the control panel function “Answering phone calls” (see Operation of control panel CA-64).
- ♦ The card may be read again after minimum 2 seconds from the moment of card removal from the reader.
- ♦ Actual removal of a card from the control panel memory takes place at the moment of exiting edition or accepting the user function with the function “Save”.
- ♦ The way of reading in and removal of DALLAS chip are identical to proximity card reading in and removal.

**ZONE BYPASSES**

This function bypasses zones from the moment of the function entry. The control panel ignores all information coming from detectors connected to bypassed zones. The function is used in case of a detector failure or its incorrect operation. It gives the possibility to arm the system ignoring the bypassed zones. The bypass entered with this function is cancelled after disarming. Also, zone bypass may be de-activated with the use of this function. Proceed in a way reverse to bypassing of zones – remove marking of zones marked. The installer defines zones, which cannot be bypassed with this function.

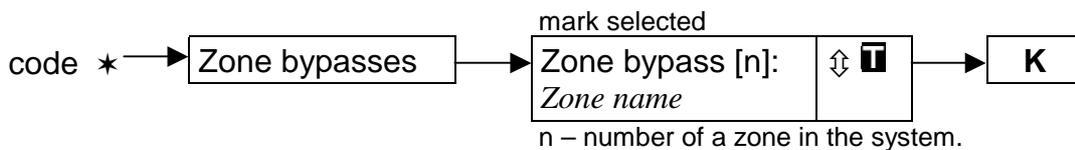


Figure 17

**SET TIME**

The function makes possible to enter the actual time and date to the alarm system. This data are entered in the following format:

- time - HH:mm:ss (hour:minute:second),
- date - DD:MM:YYYY (day:month:year)

New data are entered by typing the correct digit at the place of the cursor flashing. After entering the digit, the flashing indicator moves to the next position on the right. Also, it may be moved with the use of keys: ← and →.

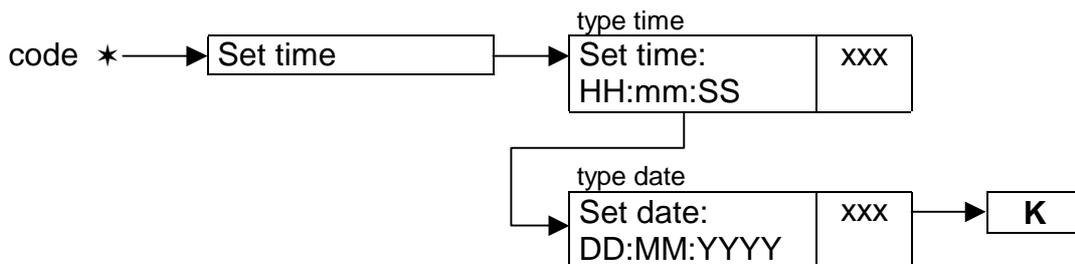


Figure 18

## FAILURES

The function makes possible to scroll the list of failures occurred in the alarm system. It is accessible only when FAILURE LED flashes at the LCD keypad and partition keypads. You can find the list of possible failure messages at the end of this Manual, APPENDIX A.

The name of element concerned (entered by the installer) appears in messages related to zones, expanders and keypads, in bottom line of the display. No additional message is displayed at the end of this function.

**NOTE:** *Inform the service person immediately in the event of any failure in the system, and remove the cause of the failure alarm.*

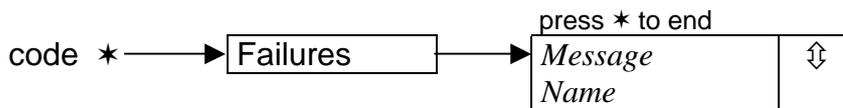


Figure 19

## EVENTS

The function makes possible to scroll the list of events stored in the control panel memory. The events are given in the sequence order of their occurrence. The event description contains data displayed in the following format (see *Figure 20*):

date -	DD:MM (day:month),
time -	HH:mm (hour:minute),
identifier -	xxxx (four characters - IDEN) which identifies the number of zone, partition, module, user operating the system, special symbol,
Event name -	text in second display line.

Description of meaning of identifiers:

- ♦ Ser. user – service code,
- ♦ Adm[n] [n]=1-8 user – subsystem administrator code,
- ♦ u [n] [n]=1-192 ordinary user of the system,
- ♦ m [n] [n]=0-15 keypad – module connected to the keypad bus or virtual keypad accessible from the program GUARD64,
  - 0-7 nos of keypads in the system,
  - 8-15 nos of keypads accessible from the program GUARD64, defined as follows: no. of keypad to which the user computer is connected plus 8,
- ♦ DLrs keypad connected to the main board RS port, accessible from the program DLOAD64,
- ♦ DLtl keypad connected to telephone line at the main board, accessible from the program DLOAD64,
- ♦ e [n] [n]=0-63 expander - module connected to the expander bus,
- ♦ s [n] [n]=1-32 partition,
- ♦ w [n] [n]=1-64 zone,
- ♦ T [n] [n]=1-64 timer,

- ♦ Tpar                      partition timer,
- ♦ MnPI                     control panel main board.

Some of event descriptions allow readout of two identifiers, for example: partition number and zone number, keypad number and user number, etc. To read the second identifier, press one of keys: ⇒ (change of the parameter displayed for the currently displayed event only) or ⇐ (change of the parameter displayed for all events). Next pressing of the key changes the identifier displayed to the previous one.

Either viewing of all events or viewing of selected events is possible. Also, you may choose partitions to be viewed. The selection is made for partitions accessible for the user, who called the function.

If the user wants to view selected events, he has to mark at least one event type, otherwise the menu function "Viewing" is not accessible (see *Figure 20*). Marking of a partition is not necessary. When the partitions are not marked, the list of events from all partitions accessible for the user is displayed.

Selection of partitions influences the contents of the list displayed when viewing event types from 1 to 4 (event type numbers according to the list given below).

#### List of event types:

- |                   |   |
|-------------------|---|
| 1. Zone & tamp.al | - Alarms for zones, tamper alarms   |
| 2. Other alarms   | - Other alarms. Fire, auxiliary, technical alarms, no sentry round.   |
| 3. Arm/Disarm/Clr | - Arming and disarming, alarm clearing.   |
| 4. Zone bypasses  | - The use of function "zones bypass", bypass cancelling after disarming.  |
| 5. Access control | - Use of keypads and proximity card readers for controlling electromagnetic door locks, door status monitoring, temporary bypass of partitions. |
| 6. Failures       | - Failures. Technical problems in the system, restarts of modules.  |
| 7. Functions      | - Functions. Calls for user functions to control the operation of the control panel.  |
| 8. System         | - System events. Service mode, clock programming, etc.  |

**Note:** *The messages about the following event types are not displayed in the event lists on the LCD keypad:*

- Attack alarm (PANIC),
- Silent attack alarm (silent PANIC),
- Forced activity alarm (DURESS type code)

No additional message is displayed when exiting the function.

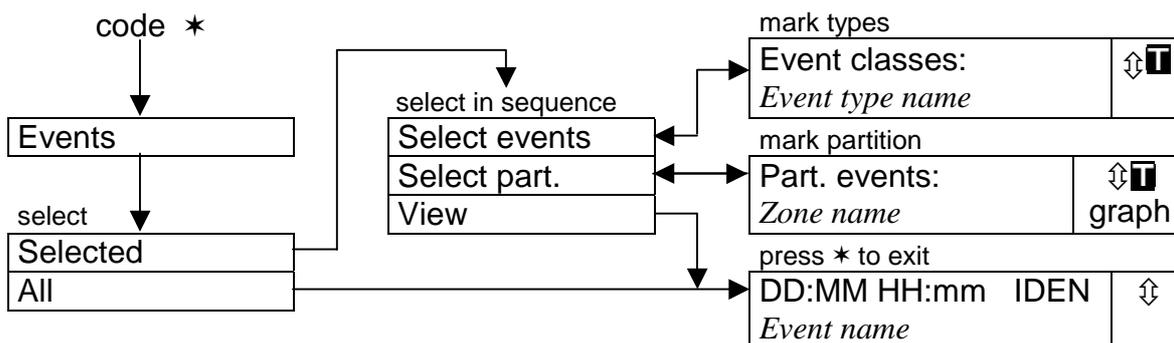


Figure 20

**Note:** The list of possible event messages (*Event name*) is at the end of this Manual, in APPENDIX B.

## RESET ZONES

The function forces short voltage loss at detector power supply outputs with activation memory (for example, fire detectors). This operation clears detector memories.

If few identical detectors are connected to a single output, the activation memory allows finding the detector which triggered the alarm.



Figure 21

## CHANGE OPTIONS

This function controls the “**GONG**” type signalling and allows setting **partition user timer** which automatically armes and disarms.

**Gong in keypad** – signals the violation of any zone (detector) selected by the installer. Few zones may be selected, and they will activate signalling in the keypad. The gong signal in each keypad may be activated from different zones. The function makes possible to block and unblock the signalling mentioned above in the keypad, in which it was called.

**Gong from output** – there is a possibility to configure the output intended for signalling the violation of selected zones. This output generates signals a control panel zone violation with the marked option “Gong control”. It is possible to block or unblock activation of such signals for individual partition outputs separately.

**Partition user timer** (see section: *SYSTEM ARMED*) allows automatic zone arming and disarming.

1. To enable timer operation, mark the parameter „Active (☑)” (Figure 22).
2. Then, select operation mode: *daily* or *weekly*.
3. Programming of timer on and/or off time is the next step. To do this, select the function (for daily mode timer) → **Cod. HH:MM HH:MM** and press key # or ⇨ - the message “*Timer switched on every day: HH:MM*” on the display.
4. Then, enter hour (HH) and minutes (MM) of timer switching on. Press key ↑ or ↓ to enter hour and minutes of timer switching off. To accept data entered, press key

#. The display will show the name of the timer set data programmed. For a weekly cycle timer, the time of switching on and/or off is programmed in the same way, but it should be done for each weekday separately. When you enter only "nines", the function will not be active. For example: the timer may arm only at the determined time, but disarming must be performed by the user himself; automatic partition control may be activated in some weekdays only.

5. In order to save timer settings in the control panel memory, exit option programming with the function *SAVE*.

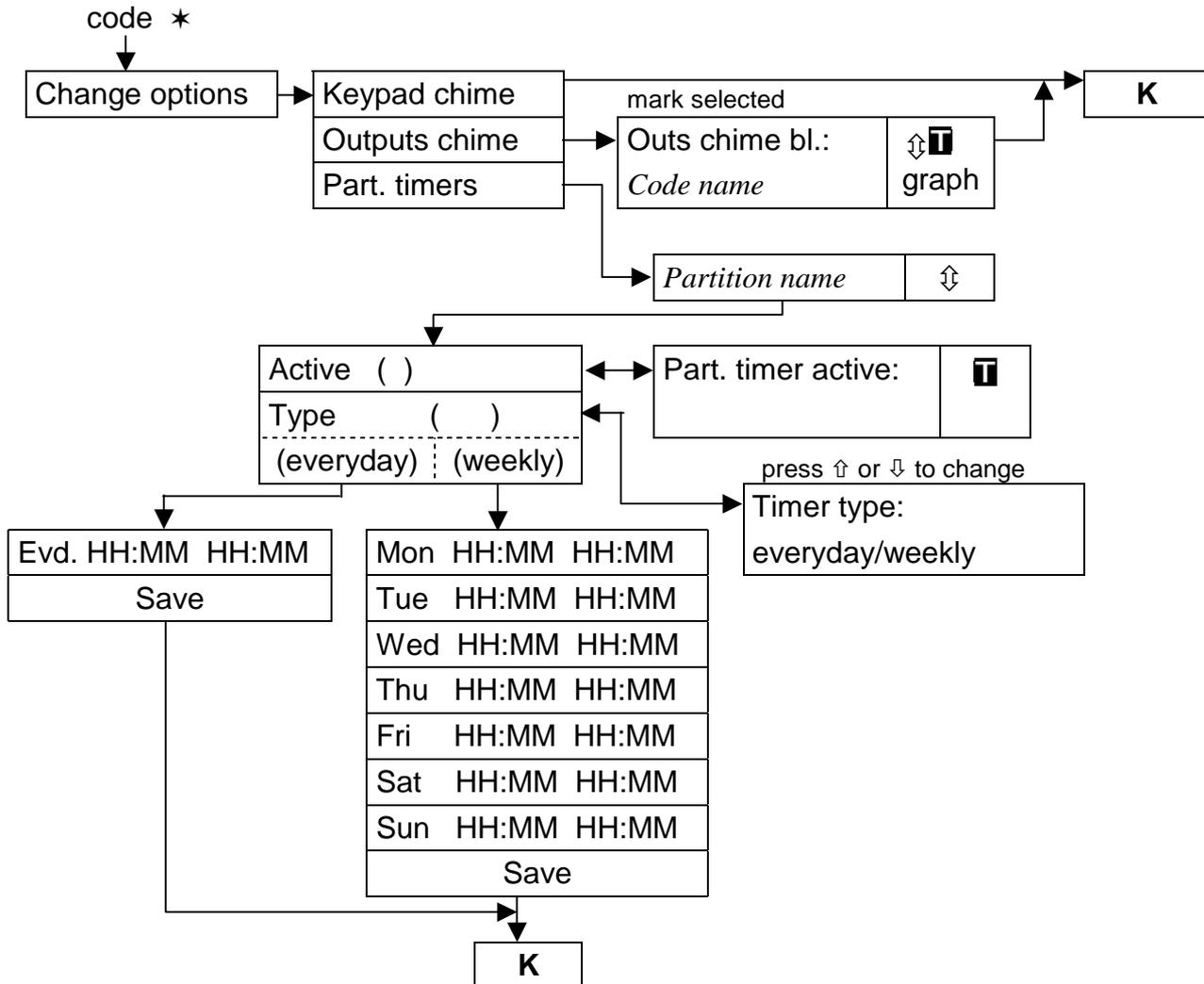


Figure 22

**TESTS**

The function allows performing various operations for checking the system operation correctness.

- ♦ **Arming status** – Checking the current status of partitions accessible for an individual user and operated from the LCD keypad. The partition status is shown in the form of symbol (mark) adjacent to the number (numbers around the display screen) which corresponds to the partition number in the system. The installer assigns symbols (marks) to particular situations. It is possible to read the following information on zones:

- b - temporary partition bypass,
  - ? - entry delay,
  - w - exit delay (less than 10 seconds),
  - W - exit delay (more than 10 seconds),
  - c - zone is armed,
  - - zone is disarmed.
- ♦ **Zone status** – checking the current status of each zone in partitions accessible for an individual user. Zone status is shown in the form of a symbol (mark) adjacent to the number (numbers around the display screen) which corresponds to the zone number in the system. The installer assigns symbols (marks) to particular situations. Two sets of information on zones are displayed: first set for zones 1-32 and second one for zones 33-64. Two green LEDs next to the display indicate, which set is displayed currently. Upon starting the function the status of zones 1-32 is displayed. Press any arrow key to move to the display of statuses for zones 33-64 (to find a zone number, add 32 to the number next to the symbol). Press any arrow key to move to the display of statuses for zones 1-32 again. The amount of Information accessible depends on the type of detector connected to the zone. Detectors configured as double-parameter provide most detailed information. It is possible to read the following information of zones:

- b - zone bypass,
- l - failure "long violation",
- f - failure "no violation",
- S - tamper alarm,
- A - alarm,
- - zone tamper,
- - zone violation,
- s - tamper alarm memory,
- a - alarm memory,
- - zone OK.

**Note:** *Symbols shown above are factory settings, which may be changed. The installer should inform on how individual zone and partition statuses will be marked on the display.*

- ♦ **LCD keypad status** – checking the status of anti-tamper contacts in the keypad casings. Symbols displayed at the keypad screen are as follows:
- - correct status,
  - - contact violated,
  - X - keypad replaced (verification error),
  - ? - keypad is missing.
- ♦ **Expander status** - checking the status of anti-tamper contacts in expander casings; first bus expanders and second bus expanders are checked separately. On starting the function the status of the first expander bus is seen at the display (LED marked 1-32 lights). Press any arrow key to display status of the second bus expanders (LED marked 33-64 will light). Symbols displayed at the keypad screen are as follows:
- - correct status,
  - - contact violated,
  - X - expander replaced (verification error),
  - ? - expander is missing.

- ♦ **Supply voltages** - checking power supply voltage level for individual expanders. The display shows the expander name and approximate power supply voltage level for this expander.
- ♦ **Zone Test** - the function allows to check which of control panel zones used are violated when the test is carried out. After the function is called, the display shows the text "New" – press key # or ⇒ to start the function of registration of zone violations. Subsequent calling of this function by the same user makes accessible the function "Test result viewing" - press key # or ⇒ to open the list containing the number of zone, zone name and information on whether it was violated at least once during the time the test was carried out. Next pressing of the key ⇒ changes the descriptive mode of the test result display to the graphical mode. In the latter mode, the following information is displayed:
  - - zone was not violated,
  - - zone was violated.

The duration of the test is unlimited. Test results are accessible for the user, who started the function. The user is allowed to test the zones in these partitions, to which he has access.

**Note:** *Calling the new test function by the user cancels the test previously started by another user.*

- ♦ **Manual test transmission** - the function generates the event, which starts the procedure of message transmission to the monitoring station.
- ♦ **Monitoring station test (1A,1B,2A,2B)** - the function makes possible to carry out the test transmission to the monitoring station (to each accessible telephone number separately). The test transmission is carried out with tracing the data transmission process at the same time. The messages at the keypad display inform on current activity. In practice, the function is used by the installer when starting communication with a monitoring station.
- ♦ **Viewing masters** - the function is accessible for the administrator only. It allows checking, for which subsystems the administrators are created. It allows to control the number of users, who are able to give permission to access the system in the service mode.
- ♦ **Control panel version** - the function shows the current control panel software version number at the keypad screen.

No additional message is displayed at the time of exiting the function.

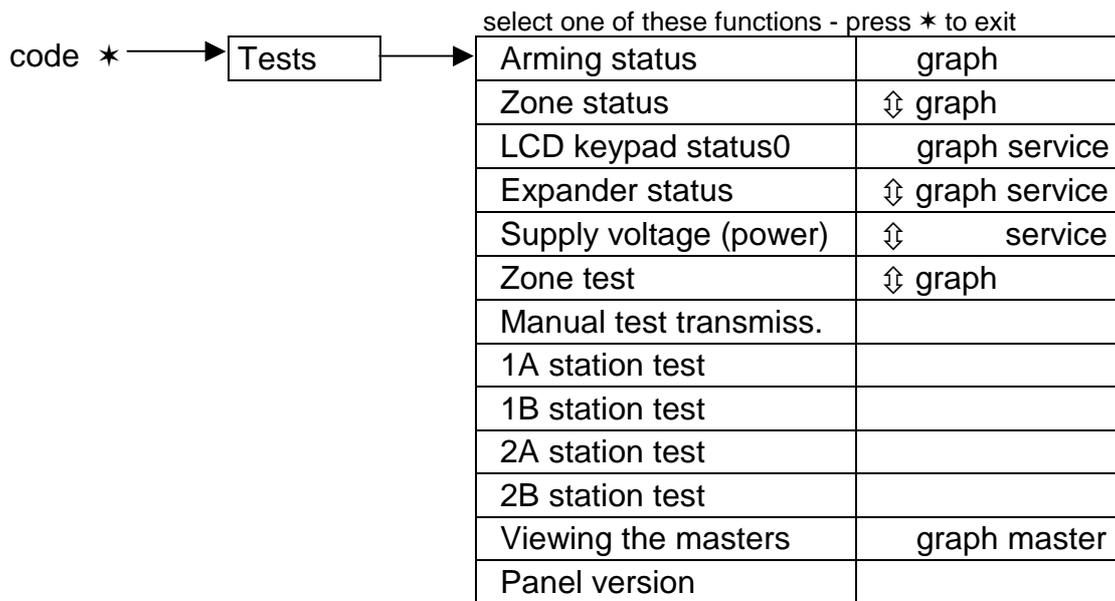


Figure 23

## SERVICE ACCESS

The function allows the installer to access the system by means of the service code. It is accessible in the administrator menu only. It requires data entering – number of hours, when the alarm system will be at installer's (service) disposal. The access to the system is blocked after this time elapses.

Typing "zero" with this function (in place of number of hours), when service access is opened, automatically blocks the access.

Access time is counted down whether the service mode is started or not. Access time counting down may be interrupted by power supply disconnection (mains 220V and battery) only. With this function you can check how much time is left (from the access time limit given by the administrator) – indication „00" means that the last hour is being counted down.

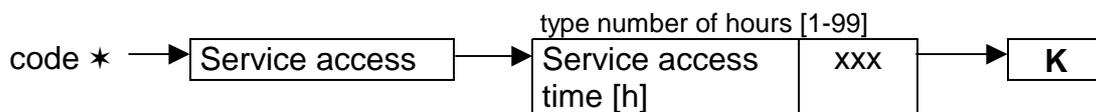


Figure 24

## SERVICE MODE

The function starts a special control panel operation mode. The list of the "Service functions" is accessible in the separate instruction manual for the installer. The control panel does not signal alarms from most of zones (including tamper alarms), it responds to violation of some zones armed for 24 hours and alarms from partition keypads and coded locks (functions of long-time key pressing). In this operation mode, the control panel programming is possible with the use of program **DLOAD64** via RS port (at the main board) and via the telephone line). The control panel remains in the service mode until exiting it with function „End of SM (service mode)" (entry in the list of service functions), or until the time limit given by the administrator elapses.

The function is accessible after unlocking service access by the administrator and entering the service code.

### **SM TAKE-OVER**

The function makes possible to switch over the operation control of the control panel being in the service mode to the keypad other than the one, from which the service mode has been called. The function is accessible for service only. It is intended for use in large objects, where several keypads are installed – the function facilitates installer work.

### **DOWNLOADING**

The function, which starts communication with the service computer. It allows installer to program the alarm system by means of the computer and the service program DLOAD64. It is possible to start direct communication via RS port, as well as indirect communication via the telephone line (with the use of either external or internal modem). To start a telephone call it is necessary to program the service computer telephone number .

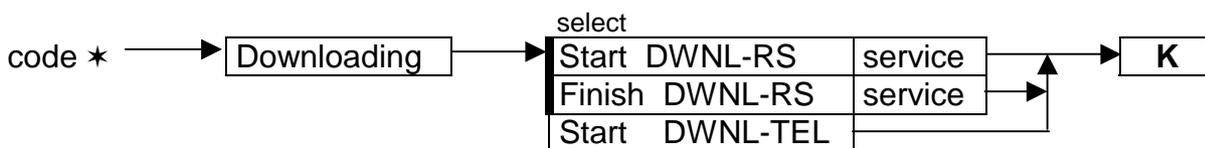


Figure 25

## SUMMARY

The alarm control panel is one of components of an alarm system, it works surrounded by many pieces of equipment, and performance of each system component decides on the performance of the entire system. Therefore, we recommend testing the operation of the entire system and each system component on the regular basis. It is a good practice to order periodic inspections from the system installer.

The installer should train system users on the following issues:

- ◆ ways of signalling and types of alarms,
- ◆ action procedures during various types of alarm,
- ◆ correct work of the control panel with a monitoring station,
- ◆ operation of modules, which control the operation of the control panel,
- ◆ operation of additional devices controlled by the control panel (if such equipment is installed),
- ◆ actions in case of failures in the system.

Pay particular attention to the number of messages transmitted to the monitoring station. Large number of occurrences, on which the monitoring station is informed by the control panel, loads the telephone line excessively, and it may make it difficult to send important information concerning the safety of object and people being inside.

**Remember that operative alarm system is not the full protection against burglary, attack or fire. The system only reduces the risk of such occurrences performing the functions of signalling and informing.**

## APPENDIX C

### EXPLANATION OF SOME TECHNICAL TERMS.

All definitions are valid for the alarm system based on control panel CA-64.

<b>STARTER</b>	The program activated in the control panel after power supply switching on, the purpose of which is to check correctness of the basic program stored in FLASH memory and make possible to load a new control panel software version into this memory.
<b>FLASH memory</b>	The memory, where the control panel basic program is stored. It is cleared electrically, and its contents may be changed with the use of computer.
<b>2402 memory</b>	Additional non-volatile memory, where important system parameters are stored (for example, administrator codes, etc.).
<b>DLOAD64</b>	Computer program that enables programming of control panel settings with the use of computer, so called service program.
<b>GUARD64</b>	Computer program that enables operation of the alarm system with the use of computer, so called user program.
<b>subsystem</b>	The group of partitions being an independent alarm system. Eight groups of this type may be created on the basis of control panel CA-64.
<b>partition</b>	The group of zones supervising separated part of object; arming and disarming is carried out simultaneously for the group. The alarm control panel CA-64 allows creating of 32 independent partitions.
<b>zone</b>	Pair of contacts at the control panel main board or module board (connected to the control panel by means of bus), to which the detectors are connected. The control panel monitors detector statuses via the zone. Monitoring of 64 zones is possible.
<b>zone violation</b>	Change of zones status when the detector is activated (for example: zone contact opening or shortening, change of detector parametric resistance).
<b>output</b>	Pair of contacts at the control panel main board or expander module boards, where the voltage is controlled by the control panel. It is possible to control 64 outputs (including relay outputs).
<b>relay output</b>	Electromagnetic switch located at the expander board, controlled (switched over) by the control panel.
<b>bus</b>	The group of wires, to which the modules operating with control panel main board are connected. The control panel CA-64 is provided with three buses. One bus is used for connecting LCD keypads, and two buses – for connecting expanders.
<b>expander</b>	Electronic device which extends control panel features. There are expanders to increase number of control panel zones or (and) outputs. Also, partition keypads, coded locks and proximity card readers are included. It is possible to connect up to 64 expanders to the control panel.

## APPENDIX D

This appendix contains descriptions of **examples** of activities to be carried out when calling some user functions. The first column indicates which keys must be pressed, the second column contains description of operation called, and the third one shows texts displayed on the LCD keypad after the operation is executed and the comment on the situation obtained. Since the **user function menu** depends on software installed by the installer and specific user authorisation, texts shown here are for orientation only and may be slightly different in practice.

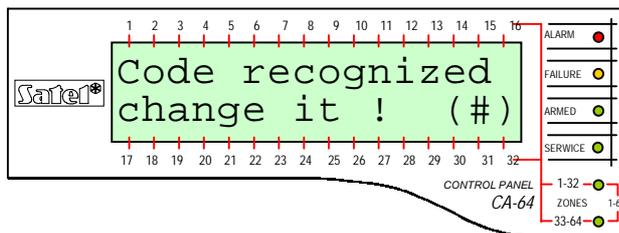
**Example 1: ARMING (part I)**

- partition No. 2 named "Book-keeping", belonging to the subsystem 1; user – the subsystem master.

%%% %

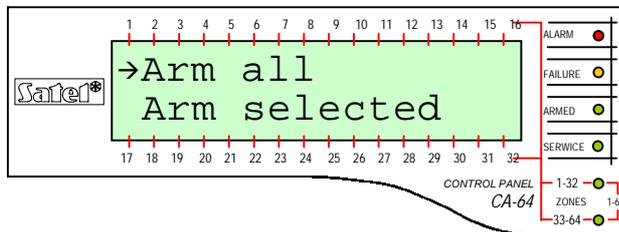
Enter a user code (the factory set master code for the subsystem 1).

Also, you can enter the code of any user, who has access to the partition 2 and authorisation for arming.



This message is displayed when the user has the right to change the code and **should** make this change (see *User Manual, CA-64*, description of function *Code change*).

Confirm the message.



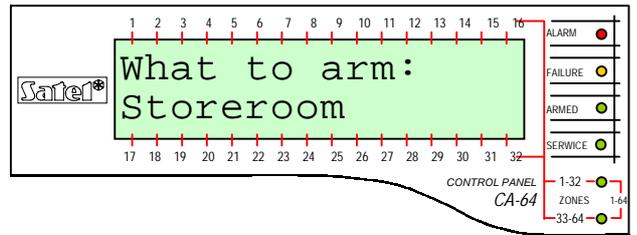
If you press key `*` or `#`, all partitions accessible for the user will be armed.

**NOTE:**

*If some of partitions accessible for the user are already armed, the control panel will make available the functions of **disarming** only, but if just one partition is armed, it will be disarmed. To arm the remaining partitions, first call the user function menu by typing CODE \* (see continuation of the example: ARMING (part II) below).*

Function **Activate selected** marked.

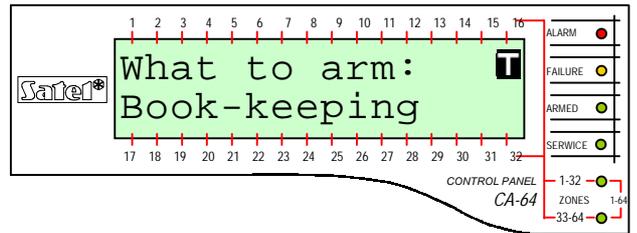
Calling the function.



Scroll the list with partition names. Press one of these keys so many times as you need to display the name of the partition required (partition 2 – **Book-keeping**).

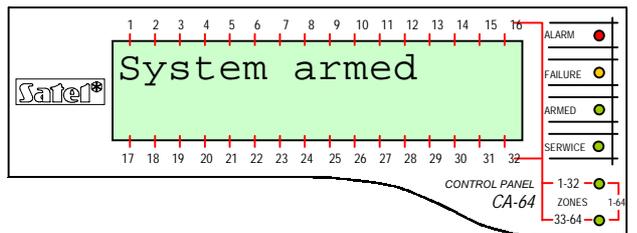
After the function is called, the control panel displays partition names (factory set or entered by the installer), which the user may arm. Press key **⏏** to move to the **graphical mode** of partition selection.

Mark the partition selected for arming (**⏏** mark at the right-hand side of the display) using any numeric key.



You may select for arming (mark) any number of partitions accessible to you. Also, you may cancel marking for partitions selected earlier.

End of selection and arming of all marked partitions.



When this message appears, counting down time for leaving is started in the armed partitions.

## GRAPHICAL MODE

There are two ways of selecting the partitions for arming:

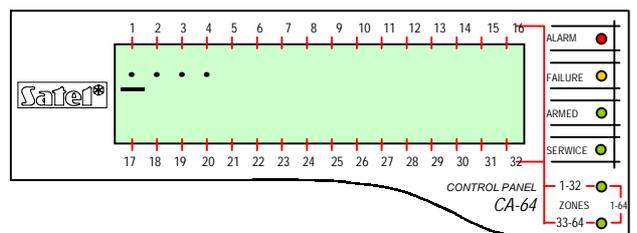
- using names – as described above,
- using partition numbers – in the graphical mode described below.

This is the mode for the user who knows numbers of partitions in the alarm system, or the user, who wants to check quickly how many of zones are not armed yet.

These keys are used to select partitions in the graphical mode.

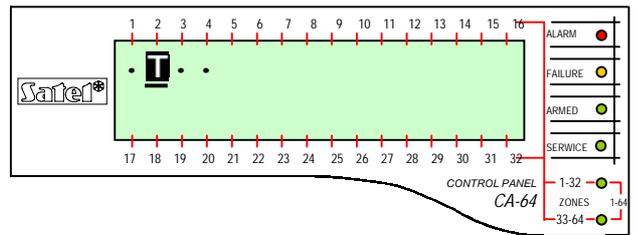
These keys are used to select partitions in the basic mode (using partition names).

It is possible to switch over between modes as many times as necessary.



Dots next to numbers 1-32 indicate partitions, which may be armed (1, 2, 3 and 4). The cursor under a dot allows to select the partition, which may be marked for arming.

"  
 ' Move cursor under the 2<sup>nd</sup> partition field.  
 Mark the partition for arming with any numeric key.



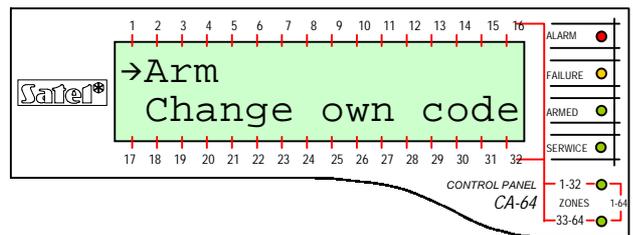
Pressing the key  $\cdot$  after selection of partition makes it armed, independently of the display mode.

### ARMING (part II)

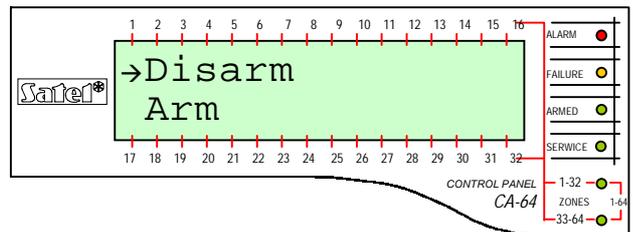
- with the use of all user function menus accessible.

%%%%%† Type code – calling the user function menu.

or " Select the function marked with arrow – moving to the stage of partition selection for arming as described in details in the first part of this example.

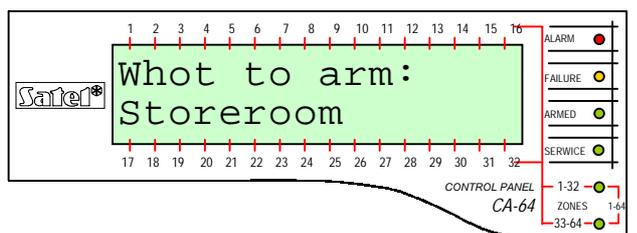


**NOTE:** When all partitions accessible for you are armed, the function **Arm** will not be shown in the menu (on the keypad display).  
 If some partitions in the subsystem are already armed, the following texts will appear on the display:

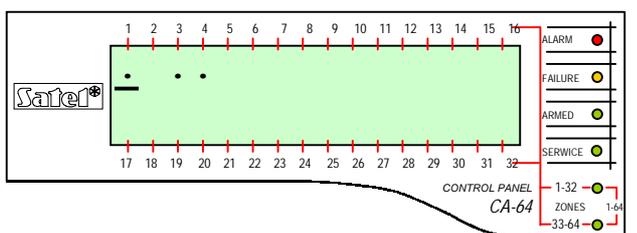


In this situation, perform as follows:

Indication of the function **Arm**.  
 or " Select the function marked with arrow – moving to the stage of partition selection for arming, as described in details in the first part of this example.



If we assume (in this example) that the partition 2 (Book-keeping) has been already armed, after calling the function **Arm** again and entering the graphical mode of partition selection the following display will be shown:



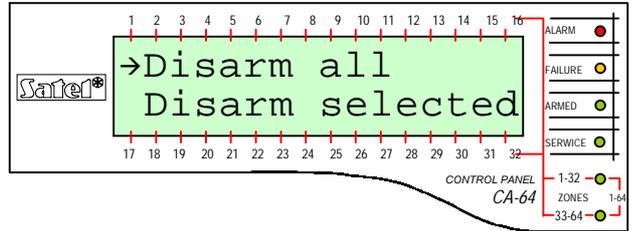
Now, partitions 1, 3 and 4 may be armed.

**Example 2: DISARMING (part I)**

Partition No. 2 named "Book-keeping", belonging to the subsystem 1; user – the subsystem master.

**NOTE:** The function is available only when at least one of partitions accessible for the user is armed.

Enter the user code (factory set administrator code for the subsystem 1).  
Also, you can enter the code of any user, who has access to partition 2 and authorisation for disarm.



When you press key or , all partitions armed and accessible for the user will be disarmed.

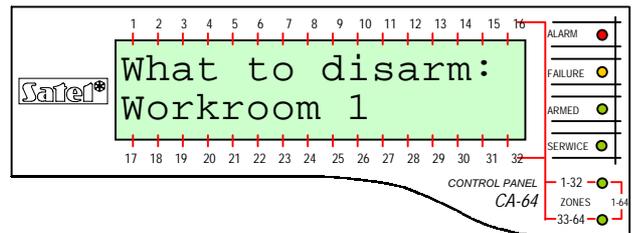
**NOTE:** If only one partition is armed, it will be disarmed just after pressing key # (together with displaying the end message).  
If an alarm is signalled for the partition, it may be cleared together with disarming

Indication of the function **Disarm selected**

Calling of the function.

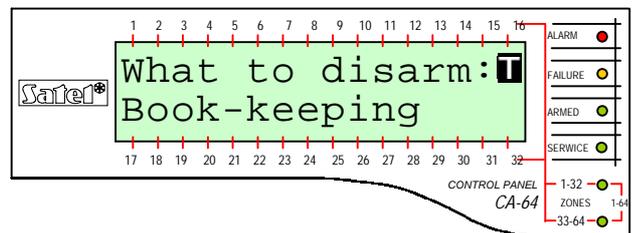
or  
or f

Scroll the list with partition names. Press one of these keys so many times as you need to display the name of the partition required (partition 2 – **Book-keeping**).



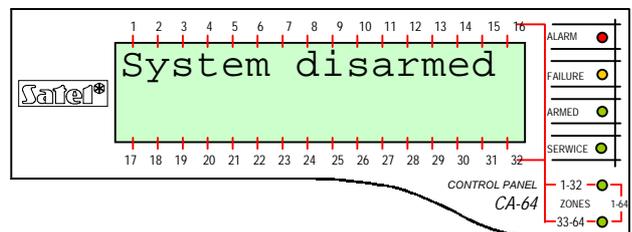
After the function is called, the control panel displays partition names (factory set or entered by the installer), which the user may disarm. Press key , to move to the **graphical mode** of partition selection (selection in the graphical mode is carried out in a way identical with arming).

Mark the partition selected for disarming (mark at the right-hand side of display) using any numeric key.



You may select for disarming (mark) any number of partitions accessible for you. Also, you may remove marking for partitions selected earlier.

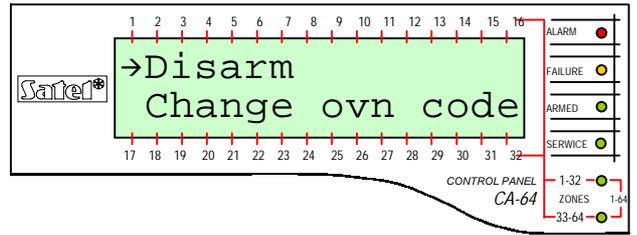
End of selection and disarming of all partitions marked.



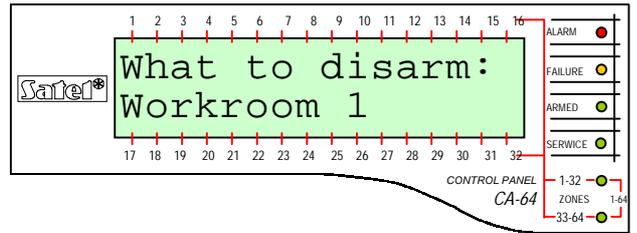
ARMING (part II)

- with the use of all user function menus accessible.

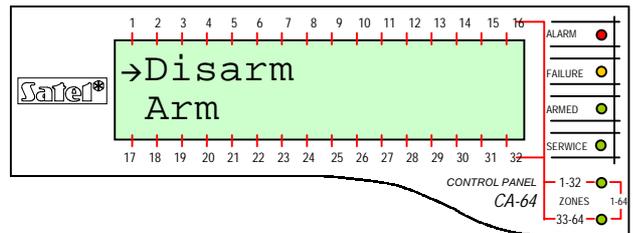
%%%%%%%%† Type code – calling the user function menu.



or " Select the function marked with arrow – moving to the stage of partition selection for disarming, as described in detail in the first part of this example.

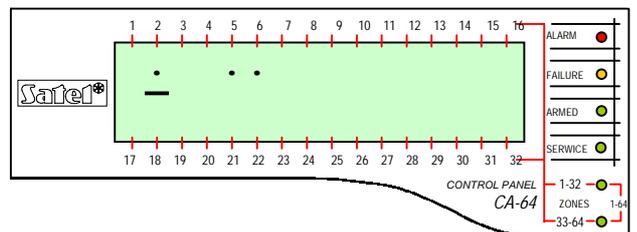


**NOTE:** If only some partitions in the subsystem are armed, the following texts appear at the display:



Performance in this situation should be identical as when all partitions are armed.

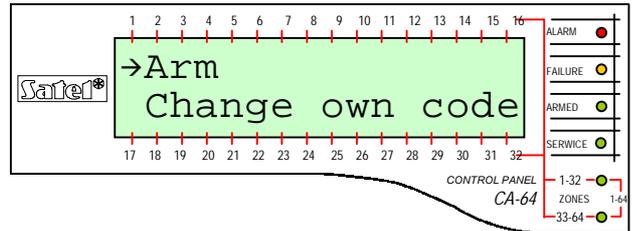
If we assume data from the example presented earlier, the following picture may be shown at the keypad screen being in the graphical mode of partition selection:



**Example 3: ZONE BYPASSING**

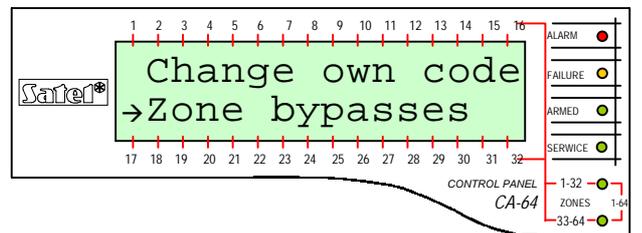
- Bypass zone No. 4 named **Entrance door** and zone No 49 named **PIR secr.office**; the user code: 38407.

' , ( \$ + † Type code – calling the user function menu.

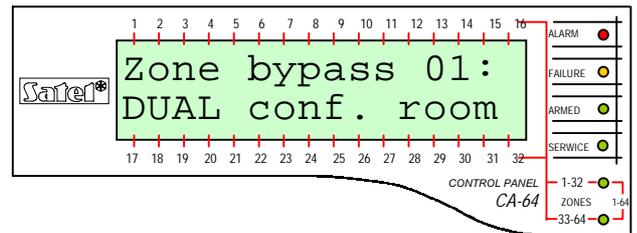


The use of most user functions (except functions called with longer pressing of a single key and the function of quick arming) starts with entering code and pressing key † (or , - example 1 and 2).

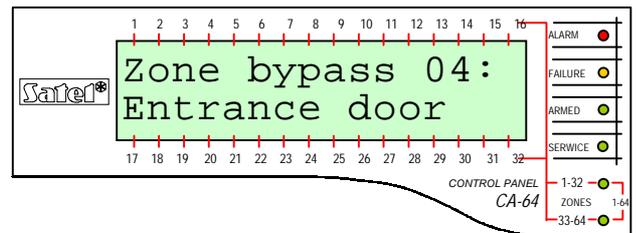
, or f Scroll the list with accessible function names. Press one of these keys so many times as you to display the name of proper user function next to the arrow.



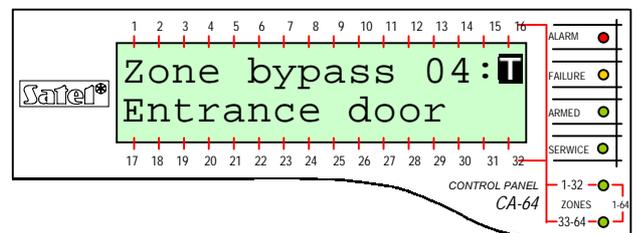
, or " Select function indicated with arrow – moving to the stage of zone (detector) selection to be bypassed.



, or f Scroll the list with zone names. Press one of these keys so many times as you need to display the name of the first zone to be bypassed (**Entrance door**) next to the arrow.

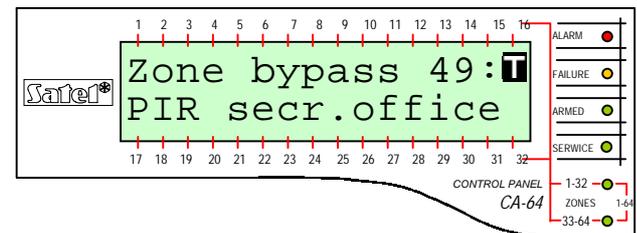


- Mark the zone selected for bypassing (■ mark at the right-hand side of display) using any numeric key.

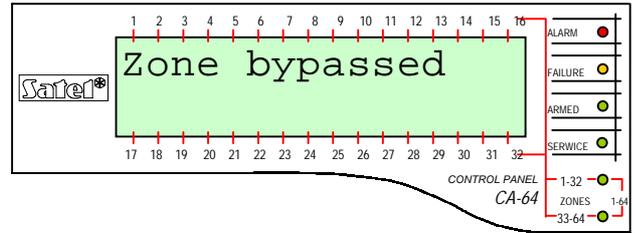


, or f Scroll the list with zone names to select next zone (detector) for bypassing (**PIR secretary office**).

- Marking of the zone selected for bypassing.



End of selection and bypassing of status monitoring for all zones (detectors) marked.



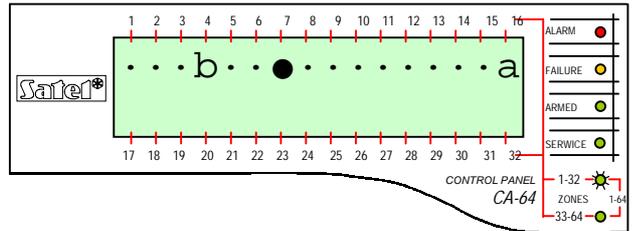
**NOTE:** Zone bypass is cancelled after disarming of the partition, to which the bypassed zones belong.

**Example 4: ZONE STATUS VIEWING**

- function called by long keeping pressed of the key %.

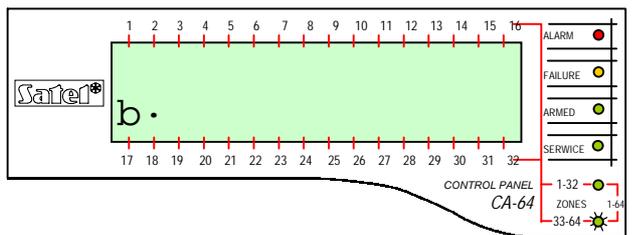
%

Call the function of control panel zone status viewing. Keep pressed the key for approximately 3 seconds – information on first 32 system zones will be shown in the graphical mode display.



The LED 1-32 being ON indicates the set of zones, the status of which is shown on the display. Symbols representing zone status are described in the *User Manual. CA-64 – description of function Tests*.

Move to the second zone set display, zones 33-64. Use any arrow key to do that. You may switch over between zone sets as many times as needed.  
End of function.



The LED 33-64 being ON indicates the set of 33-64 zones, the status of which is shown on the display. Add 32 to the number next to the zone symbol (numbers around the display) to obtain the zone number.

**APPENDIX E**

**Functions of LCD keypad keys and LEDs (see pages 4 – 7 for detailed description).**

% to \* - keep pressed for 3 seconds to get **access to the viewing functions.**

- % - zone status viewing
- & - keypad tampers viewing
- ' - expander tampers viewing
- ( - partition armed status viewing
- ) - alarm memory contents viewing
- \* - failure memory contents viewing

(see: descriptions of functions TESTS and EVEN HISTORY VIEWING)

LCD DISPLAY: date and time

**ALARM**

- steady light – alarm in the operated partition
- blinking light – alarm memory for the partition

**FAILURE** – signals that the technical problem has been detected in the system.

- check by pressing the key + for 3 seconds.

**ARMED**

- steady light – all partitions operated by the keypad are armed.
- blinking light – some zones are armed.

**SERVICE** – blinking informs that the service mode is activated

1-32 – zones 1-32 or the first expander bus

33-64 – zones 33-64 or the second expander bus

*f* , - scrolling names of partitions, where alarm has been activated

' - keypad name (when pressed for approximately 3 seconds)

...# - scrolling names of zones, which triggered alarm

+ - when pressed for 3 seconds, a **message on currently detected failure** is displayed

, - when pressed for 3 seconds, gong signalling in **KEYPAD** is switched on/off

{ - when pressed for 3 seconds, **FIRE ALARM** is activated

CODE + { - call for the user function menu

\$ - when pressed for 3 seconds, **auxiliary ALARM** is activated

- when pressed for 3 seconds, **PANIC ALARM** is activated

0+ - arming

CODE+ -arming/disarming

