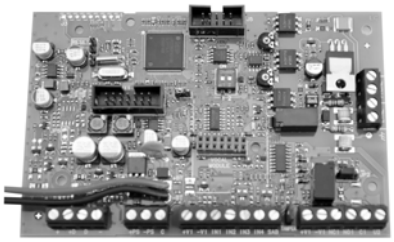
GB

MP504TG

Remote management alarm control panel



Programming Manual

CE

ELKRON

DS80MP1J-008 LBT80690

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PREFACE

STRUCTURE OF THIS MANUAL

The manual is divided into chapters and discussed subjects are arranged sequentially to accompany each step of system **programming** and **configuration**.

Descriptions to **design, install** and **maintain** the system are given in **Installation Manual**, where **devices acquiring** procedure is indicated**.**

Descriptions for system use from end user are given in **User Manual.**

STANDARDS USED IN THIS MANUAL

For the sake of clarity, the following conventional standards are used throughout this manual:

For example **120 OK** means “enter 120 and then press the OK key”.

▲, ►, ▼ and ◄ indicate the corresponding navigation arrow keys on the keypad.

Finally, take care of the following symbols:

This symbol indicates an important warning.

This symbol indicates an suggestion.

STAY – AWAY MODE

The two arming modes of the system are:

- **STAY Mode: The system is partially armed, it is useful, for example, when you only want to arm the external perimeter part. In this case, only persons inside the coverage area of the system are permitted.**

- **AWAY Mode: The system is totally armed, which means that both the external perimeter part and all other foreseen internal protections are armed. A presence detected anywhere in the coverage area of the system will generate an alarm.**

For details about the arming/disarming modes of the system, see sections 8.1, 8.2 and 8.3.

NAVIGATION THROUGH MENUS

MP504 system provides for 4 menus:

- **Technical menu** which can be accessed by entering ***Technical Code*** (default 0000) **OK MENU**
  this menu is dedicated to system installer and described at paragraph 4.1.
  The whole tree of Technical Menu is illustrated at paragraph 9.2.
- **Master menu** which can be accessed by entering ***Master Code*** (default 1111) **OK MENU**
  this menu is dedicated to system main user and described in User Manual.
  The whole tree of Master Menu is illustrated at paragraph 9.1.
- **User menu** which can be accessed by entering a ***User Code*** (es. default 0020) **OK MENU**
  this menu is dedicated to system users and described in User Manual.
  The whole tree of User Menu is illustrated at paragraph9.3
- **Free access menu** which can be accessed by directly entering **MENU**
  from this menu, some information on system status can be achieved.

The menus are organised in a tree-like structure, that is with more or less deep submenus including more items.
Typically, on display 1st line, the item appears of menu being used and, on display 2nd line, the submenu items of the menu.

As an example:

```
EVENT LOG
READ EVENT LOG
```

To scroll through menu items, use vertical scrolling keys ▲ and ▼
To access a submenu, press **OK**
To confirm a choice within a menu, press **OK** otherwise press **ESC**
To go back by one level, press **ESC**
To quit a menu, press **ESC** more times

If no key is pressed, after one minute the system automatically exits the menu.

Pressing any key is signalled by a short *beep* sound.
E.g. valid code confirmation is signalled by *beep-beep!*.
Entering a parameter which is wrong, e.g. owing to a not valid code, is signalled by a low tone.

The displaying of the STAY and AWAY mode status and of their assignations to other functions during programming is graphical.

Example:

```
STAY
■□
```

On display 2nd line, graphic symbols appear matching digits 1 and 2 present on the mask:
the symbol near number 1 (left) relates to STAY mode;
the symbol near number 2 (right) relates to AWAY mode;

The meaning during programming is:

- □ = STAY or AWAY mode is not assigned to the function
- ■ = STAY or AWAY mode is assigned to the function

The meaning during use is:

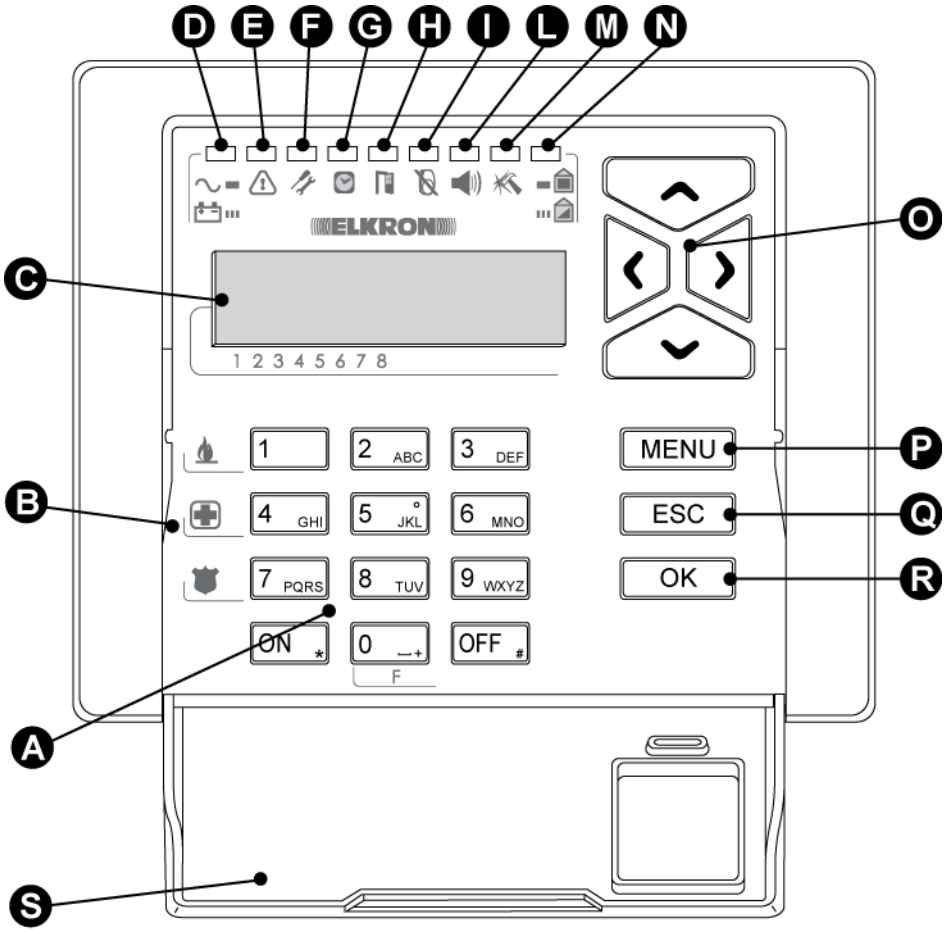
- □ = STAY or AWAY mode is disarmed
- 0 = STAY or AWAY mode is disarmed with one or more open inputs
- ■ = the mode is armed

In the first line, the STAY or AWAY mode on which the cursor is positioned is indicated.

Further information is reported in paragraph describing single functions.

1 COMMAND DEVICES

1.1 KP500D/EN DISPLAY KEYPAD



Ref.	Description	Use or provided indications
A	Keypad	Used to enter the access code, to select some functions and to program the control panel
B	Function Keys	Used to activate additional system functions - see § 8.1.7
C	LCD 2x16 characters display	Shows date and time when in stand-by mode, detailed information on system status, the event log and the programming menus
D	Control panel mains voltage and battery charge green LED	**On** = mains power supply 230 V~ available and battery charged **Off** = mains power supply 230 V~ not available and battery charged **Blinking** = low battery charge see Installation Manual
E	Yellow LED failures	**Off** = normal operation **On** = Failure present see § 1.1.6
F	Yellow LED maintenance	**Off** = normal operation **On** = system in maintenance see § 8.6
G	Green LED Timing programmer status	**Off** = Time Programmer (P.O.) disabled **On** = Time Programmer (P.O.) enabled **Blinking** = automatic arm warning see § 4.14
H	Yellow LED Open inputs	**Off** = inputs in stand-by mode **On** = open inputs see § 1.1.2
I	Yellow LED Excluded inputs	**Off** = all inputs included **On** = excluded inputs see § 1.1.3
L	Red LED alarm memory	**Off** = no alarms **On** = alarm memory see § 1.1.4
M	Red LED tamper memory	**Off** = no tamper **On** = tamper memory see § 1.1.4

Ref.	Description	Use or provided indications
N	Green LED System status	**On** = system totally armed - AWAY **Off** = system disarmed **Blinking** = system partially armed - STAY see § 1.1.1
O	Arrow keys	Scroll the menu items; change the value of some parameters
P	MENU key	Access to the menu
Q	ESC key	Back to the upper level menu
R	OK key	Confirms the access code or any other entered data; confirms the selected menu item and goes to its submenu.
S	Cover	It protects numerical keys

1.1.1 System status display

System status is shown by summarising LED present on keypads and key readers.
Every user, included Master and Installer, can display in detail the system status.

To display the system status, enter its code followed by the **OK** key, then **MENU,** then the «SYSTEM STATUS» option, and then confirm it with the **OK** key**.**

For example:

On display 2nd line, graphic symbols appear matching digits 1 and 2 present on the mask;
Their meaning is the following:

- □ = the mode is disarmed
- 0 = the mode is disarmed with one or more open inputs.
- ■ = the mode is armed

With the ◄ and ► keys, you can move between the two STAY (partial arming) and AWAY (total arming) modes, whose name appears on the top line.

Note: if desired, it is possible to arm the status display of the STAY and AWAY mode in place of the Date-Time, for details see the section 8.1.17 Info Display.

1.1.2 Open inputs display

The presence of one or more open inputs is signalled by the turning on of the yellow LED (H) of the keypad and LED key readers (A).

Note: these LEDs also signal the opening of excluded inputs.

To display input addresses in detail, directly press **MENU**, then, by keys, ► and ◄, select «OPEN INPUTS». and confirm with **OK**. Scroll through the list by keys ▲ and ▼; inputs are identified as “logical address: physical address”.

1.1.3 Display excluded inputs

The presence of one or more inputs that are excluded is signalled by the turning on of the yellow LED (I) of the keypad.
An input can only be excluded if it was programmed with bypass allowed– see § 4.4.5.
An input can be excluded manually – see § 8.1.15, or automatically by system at activation – see § 4.9.
To display the excluded inputs in detail, directly press **MENU**, then using the ► and ◄ keys, select «EXCLUDED INPUTS», press the **OK** key, enter a valid code and confirm with **OK**. On the display the "READ LIST” appears, confirm with **OK** and scroll through the list of excluded inputs with the ▲ and ▼ keys.

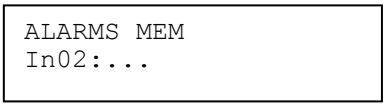
1.1.4 Examine alarm and tamper memory

In case of tamper or alarm, events are signalled by appropriate LEDs (on keypad or readers) and stored in the control panel. Afterwards it is possible to see in the keypad display the details of events causes.

To display details follow the instructions below:

1. Press on the keypad **MENU** key.
2. Press ► key until “TAMPERS MEM” or “ALARMS MEM” appears. Press **OK** key on the selected item.

3. Scroll with ▲ and ▼ keys the list of tamper or alarm causes.
4. To exit from the menu press **ESC** key repeatedly.



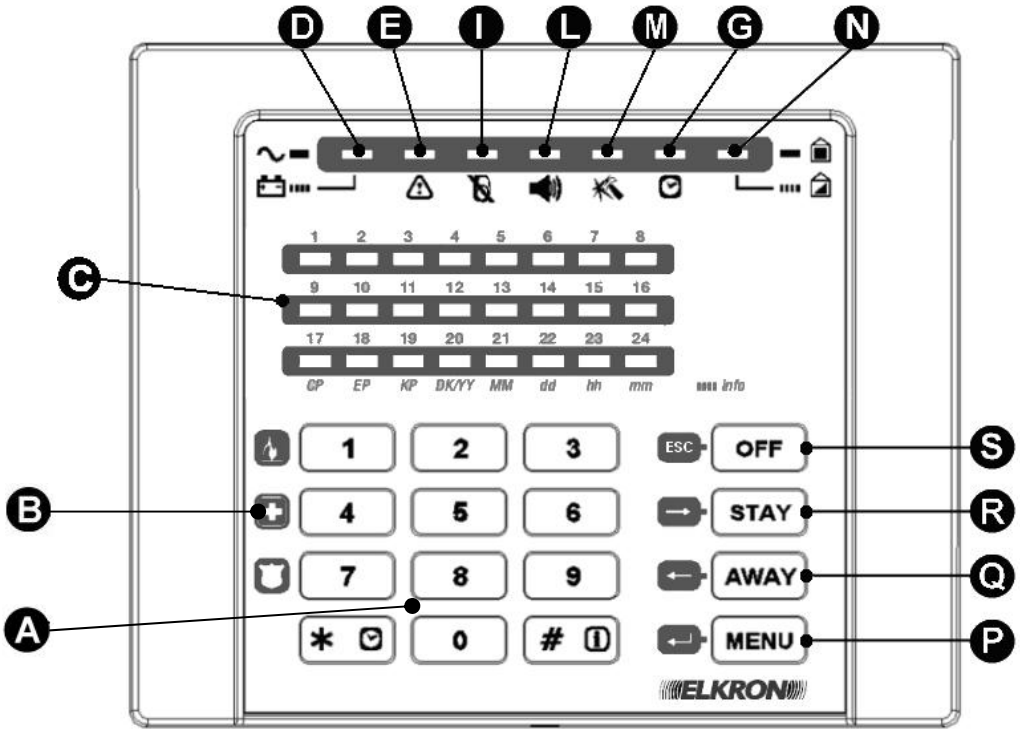
1.1.5 Alarm and tamper memory deleting

When the cause that has generated the event has been restored, the alarm/tamper memory is deleted (LED OFF) upon the subsequent arming in the AWAY mode (total).

1.1.6 Display failures and faults

The presence of a failure or fault, such as a breakdown in telephone line, is signalled by special yellow LED (E) on keypad and LED (A) on key readers.
To display details of faults detected, directly press **MENU**, then, by keys, ► and ◄, select «FAILURES».

1.2 KP500L LED KEYPAD



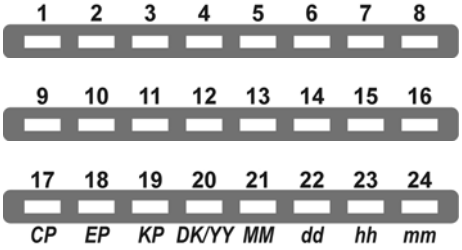
Ref.	Description	Use or provided indications
A	Keypad	Used to enter the access code, to select some functions and to program the control panel
B	Function keys	Used to activate additional system functions - see § 8.2.7
C	Yellow LED inputs	Show the state of the inputs (idle or open), and other information see below
D	Green LED Control panel mains voltage and battery charge	**On** = mains power supply 230 V~ available and battery charged **Off** = mains power supply 230 V~ not available and battery charged **Blinking** = low battery charge see Installation Manual
E	Yellow LED failures	**Off** = normal operation **On** = Failure present see § 1.2.7
I	Yellow LED Excluded inputs	**Off** = all inputs included **On** = excluded inputs see § 1.2.3
L	Red LED alarm memory	**Off** = no alarms **On** = alarm memory see § 1.2.4
M	Red LED tamper memory	**Off** = no tamper **On** = tamper memory see § 1.2.5
G	Green LED Timing programmer status	**Off** = Time Programmer (P.O.) disabled **On** = Time Programmer (P.O.) enabled **Blinking** = automatic arm warning see § 4.14
N	Green LED System status	**On** = system totally armed - AWAY **Off** = system disarmed **Blinking** = system partially armed - STAY **Fast Blinking** = system in maintenance see § 1.2.1
S	Key ESC OFF	To disarm; to exit a menu
R	Key STAY	To arm in STAY mode; to scroll forward through the menus
Q	Key AWAY	To arm in AWAY mode; to scroll backward through the menus
P	Key MENU	To access the menu; to confirm the access code or other data entered

1.2.1 Display the system status

The status of the system is shown by the green LED

- LED on system totally armed - AWAY
- LED off: system disarmed
- LED slowly blinking: system partially armed - STAY
- LED quickly blinking: system in maintenance.

1.2.2 Display the open inputs



The 24 yellow LEDs are used to display the input status:

- LED OFF: idle inputs
- LED blinking: open or tamper inputs.

1.2.3 Display the excluded inputs

The presence of one or more inputs that are excluded is signalled by the turning on of the yellow LED .

To display the excluded inputs in detail, press the info key [# ⓘ]

then with the and keys, select that it start to blink, and confirm with then enter its code and confirm with [MENU]

The excluded inputs are shown on the 24 yellow LEDs.

1.2.4 Examine the alarms memory

The turning on of the LED indicates that there are alarms stored.

To display the details press the info key and [# ⓘ] then with the and keys, select that it starts blinking and confirm with [MENU] .

With the and keys, you can scroll through all the alarms in memory:

The inputs that have generated an alarm are shown on the 24 yellow LEDs: the LEDs are constantly turned on.

If the 19 KP LED blinks it means that the alarm has been generated by the pressing of a function key of a keypad (fire alarm, emergency or audible panic).

1.2.5 Examine the tamper memory

The turning on of the LED indicates that there are alarms stored.

To display the details press the info key # ⓘ , and then with the keys ← and → select that it starts blinking and confirm with ← MENU .

With the ← and → keys, you scroll through all the tampers in memory.

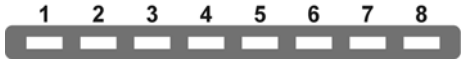
The inputs that have generated a tamper are shown on the 24 yellow LEDs, if present. the LEDs are constantly turned on.

The LEDs 17÷20 

if blinking, indicate instead the type of device that has generated the tamper.

The LED corresponding to the device blinks, as shown in the following table.

LED		Tampering source
17	*CP*	Control panel
18	*EP*	Expansion
19	*KP*	Keypad
20	*DK*	Reader

The LEDs 1÷8 

indicate the number of the device that has generated the tamper.

The LEDs 9÷11 

indicate the cause of the tamper, as shown in the following table:

LED	Cause of the tamper:
9	Tamper
10	Lock of communication with the device
11	Wrong code

1.2.6 Deletion of the alarm and tamper memories

When the cause that has generated the event has been restored, the alarm/tamper memory is deleted (LED OFF) upon the subsequent arming in the AWAY mode (total).

1.2.7 Display the failures

The turning on of the LED ⚠ indicates the presence of a failure or abnormality.

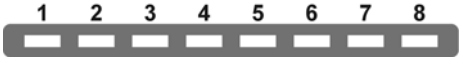
To display the details press the info key # ⓘ and then with the keys ◄ and ► select ⚠ that it starts blinking and confirm with ↵ MENU.

With the ◄ and ► keys, you scroll through the failures and anomalies present.

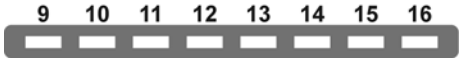
The LEDs 17÷20 

if blinking indicate the type of device that has generated the tamper, as shown in the following table:

LED		Abnormality source
17	*CP*	Control panel
18	*EP*	Expansion
19	*KP*	Keypad
20	*DK*	Reader

The LEDs 1÷8 

indicate the number of the device that has generated the tamper.

The LEDs 9÷16 

indicate the cause of the failure, as shown in the following table:

LED	Failure type:
9	PSTN failure
10	LAN or Ipervoice failure
11	Abnormality +PS
12	Abnormality +SR
13	Abnormality +V1
14	Abnormality +V2
15	Abnormality +D
16	Failure data memory

For further information, see Installation Manual – Troubleshooting.

Press ► to display the next abnormality and ◄ to display the previous one.

1.2.8 Display telephone numbers and system codes

With the LED KP500L keypad, it is possible to display the telephone numbers and the system codes with the appropriate command codes (see below).
The display occurs with the turning on in sequence of the corresponding LEDs (LED 1 to 10), the LED 10 corresponds to the number "0".
If no key is pressed, the display is repeated for 60 seconds.
At the end of each display you will hear a short beep, which is especially useful when a telephone number is not present and no LED turns on.

1.2.9 Display date and time

To show date and time:

1. Enter Master or User code **#** , *bip-bip and* then press ↵ MENU
2. Enter function code **83** *and* then press ↵ MENU

The display is in 5 phases (year, month, day, hour, minute) starting from the display of the year.

The LEDs blinking indicate the detail that is being displayed:

LED		Show detail
20	*YY*	year
21	*MM*	month
22	*dd*	day
23	*hh*	hour
24	*mm*	minute

Use the arrow keys → and ← to pass from one detail to another.

The last 2 numbers of the year are displayed (e.g. 2011 -> 11).

The display of the detail occurs with the turning on in sequence of the corresponding LEDs (LED 1÷10), the LED 10 corresponds to the number "0". The tens are shown with a long blink, and the units with a short one.
At the end of each display a short beep will be heard.

Example:
to display the date 25th April 2011 and a time of 2.15

while 20 *DK/YY* blinks, the year 1 + 1 is shown

press →

while 21 *MM* blinks, the month 4 + is shown

press →

while 22 *dd* blinks, the day 2 + 5 is shown

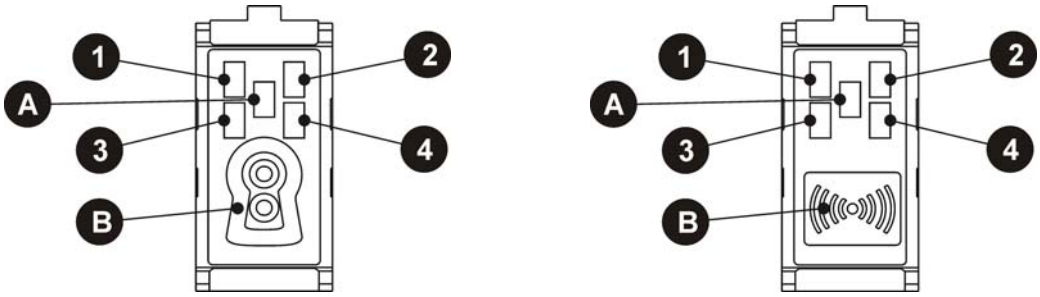
press →

while 23 *hh* blinks, the time 2 is shown

press →

while 24 *mm* blinks, the minutes are shown 1 + 5.

1.3 ELECTRONIC KEY READER DK500M-E AND PROXIMITY KEY READER DK500M-P



	Description	Use or provided indications
1	Green LED STAY status	**Off** = system disarmed **On** = with 2 led turned off, system partially armed - STAY
2	Green LED AWAY status	**Off** = see LED 1 **On** = system totally armed - AWAY
3 - 4	Green LED	**Not used**
A	Red LED summarising alarms and signalling	**Off** = no signalling **On** = stored alarm or tampering signalling or system failure (the LED turns off upon the next arming of the system, if in the meantime the alarm has ceased or until the fault is not repaired). **Blinking** = presence of at least one open input If alarms or failures and open inputs are present at the same time, the LED is on steady. **In general, putting on this LED is for suggesting to control signalling details on system keypad.**
B	Keyhole or Transponder	DK500M-E: hole to insert electronic key DK50 DK500M-P: detector for proximity key DK30

Note: LEDs 3 and 4 are not used.

2 ALARMS, EVENTS AND SIGNALLING

2.1 DESCRIPTION OF ALARMS, EVENTS

The MP504 system manages different types of alarms, described below with their characteristics.

2.1.1 Burglar Alarm

It is the alarm of anti-burglar system. System MP504 manages one burglar alarm for each mode, to each single partition there can be paired its own output actuators, such as sirens.
Various possibilities are provided for to determine when burglar inputs have to generate an Alarm: burglar inputs can be either single or clustered (e.g. combined in AND mode, owing to double release….) - see “Input programming”.
Note: by activating function “Alarm count”, maximum number of alarms can be determined caused by a detector in one day and as long as competence mode is activated.

Generated if...	• a burglar input is open and the mode assigned to it is active
activates...	• the programmed Burglar and Burglar/Tamper outputs that are assigned to the same input mode that has generated the event • the communicator for voice, numerical or modem sending of the respective Burglar alarm message (if programmed)
Is stored...	• In the event log • in alarm volatile memory
Is displayed...	• on the keypads • on the readers
Is held...	• for Burglar/Tamper/Panic Alarm Time
Is stopped by...	• entering a valid code on a keypad • insertion of a valid key • a disarming command from the input key assigned to the same input mode that has generated the event • a disarming DTMF command after a phone call through the control panel

2.1.2 Pre-alarm

In anti-burglar system, a Pre-alarm can be used, as an example, to ring a buzzer all the times when detectors relating to an outer area, such as a yard, detect the presence of a person.

Generated if...	• a Pre-alarm input is open and the mode assigned to it is active
activates...	• the programmed Pre-alarms outputs that are assigned to the same input mode that has generated the event • the communicator for voice, numerical or modem sending of the respective Burglar alarm message (if programmed)
Is stored...	• In the event log • in alarm volatile memory
Is displayed...	• on the keypads • on the readers
Is held...	• For Pre-alarm time
Is stopped by...	• entering a valid code on a keypad • insertion of a valid key • a disarming command from the input key assigned to the same input mode that has generated the event • a disarming DTMF command after a phone call through the control panel

2.1.3 Tamper alarm

It is the alarm which is generated if somebody tries to tamper the system. It is always (24H) active and is temporarily disabled by putting the system to maintenance status.

Generated if...	• a Tamper is opened (control panel, keypads) • The SAB line of the control panel or expansions is opened or unbalanced • a double balancing input is unbalanced (short circuit or wires cut) • an input programmed as Tamper is opened • a device connected on the bus does not answer for many consecutive times The alarm is generated regardless of the system status (24h).
Activates...	• The outputs programmed as Tamper and Burglar/Tamper • the communicator for voice, modem or numerical sending of the respective event Tamper alarm message (if programmed)
Is stored...	• In the event log • in volatile tamper memory
Is displayed...	• on keypads • on readers
Is held...	• For burglar/tamper/panic alarm time
Is stopped by...	• Entering of a valid code in the keypad • insertion of a valid key • a disarm command given by a Key input • a disarming DTMF command after a phone call through the control panel

2.1.4 Wrong code alarm

It is the alarm which is generated if somebody tries to identify a valid code to deactivate the system. It is always (24H) active and is temporarily disabled by putting the system to maintenance status.

Generated if...	• A wrong code is entered four consecutive times (the count is reset by entering a valid code) The alarm is generated regardless of the system status (24h).
activates...	• The outputs programmed as Tamper and Burglar/Tamper • the communicator, modem or numerical sending of the respective event and detailed wrong code (if programmed)
Is stored...	• In the event log • in tamper volatile memory
Is displayed...	• on the keypads • on the readers
Is held...	• For burglar/tamper/panic alarm time
Is stopped by...	• Entering of a valid code in the keypad • insertion of a valid key • a disarm command given by a Key input • a disarming DTMF command after a phone call through the control panel

2.1.5 Panic alarm

It is an alarm which can be triggered by a user in a situation of danger. It is always (24H) active and is temporarily disabled by putting the system to maintenance status.

Generated if...	• A Panic input is opened The alarm is generated regardless of the system status (24h).
activates...	• The outputs programmed as Panic • the communicator for voice, modem or numerical sending of the respective Panic alarm message (if programmed)
Is stored...	• In the event log • in alarm volatile memory
Is displayed...	• on the keypads • on the readers
Is held...	• For burglar/tamper/panic alarm time
Is stopped by...	• Entering of a valid code in the keypad • insertion of a valid key • a disarm command given by a Key input • a disarming DTMF command after a phone call through the control panel

2.1.6 Silent panic alarm

It is an alarm which can be triggered by a user in situations of danger and must not draw wrongdoer's attention. It is always (24H) active and is temporarily disabled by putting the system to maintenance status.

Generated if...	• a Silent panic input is opened • the silent panic function key is pressed for at least 3 seconds on a keypad The alarm is generated regardless of the system status (24h).
activates...	• the communicator for voice, modem or numerical sending of the respective panic alarm message (if programmed)
Is stored...	• In the event log

2.1.7 Hold-up alarm

It is an alarm which can be triggered by a user when he/she is forced by a wrongdoer to deactivate the system. It is always (24H) active and is temporarily disabled by putting the system to maintenance status.

Generated if...	• A hold-up code is entered from the keypad (code + 1) The alarm is generated regardless of the system status (24h).
activates...	• The outputs programmed as Hold-up • the communicator for voice, modem or numerical sending of the respective Hold-up alarm message (if programmed)
Is stored...	• In the event log
Is held...	• For a fixed time of 30 seconds
Is stopped by...	• Entering of a valid code in the keypad • insertion of a valid key • a disarm command given by a Key input • a disarming DTMF command after a phone call through the control panel

2.1.8 Emergency alarm

System MP504 provides the capability to generate service signalling for an "emergency request" owing to either actuating a dedicated Key.

Note: An "emergency request" is only to be considered as an anti-burglar system ancillary function; therefore, system MP504 cannot be used as a remote emergency system according to regulations in force.

Generated if...	• A emergency input is opened • the emergency function key is pressed for at least 3 seconds on a keypad The alarm is generated regardless of the system status (24h).
activates...	• The outputs programmed as Emergency • the communicator for voice, modem or numerical sending of the respective Emergency alarm message (if programmed)
Is stored...	• In the event log • in alarm volatile memory
Is displayed...	• on the keypads • on the readers
Is held...	• For Emergency alarm time
Is stopped by...	• Entering of a valid code in the keypad • insertion of a valid key • a disarm command given by a Key input • a disarming DTMF command after a phone call through the control panel

2.1.9 Fire alarm

System MP504 provides the capability to manage fire detectors (smoke, keys, …) connecting them to properly programmed inputs, to generate service signalling of "fire alarm" type.

Note: "Fire alarm" is only to be considered as an anti-burglar system ancillary function; therefore, system MP504 cannot be used as a fire detection system according to regulations in force.

To implement a system which fully meets the requirements of a fire detection system, please see Elkron general catalogue at Fire section.

Generated if...	• A fire input is opened • the fire alarm function key is pressed for at least 3 seconds on a keypad • The alarm is generated regardless of the system status (24h).
activates...	• The outputs programmed as Fire • the communicator for voice, modem or numerical sending of the respective Fire alarm message (if programmed)
Is stored...	• In the event log • in alarm volatile memory
Is displayed...	• on the keypads • on the readers
Is held...	• until a reset fire alarm input is opened, which is assigned to the same mode as the fire alarm that has generated the event.

2.1.10 Fire reset event

Generated if...	• A fire reset input is opened
activates...	• for 1 second the outputs programmed as fire reset
Is stored...	• In the event log
besides...	• Stops the respective fire alarm • resets the fire alarm volatile memory • turns off the LED on the keypads and readers that signalled the event.

Warning: in case of "fire alarm" signalling and subsequent alarm manual resetting, environmental conditions have to be restored in premises where the alarm was generated and the detector has to be checked to have been armed again in order to be able to detect a new alarm situation.

2.1.11 Technological event type 1 (Status)

System MP508 provides the capability to manage some domotics (heating activation, garden irrigation management, etc.) functions through "technological events" of types 1, 2 and 3.
"Technological events" are always active (24H).

Generated if...	• A technological type 1 input is opened
activates...	• The outputs programmed as Technological type 1 • the communicator for voice, modem or numerical sending of the respective technological Service message (if programmed)
Is stored...	• In the event log
Is held...	• so that at least one of the inputs programmed as Technology type 1 assigned to the same output mode with the output remaining open

2.1.12 Technological event type 2 (Pulsed)

Generated if...	• A technological input type 2 is opened
activates...	• The outputs programmed as Technological type 2 • the communicator for voice, modem or numerical sending of the respective technological Service message (if programmed)
Is stored...	• In the event log
Is held...	• 1 second

2.1.13 Technological event type 3 (Latch)

Generated if...	• A technological input type 3 is opened
activates...	• The outputs programmed as Technological type 3 • the communicator for voice, modem or numerical sending of the respective technological Service message (if programmed)
Is stored...	• In the event log
Is held...	• until a valid code is entered on the keypad and all inputs programmed as Technologies type 3 assigned to the same output mode are returned to idle

2.1.14 Telephone failure alarm

Generated ...	• after 3 automatic and consecutive failed PSTN tests • if, with tones control enabled, after an event to be sent, when the line is seized the dial tone is not detected for 3 consecutive times The alarm is generated regardless of the system status (24h).
activates...	• The outputs programmed as Telephone failure • the communicator for the digital, modem, vocal sending of the message corresponding to the phone failure Alarm (if vocal, a generic *"system failure"* message is sent).
Is stored...	• In the event log • Into failure and fault list
Is displayed...	• With the failure yellow LED on the keypads • with the red LED on the readers
Is stopped by	• when the telephone failure has been repaired, that is with a successful call on PSTN line, or with a successful automatic PSTN test.
After the solution of the problem the control panel...	• activates the communicator for voice, modem or numerical sending of the respective message of telephone failure alarm end (if programmed) • turns off the failure LED on keypads and readers • stores in the event log the telephone failure end • deactivates the outputs programmed as telephone failure

2.1.15 LAN failure alarm

Generated ...	• after 3 consecutive failed tries to send the event on LAN Ethernet channel The alarm is generated regardless of the system status (24h).
activates...	• the communicator for the digital, modem, vocal sending of the message corresponding to the LAN failure alarm (if vocal, a generic *"system failure"* message is sent).
Is stored...	• into Event log • Into failure and fault list
Is displayed...	• With the failure yellow LED on keypads • With the red LED on readers
Is stopped by	• LAN failure restore, that is with a successful communication on LAN Ethernet channel
After the solution of the problem the control panel...	• activates communicator for numerical sending of relating event end of LAN Failure Alarm message (if programmed) • puts off failure LED on keypads and readers • stores end of LAN Failure into Event Log

2.1.16 System failure alarm

Generated if...	• a fault occurs on system supply voltages The alarm is generated regardless of the system status (24h).
activates...	• The outputs programmed as System failure • the communicator for voice, modem or numerical sending of the respective system failure alarm message (if programmed)
Is stored...	• In the event log • Into failure and fault list
Is displayed...	• With the failure yellow LED on the keypads • with the red LED on the readers
Is stopped by...	• The solution of the problem
After the solution of the problem the control panel...	• arms the communicator for the digital or modem sending of the end event of the alarm failure (if programmed) • turns off the failure LED on keypads and readers • stores in the event log the failure end • deactivates the outputs programmed as System failure

2.1.17 Lack of power event

Generated if...	• the mains voltage is off for a shorter time than the programmed "Lack of power time" The event is generated regardless of the system status (24h).
Is stored...	• In the event log
Is displayed...	• by the turnoff of the green LED on the keypads indicating the lack of power presence • by the "POWER" LED on the control panel board, that turns off
Is stopped by...	• the lack of power return
After the mains return the control panel...	• Turns on again the green LED on the keypads indicating the lack of power presence • Turns on the "POWER" LED on the control panel board • stores in the event log the temporary lack of power end

For more information, see Installation Manual.

2.1.18 Alarm generated by continuous lack of power

Generated ...	• After the Event generated by an lack of power, if the mains voltage fails for a time equal or longer than the programmed lack of power time The alarm is generated regardless of the system status (24h).
Activates...	• The outputs programmed as Lack of power • the communicator for voice, modem or numerical sending of the respective lack of power alarm message (if programmed)
Is stored...	• In the event log
Is displayed...	• on keypads, as lack of power event • with the red LED on the readers
Is stopped by...	• The mains return for at least 5 consecutive minutes
5 minutes after the return of the mains voltage the control panel...	• activates the communicator for voice, modem or numerical sending of the respective event lack of power alarm message (if programmed) • stores in the event log the lack of power end • deactivates the outputs programmed as lack of power

For more information, see Installation Manual.

2.1.19 Low battery alarm

Generated if...	• The control panel battery is flat or absent The alarm is generated regardless of the system status (24h).
activates...	• the communicator for voice, modem or numerical sending of the respective low battery alarm message (if programmed)
Is stored...	• In the event log
Is displayed...	• By the blinking of the green LED indicating mains presence/battery charging on the keypads • with red LED on readers
When the battery is charged, the control panel...	• activates the communicator for voice, modem or numerical sending of the respective event low battery alarm message end (if programmed) • restore the indication of charged battery on the keypads (green LED on) • stores in the event log the low battery condition end

For more information, see Installation Manual.

2.1.20 Maintenance event

generated if...	• “Maintenance” menu is accessed • maintenance status is activated
activates...	• the communicator for numerical or modem sending of the respective event Maintenance message (if programmed)
Is signalled...	• with the yellow maintenance LED on the KP500D/EN keypads • with the green fast-blinking system status LED on the KP500L keypads
inhibits...	• alarm outputs • the communicator for vocal, modem or numerical sending of alarm calls
Is stored...	• into Event log (start of maintenance)
Is held...	• as long as you are in “Maintenance” menu, provided that maintenance status was not activated • at control panel tamper closing again, provided that maintenance status was activated

For more information, see Installation Manual.

2.1.21 Input exclusion event

generated if...	• inputs are manually excluded • if the system excludes inputs or owing to “alarm count” overflow (if programmed)
activates...	• the communicator for numerical or modem sending of the respective event Input excluded message (if programmed)
Is signalled...	• by excluded inputs yellow LED on keypads
Is stored...	• into Event log • into excluded inputs list
at input reinsertion, control panel...	• activates the communicator for numerical or modem sending of the respective event Input included message (if programmed) • stores input reinsertion into Event log • puts off excluded inputs yellow LED on keypads

For more details, see § 8.1.15 and 8.2.11.

2.2 ACOUSTIC SIGNALLING

On the keypads buzzer can be activated the following signalling.

2.2.1 Entry/exit time signalling

Generated if...	• arming takes place and the keypads have enabled the acoustic signal (buzzer) for the time entry/exit time
Is held...	• for the delay times of the delayed inputs (in case of multiple inputs with different times the largest is considered)
Activated on...	• Enabled keypads • the Buzzer programmed outputs assigned to the same arming mode carried out

2.2.2 System arm warning

Generated if...	• the programmed Pre-warning time for carrying out a STAY or AWAY arming command from the timing programmer
Is held...	• until the system is armed, or a “postponement” has been entered
Activated on..	• Enabled keypads with one beep per minute

2.2.3 Gong

Generated if...	• an Input is opened for which the Gong auxiliary function has been enabled and the mode with which it is associated is disarmed
Activated on...	• Enabled keypads with 2 consecutive beeps • for 1 second the Gong programmed outputs assigned to the same input mode that has generated the event

3 SYSTEM START-UP

At the end of the physical installation procedure of the devices, it is necessary to carry out the programming necessary to start up the MP504/TG system.

All programming can be carried out via a KP500D/EN service keypad or installed on the system - see chapter 4, or alternatively you can use a PC with Hi-Connect, see 3.10 or higher - see chapter 6.
A good part of the programming can also be carried out with the KP500L LED keypad - see chapter 5.

3.1 SYSTEM ACCESS CODES

For MP504 system management it is possible to use up to 24 different access codes: 1 Installer code, 1 Master code and 22 User codes. The access code can be freely programmed, from a minimum of 4 digits up to 6 digits max. According to its type, the code allows specific system functions. Every user can change its own access code as he wants; the system will automatically assign him a code for hold-up function; this new code is the same as the previous + 1 (for example: if I choose 789456, the hold-up code will be 789457).

Suggestion: every user, included Master and Installer, should change their code before the system start-up.

The Master code is always enabled and it is the only code authorized to enable the other codes; it can also reset the other access codes to the factory value (if someone forgets them).
The entered access code must be confirmed by pressing **OK** key.

Warning: if any user enter his code, the Installer that might be enabled will automatically be disabled; he is also disabled after electronic or proximity key insertion.

3.1.1 Default codes

Code type	Default code	Assigned mode	Enabled
Installer	0000	STAY/AWAY	Yes
Master	1111	STAY/AWAY	Yes
User (2 ÷31)	0020-0230	STAY/AWAY	No

The control panel installer code is enabled by default; the code is automatically disabled after entering for the first time a new valid code.

Note: The codes are assigned exclusively to the AWAY mode, to ensure full operability throughout the system.

3.1.2 Access to functions

The various functions of system MP504 are collected into 4 separate Menus:

FREE ACCESS MENU
Directly accessed by pressing MENU key without entering any codes and including following functions:

- Displaying failures
- Displaying Timing Programmer preinsertion status
- Displaying open inputs list
- Displaying excluded inputs list (followed by code entry)
- Looking at Alarm Memory
- Looking at Tamper Memory
- Setting “Info display” wording being displayed in rest conditions (followed by code entry)
- Regulating buzzer volume
- Regulating display contrast
- Regulating display backlight

MASTER MENU (see § 9.1)
Accessed byentering Master code, confirmed with OK, and by pressing MENU key; it includesfollowing functions:

- Activating / partitioning the system
- Deactivating the system
- Displaying system status
- Displaying event log
- Excluding / including inputs
- Setting Date and Time
- Modifying its own code
- Setting the users
- Setting and programming the keys
- Setting Timing Programmer
- Enabling / disabling technician and users

- Enabling / disabling keys
- Enabling / disabling time commands
- Enabling / disabling remote access
- Enabling / disabling remote disarming
- Testing inputs
- Testing outputs
- Testing the battery
- Testing telephone items
- Entering / modifying telephone numbers
- Listening vocal messages

TECHNICIAN MENU (see § 9.2)
Accessed, after previous Master enabling, by entering Installer code, confirmed with OK, and by pressing MENU key;
it includes following functions:

- Activating / partitioning the system
- Deactivating the system
- Displaying system status
- Displaying / deleting event log
- Excluding / including inputs
- Setting Date and Time
- Modifying its own code
- Setting the users
- Setting and programming the keys
- Programming the system (system, outputs, keypads, readers, system parameters)
- Programming communicator
- Listening / recording vocal messages
- Setting Timing Programmer
- Testing inputs
- Testing outputs
- Testing the battery
- Testing telephone items
- Entering / modifying telephone numbers
- Putting to Maintenance status

USER MENU (see §9.3)
Accessed by entering a valid user code, confirmed with OK, and by pressing MENU key; it includes following functions:

- Activating / partitioning the system
- Deactivating the system
- Displaying system status
- Displaying event log
- Excluding / including inputs
- Modifying its own code
- Modifying its own name

NOTE: All functions are accessible when the system is disarmed, when the system is armed, it is only possible to disarm / split.

Some functions can be also accessed from remote location via phone, through menu with tone line guide:

TONE LINE GUIDE MENU (see § 8.4.2)
Accessed via telephone with the DTMF keys, the entry of a valid code is required, and the following functions provided:

- Activating / deactivating the system
- Requesting system status summary

4 PROGRAMMING WITH KP500D/EN KEYPAD

4.1 PROGRAMMING WITH KP500D/EN DISPLAY KEYPAD

4.1.1 Alphanumeric characters input

With the KP500D/EN keypad it is possible to enter alphanumeric characters to store names describing users, inputs, outputs. Each name can be made up of 24 characters as a maximum. Keys allow to scroll and select several characters, as shown in the following table. The position of the new entered character is indicated by a cursor blinking on the display.
To write a name:

- press repeatedly the key associated to the desired character until it appears;
- use ► and ◄ keys to go to the next or previous position (to delete unwanted characters press **0** character [blank]);
- at the end press **OK** key to store the name or **ESC** key to exit from the procedure without saving it.

Key	Character
1	. / : ; ! ? 1
2	A B C a b c 2
3	D E F d e f 3
4	G H I g h i 4
5	J K L j k l 5

Key	Character
6	M N O m n o 6
7	P Q R S p q r s 7
8	T U V t u v 8
9	W X Y Z w x y z 9
0	[blank] 0 + -

4.2 LANGUAGE SELECTION

Before starting, select the language used to display menu items on the keypad. Default language is Italian, but it is possible to choose hoose between different languages. To access the language setting function follow the instructions below:

1. Enter on keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “MAINTENANCE” appears on the display.

```
Us00: INSTALLER
MAINTENANCE
```

4. Press **OK** key to confirm.

```
MAINTENANCE
LINGUA-LANGUAGE
```

5. Press **OK** key. The first system keypad is shown.

```
LINGUA-LANGUAGE
KP01:KP 01
```

6. Select the keypad where to change the language by pressing ▼ key and confirm the selection with **OK** key.
7. Press ▼ key until the desired language appears on display and confirm selection with **OK** key.
8. On both keypads appears “Download in progress”.
9. At the end of operation, press **ESC** repeatedly to exit from the menu.

```
KP01:KP 01
ITALIANO
```

4.3 TIME/DATE SETTING – SUMMER TIME

Date and time can be shown on keypad in display in rest conditions (see “Info display) and are used in recording events into the log and for Timing Programmer functions.
To modify date and time displayed on the display, access, from either Master menu or Technician, menu at item « SETTING »/ « TIME-DATE »

- «SET HOUR» directly enter time in 24-hour format by numerical keys
- «SET DATE» directly enter day / month / year by numerical keys
- «SUMMER TIME» set “ENABLE” if you wish solar / summer time to be updated automatically, otherwise, set “DISABLE”
- «SOLAR MONTH» by keys ▼ and ▲, set the month when solar time comes into force
- «SUMMER MONTH» by keys ▼ and ▲, set the month when summer time comes into force
- «SUNDAY» by keys ▼ and ▲, set the Sunday when change of time occurs, precisely, either “LAST SUNDAY” or “FIRST SUNDAY”

4.3.1 Arming mode – Standard / Block arming

For all system it is possible to program the arm mode, if there are associated burglar inputs that are open during arm:

- **Standard**: an alarm is generated if there are open associated inputs during arm.
- **Block arming** it is not possible to arm a mode programmed in this way if there are inputs assigned to it that remain open. In particular, if the open input is STAY associated, it will not be possible to arm neither STAY nor AWAY. If it is assigned AWAY, it will only be possible to arm STAY mode.

To program the arming mode, do the following:

1. Enter the Installer code (default - 0000) on the keypad and press the **OK** key.
2. Press the **MENU** key.
3. Press the ▼ key, until "PROGRAMMING" disappears from the display. Press the **OK** key to confirm.

```
Us00: INSTALLER
PROGRAMMING
```

4. "SYSTEM" appears.
   Press the **OK** key to confirm.

```
PROGRAMMING
SYSTEM
```

5. "ARMING MODE" appears.
   Press the **OK** key to confirm.

```
SYSTEM
ACTIVATION MODE
```

6. Select the arming mode with the ▼ and ▲ keys. The possible choices are Standard and Block arming.

```
ACTIVATION MODE
STANDARD
```

7. Press the **OK** key to confirm the choice.
8. Press the **ESC** key repeatedly until exiting the menu.

4.4 INPUT PROGRAMMING

System MP504 manages max general use 24 inputs.
SAB tamper inputs present in control panel and expansions EP508 are not programmable.
For more information and connections, refer to *Installation manual*.

4.4.1 Inputs encoding

Every input has two codes: a physical one and a logical one. The two addresses are displayed according to the following diagram:

physical address : logical address

more in detail:

ddX In**Y:**In**ZZ**

where:

- **dd** is the bus device type or the control panel (UC= control panel, EP= expansion, KP= keypad, DK= reader)
- **X** is the progressive numbering of bus devices that contain the inputs,
- **Y** is the input numbering in bus X device (physical address).
- **ZZ** is the input logical address, composed by two digits, that the control panel assigns with a system progressive numbering when bus devices are acquired.

The physical address is useful for the installer during system installation and maintenance phase.
The installer can change the logical address at any time.
System MP504 identifies the inputs on display with physical address, logical address and name, while voice and numerical alarms are identified only with logical address and customized message, if present.
During acquisition phase of EP508 expansions, the control panel assigns automatically a progressive logical address to all the 8 inputs (the first 4 are the control panel inputs), while keypads and readers inputs are not considered; because they are default inputs and consequently they are defined as not used and must be manually enabled and numbered.

4.4.2 Inputs types

The input type sets how the control panel manages the signals coming from the electric circuit (detector + connection cables) connected to the input.
For further details and application schematics, see Installation Manual – Inputs connections.
With a programming procedure it is possible to change the physical characteristics of all the inputs, except for SAB input, that can be only balanced type and to which is associated the tamper alarm. Alarm inputs can be:

- **Not used**: electric signal changes, both as input opening and tamper, are ignored. By programming an input as “Unused”, you also prevent unused inputs from having to be closed with a jumper.

Warning: please note that the MP504 system manages a maximum of 24 inputs. From the factory, all inputs of the control panel and expansions are configured, and the auxiliary inputs of the keypad and readers are set as "Not Used”. If there are 2 EP508 expansions installed and you want to use some auxiliary inputs, you must first program just as many inputs as "not used" and then configure the auxiliary inputs, while remaining within the total of 24.

- **N.C**. (normally closed): in normal condition the electric circuit connected to the input must be closed; its opening generates the associated event.
- **N.O.** (normally open): in normal condition the electric circuit connected to the input must be open; its closing generates the associated event.
- **Balanced**: determines 2 voltage thresholds by which there are acknowledged rest status, alarm signalling, and signalling of tamper by wire shorting.
- **Double balancing**: determines 3 voltage thresholds by which there are acknowledged rest status, alarm signalling, and signalling of tamper by wire shorting and cutting.
- **Shock**: it generates the alarm signalling when the electric circuit is open for the time corresponding to the programmed sensitivity.
- **Rolling shutter**: it generates the alarm signalling when, in a given time, the electric circuit is opened and closed for a number of times corresponding to the programmed sensitivity.

4.4.3 STAY – AWAY Assignation

The assignation of the inputs and outputs to STAY mode (partial arming) or AWAY mode (total arming) is provided for via the programming. This makes it possible for the burglar type customizations to provide for the switching from a related output, provided that it has the same assignation with the input that has generated the event.
This is useful if the system is equipped with two sirens connected to two Burglar outputs with different assignations, for example. an internal siren will be activated in case of an event detected on the perimeter protection with the system in STAY mode (partial arming) and an external siren will be activated only when the system is activated in AWAY mode (total arming).

Warning: all 24 hrs Events (i.e. those which do not depend on the state of the system) generated by the opening of an input, will switch all customized outputs in the same way (e.g. Audible panic input - Audible panic output), regardless of their assignation. For these customizations, it is advised to leave the default programming (AWAY).

4.4.4 Inputs specialisations

Alarm input configuration specifies how, when and what type of alarm is generated. According to the type of generated alarm, the control panel will activate the specific devices (outputs, sirens and communicator). For further details about each function see chapter 2 *Alarms, Events and Signalling*.
Below there are described possible inputs specialisations.

BURGLAR – IMMEDIATE INPUT
The opening of the input generates a Burglar alarm when the part of the system (STAY or AWAY) associated to the Input is armed.

BURGLAR – DELAYED INPUT
Detectors are typically used, which are located between the control component (keypad or reader) and the output (e.g. magnetic contact of the entry port).

The Delayed customized input generates the burglar alarm only after its Delay time has elapsed.
Delay time can be defined separately for each single input (in programming input).

If there is only one delayed input assigned to STAY or AWAY, its delay time determines both the "Exit time" and the "Entry time"(which are therefore equal to each other).

If there are multiple delayed inputs present, with the different Delay times assigned to the same mode (AWAY or STAY), the system behaves in the following way:

- when arming, the necessary time to exit without generating an alarm corresponds to the greater of the Delay times
- with the armed system, the necessary time to enter without generating an alarm is that assigned to the first delayed Input that has opened.

The delay time, and subsequent alarm generation, can be interrupted by disarming the system.

It is possible to enable the buzzer acoustic signal of the keypad during the delay time– see § 4.4.10.

PRE-ALARM
The opening of the input generates a Pre-alarm when the STAY or AWAY mode to which the Input is assigned is armed.

TAMPER
The input opening generates the Tamper alarm, regardless of the system arm state. The input is 24h type.

PANIC
The input opening generates the Panic alarm, regardless of the system arm state. The input is 24h type.

SILENT PANIC
The input opening generates the Silent panic alarm, regardless of the system arm state. It is not assigned any output, if programmed; it arms the telephone communicator (see chapter "Alarms, events and alerts").

EMERGENCY
The input opening generates the Emergency alarm, regardless of the system arm state. The input is 24h type.

FIRE
The input opening generates the Fire alarm, regardless of the system arm state. The input is 24h type.

FIRE RESET
The opening of the input switches the associated Reset fire alarm outputs for 1 second and carries out the fire alarm reset, regardless of the arming status of the system. Alarms and memories of the previously generated fire alarms are deleted.
The input is 24h type

TECHNOLOGICAL TYPE 1 (STATUS)
The input opening generates a technological type 1 event, regardless of the system arm state.
The input is 24h type.
Note: the technology type 1 inputs must be assigned (via STAY or AWAY assignation) at least one technology type 1 output.

TECHNOLOGICAL TYPE 2 (PULS)
The input opening generates a technological type 2 event, regardless of the system arm state.
The input is 24h type.
Note: the technology type 2 inputs must be assigned (via STAY or AWAY assignation) at least one technology type 2 output.

TECHNOLOGICAL TYPE 3 (LATCH)
The input opening generates a technological type 3 event, regardless of the system arm state.
The input is 24h type.
Note: the technology type 3 inputs must be associated with (via STAY or AWAY assignation) at least one technology type 3 output.

KEY
The pulsed opening of the input arms or disarms, depending on the input association programming, the STAY or AWAY mode.

INPUT OF TEST
The input opening and closing generates events for event log and state displaying, without activating any alarm. The operation is independent of the arming of the system status focus and is always armed (24h). It can be used to check a detector without generating false alarms.

4.4.5 Excludability

If an input is prepared as "excludable", this will be subject to manual exclusion.
For more details, see § 8.1.5 and 8.2.11.

4.4.6 Additional functions: Gong

The burglar inputs can be assigned the Gong ancillary function, which are usable with the system disarmed. Its opening generates a Gong signal.

4.4.7 Burglar inputs attributes (Release type, AND inputs)

The operation of the burglar inputs can be further personalized by setting the attributes:

- **Release type**, determines when the alarm signalling is generated. It is possible to choose between:
  - **Single release**: alarm is generated as soon as the input is opened.
  - **Double release**: alarm is generated at the end of the second event, only if it occurs within 120 second from the first.
- **AND inputs**, it logically connects two burglar inputs with the same specialisation and alarm is generated only if both of them are opened within 5 minutes from the first to the second (meanwhile the first opened input can also be closed). It is not possible to change the interval of 5 minutes. AND inputs can be used, for example, to reduce the possibility of false alarms issued from detectors installed in critical areas.

4.4.8 Input associated to a video camera

When Gateway Video is used, inputs have to be associated to cameras (up to 4 cameras are managed).
During operation, alarm event from an input associated to a video camera causes a set of images to be stored which will be sent via email to email addresses defined on Gateway Video. For more detailed information, refer to Gateway Video Manuals.
Every input can be associated to one video camera only; each of the 4 video cameras can be associated to more inputs. Inputs can be specialised with any type but Tamper type and Technocogical type.

4.4.9 Burglar Inputs / Outputs: operation mode according to their STAY or AWAY assignation and the type of arming

1. ***STAY armed system (partial arming)***
   The opening of a STAY assigned burglar input, will only switch the respective STAY assigned burglar outputs.
   The opening of an AWAY assigned burglar input, does not generate any event.

2. ***AWAY armed system (total arming)***
   The opening of a STAY assigned burglar input, will switch all the burglar outputs, whether STAY assigned or AWAY assigned.
   The opening of an AWAY assigned burglar input, will switch all the burglar outputs, whether STAY assigned or AWAY assigned.

   Note: *The burglar type customizations for the inputs are: Immediate – Delayed – Pre-alarm.The burglar type customizations for the outputs are: Burglar – Burglar/Tamper – Pre-alarm.*

4.4.10 Input programming

To program an input follow the instructions below:

1. Enter on keypad the installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “PROGRAMMING” appears on the display”.
4. Press **OK** key to confirm.

```
Us00: INSTALLER
PROGRAMMING
```

5. Press ▼ key until “INPUTS” appears.

```
PROGRAMMING
INPUTS
```

6. Press **OK** key to confirm. “CONTROL PANEL” appears.

```
INPUTS
CONTROL PANEL
```

7. Press **OK** key to confirm.
   Select with ▼ key the desired input ressa.

```
CONTROL PANEL
UC.In1: In01
```

8. Press **OK** key to confirm.

```
UC.In1: In01
LOGIC NUMBER
```

9. If you want to change the logical address associated to the input press **OK** key.
   Use numerical keys and ◄► keys to change it and press **OK** key to confirm it.
   Warning: It is not possible to have two inputs with the same logical address.

```
LOGIC NUMBER
UC.In1: In01
```

10. Press ▼ key until “INPUT TYPE” appears. Press OK key to display the list of available input types. Select the desired type with ▼ and ▲ keys and confirm it with **OK.**

```
UC.In1: In01
INPUT TYPE
```

11. Press ▼ key until “ASSIGN” appears.

```
UC.In1: In01
ASSIGN
```

12. Press **OK** key to confirm. The current assignation will appear: STAY or AWAY, identified by the bold box and with the blinking cursor superimposed.

```
STAY
■□
```

13. Every inputs must be STAY or AWAY assigned. They cannot be assigned to no mode or both modes simultaneously. This automatically brings up a menu that offers a forced choice. If you want to confirm the current situation, press the **OK** key. If you change the assignation (e.g. from STAY to AWAY from or vice versa), move the cursor (blinking bold box) using the ◄ or ► keys. The display will present the changed situation. Select the cursor position by using the ▼ or ▲ keys.
14. Press the **OK** key to confirm the assignation choice. “ASSIGN” appears on the display.

```
AWAY
□■
```

15. Press ▼ key until “CUSTOMIZE” appears. Press **OK** key to display the configurations of available inputs. Select desired configuration with▼ and ▲ keys and confirm it with **OK** key.

```
UC.In1: In01
CUSTOMIZE
```

16. If “Delayed burglar” configuration is selected, a new additional item concerning the delay time of every input will appear. Select delay time by keys ▼ and ▲. (5s, 10s, 30s, 1m, 1m30s, 5m, 20s).

```
DELAY
5s
```

17. Press▼ key until “BYPASS ALLOWED” appears on the display. With▼ and ▲ keys select DISABLE, to disable exclusion possibility, or ENABLE to enable it, by confirming selection with **OK** key**.**

```
UC.In1: In01
BYPASS ALLOWED
```

18. Press▼ key until “ANCILLARY FUNCT” appears on the display. Press **OK** key to select additional functions NONE, GONG. Select the desired ancillary function with **OK** key.

```
UC.In1: In01
ANCILLARY FUNCT
```

19. Press▼ key until ”ATTRIBUTES” appears on the display.

```
UC.In1: In01
ATTRIBUTES
```

20. Press **OK** key. With ▼, ▲ and **OK** keys it is possible to select and configure the attributes RELEASE TYPE (Single or double). At the end press **ESC** key to return to “ATTRIBUTES”.

```
ATTRIBUTES
RELEASE TYPE
```

```
UC.In1: In01
ATTRIBUTES
```

21. Press the ▼ key, until "ASSIGN VIDEO" disappears from the display. (This is an optional feature used only if the system is connected to the Videogateway). Press the **OK** key to display which of the 4 Videogateway cameras is assigned to the input. The available options are: DISABLED (no camera assigned) CAMERA 1, 2, 3, or 4. Select the desired camera with the ▼ and ▲ keys and confirm with **OK.**

```
UC.In1: In01
VIDEO ASSIGN
```

22. Press▼ key until “AND INPUTS” appears on the display.

```
UC.In1: In01
AND INPUTS
```

23. Press **Ok** key. “DISPLAY AND” appears. With **▼,** ▲ and **OK** keys it is possible to display (DISPLAY AND) the AND connections of the input or it is possible to select (SELECT AND) to which other input can be connected the input, or disable (DISABLE AND) the AND connection, if present. At the end press **ESC** key to return to “AND INPUTS”.

```
AND INPUTS
DISPLAY AND
```

```
UC.In1: In01
AND INPUTS
```

24. Press▼ key until “NAME” appears on the display.

```
UC.In1: In01
NAME
```

25. Press **OK** key to confirm. the input a descriptive name, by using the keypad (for further information see paragraph 4.1.1). Name maximum length is 10 digits.

```
NAME
In01:...
```

26. Press **OK** key to confirm. “NAME” appears again.

27. Program the other control panel inputs by following the same procedure from step 7.
28. If the system has expansions, keypads or readers, press **ESC** key until “CONTROL PANEL” appears again on the display.

```
INPUTS
CONTROL PANEL
```

29. Press ▼ key to display the desired peripheral type (EP, KP, DK) and confirm selection by pressing **OK** key, then program all its inputs with the same procedure used for control panel inputs programming.
30. Program all the inputs and at the end press **ESC** repeatedly to exit from the menu.

```
INPUTS
EXPANSIONS
```

4.5 OUTPUTS PROGRAMMING

System MP504 manages max general use 8 outputs.
For more information and connections refer to *Installation manual*.

4.5.1 Outputs encoding

Every output has two codes: a physical one and a logical one. The two addresses are displayed according to the following diagram:

physical address : logical address

more in detail

ddX U**Y:**U**ZZ**

where:

- **dd** is the bus device type or the control panel (UC, EP)
- **X** is the progressive numbering of bus devices that contain the outputs,
- **Y** is the output numbering in bus X device.
- **ZZ** is the output logical address, composed by two digits, that the control panel assigns with a system progressive numbering when bus devices are acquired.

The physical address is useful for the installer during system installation and maintenance to the system.
The installer can change the logical address at any time.
System MP508 identifies the outputs on display with physical, logical address and name.
During acquisition phase of EP508 expansions, the control panel assigns automatically a progressive logical address, in sequence, to the expansions outputs.

4.5.2 Outputs types

With the programming procedure it is possible to change outputs physical characteristics.
Possible outputs types are:

- **Not used**: it disables the outputs.

- **Output N.L.**: at rest condition, if output is a relay output, the relay is de-energised;
  if output is an electric output, the output is open (lack of electric potential).

- **Output N.H.**: at rest condition, if output is a relay output, the relay is energised;
  if output is an electric output with positive reference, the output has 12 V level;
  if output is an electric output with negative reference, the output has 0 V level.

For a detailed analysis of relay and electric outputs behaviours, when they are set as N.L. or N.H., refer to Installation manual.

4.5.3 STAY – AWAY Assignation

The assignation of the inputs and outputs to STAY mode (partial arming) or AWAY mode (total arming) is provided for via the programming. This makes it possible for the burglar type customizations to provide for the switching from a related output, provided that it has the same assignation with the input that has generated the event.
This is useful if the system is equipped with two sirens connected to two Burglar outputs with different assignations, for example. an internal siren will be activated in case of an event detected on the perimeter protection with the system in STAY mode (partial arming) and an external siren will be activated only when the system is activated in AWAY mode (total arming).

Warning: all 24 hrs events (i.e. those which do not depend on the state of the system) generated by the opening of an input, will switch all customized outputs in the same way (e.g. Audible panic input - Audible panic output), regardless of their assignation. For these customizations, it is advised to leave the default programming (AWAY).

4.5.4 Outputs specialisations

Control panel and expansion outputs, both relay and electric, can be programmed to be activated after specific events.

For more details on single functions, see Chapter 2 *Alarms, Events and Signalling*.
Possible specialisations for outputs are described below.

BURGLAR
Burglar outputs are activated if an burglar alarm is generated.

PRE-ALARM
Pre-alarm outputs are activated if a Pre-alarm is generated.

TAMPER
Tamper outputs are activated if a Tamper alarm or a Wrong code alarm are generated.

BURGLAR/TAMPER
Burglar/Tamper outputs are armed if a Burglar alarm or a Tamper alarm or a False Code alarm is generated.

BURGLARY RESET
The Reset Burglar Alarm outputs are armed in a pulsed way for around 1 second after the STAY or AWAY arming (in line with the Programming of the output).

PANIC
Panic outputs are activated if a Panic alarm is generated.

HOLD-UP
Hold-up outputs are activated if a Hold-up alarm is generated.

FIRE
Fire outputs are activated if a Fire alarm is generated.

FIRE RESET
Fire reset outputs are activated if a fire reset input is opened.

EMERGENCY
Emergency outputs are activated if a Emergency alarm is generated.

TECHNOLOGICAL TYPE 1 (STATUS)
Technological type 1 outputs are activated if a Technological type 1 event is generated.

TECHNOLOGICAL TYPE 2 (PULSED)
Technological type 2 outputs are activated if a Technological type 2 event is generated.

TECHNOLOGICAL TYPE 3 (LATCH)
Technological type 3 outputs are activated if a Technological type 3 event is generated 3.

COMMANDABLE

activated if...	• an output arm command Is performed by the timig programmer
deactivated if...	• an output disarm command Is performed by the timing programmer

PULSE U COM.

activated if...	• an output arm command Is performed by the timig programmer
Is held...	• 1 second

PHONE FAILURE
Phone failure outputs are activated if a phone failure alarm is detected on PSTN or LAN line.

SYSTEM FAILURE
System failure outputs are activated if a system failure alarm is generated.

LACK OF POWER
Lack of power outputs are activated if a lack of power event is detected.

SYSTEM STATUS

activated if...	• the STAY or AWAY modes are armed (depending on the programming)
deactivated if...	• the STAY or AWAY modes are disarmed (depending on the programming)

AND TC (AWAY assigned)

activated if...	• System armed in AWAY mode.
deactivated if...	• System disarmed or armed in STAY mode

AND TC (STAY assigned)

activated if...	• System armed in AWAY or STAY mode.
deactivated if...	• System disarmed

OR TC (AWAY or STAY assigned)

activated if...	• System armed in AWAY or STAY mode.
deactivated if...	• System disarmed

HOW TO USE TC OUTPUTS
A TC (Trigger Control) output is used to control detectors, sirens and other signalling device, for example by putting them on standby and is conditioned by the STAY and AWAY mode status.

Warning: It is recommended to program the TC output as NH (default) and with the Jumper polarization on the "+" in such a way that when idle, it provides a high level (+12 V), this is a condition that places Elkron detectors on stand-by (block on the S Input).

BUZZER

activated ...	• it follows the activation of the system part related to the output (STAY or AWAY assignation). • in slow intermittent mode during associated Exit time, • in fast intermittent mode during associated Entry time
Is held...	• For associated Entry/Exit time

GONG

activated if...	• an input is opened to which the Gong ancillary function has been enabled, assigned to the same output mode.
Is held...	• 1 second
is signalled...	• By the keypads buzzer (if programmed)

4.5.5 Output programming

To program an output follow the instructions below:

1. Enter on keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "PROGRAMMING" appears on the display.

```
Us00: INSTALLER
PROGRAMMING
```

4. Press **OK** key to confirm.

```
PROGRAMMING
PARTITIONS
```

5. Press ▼ key until "OUTPUTS" appears

```
PROGRAMMING
OUTPUTS
```

```
OUTPUTS
CONTROL PANEL
```

6. Press **OK** key to confirm. Select with the ▼ key if programming the control panel outputs or those of any expansion configured

```
CONTROL PANEL
UC.U1: U01
```

7. Press **OK** key to confirm.
   Select with ▼ key the desired output.

```
UC.U1: U01
LOGIC NUMBER
```

8. Press **OK** key to confirm.

```
LOGIC NUMBER
U01 UC-U1
```

9. Press the **OK** key to display the output logic number, and modify it if necessary.

```
UC.U1: U01
OUTPUT TYPE
```

10. Press **OK** key and then ▼ until "OUTPUT TYPE" appears.
    Press the **OK** key to display the list of available output types (N.L. – N.H. – Not used). Select the desired type with ▼ and ▲keys and confirm it with **OK** key.
11. Press ▼ key until "ASSIGN" appears.

```
UC.U1: U01
ASSIGN
```

12. Press **OK** key to confirm. The current assignation will appear: STAY or AWAY, identified by the bold box and with the blinking cursor superimposed.
13. All outputs must be assigned to STAY or AWAY mode. They cannot be assigned to no mode or both modes simultaneously. This automatically brings up a menu that offers a forced choice. If you want to confirm the current situation, press the **OK** key. If you change the assignation (e.g. from STAY to AWAY from or vice versa), move the cursor (blinking bold box) using the ◄ or ► keys. The display will present the changed situation. Select the cursor position by using the ▼ or ▲ keys.

```
STAY
■□
```

```
AWAY
□■
```

14. Press the **OK** key to confirm the assignation choice. "ASSIGN" appears on the display.
15. Press ▼ key until "CUSTOMIZE" appears.

```
UC.U1: U01
CUSTOMIZE
```

16. Press **OK** key to display the configuration of. available outputs. Select desired configuration with▼ and ▲ keys and confirm it with **OK** key.
17. Press▼ key until "NAME" appears on the display.

```
UC.U1: U01
NAME
```

18. Press **OK** key to confirm.
    Give the output a descriptive name, by using the keypad (for further information see Paragraph 4.1.1).

```
NAME
U01:...
```

19. Press **OK** key to confirm. "NAME" appears again.

```
UC.U1: U01
NAME
```

20. Repeatedly press the **ESC** key to return to a higher level.

4.6 KEYPADS PROGRAMMING

Note: The keypads are assigned exclusively to the AWAY mode, to ensure full operability throughout the system.

To program a keypad follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "PROGRAMMING" appears on the display.

```
Us00: INSTALLER
PROGRAMMING
```

4. Press **OK** key to confirm.

```
PROGRAMMING
PARTITIONS
```

5. Press ▼ key until "KEYPADS" appears.

```
PROGRAMMING
KEYPADS
```

6. Press **OK** key to confirm.
7. Press ▼ and ▲ keys to select the desired keypad.

```
KEYPADS
KP01:KP 01
```

8. Press **OK** key to confirm.
9. Press ▼ key until "GONG FUNCTION" appears. Press **OK** key and with ▼ and ▲ keys choose if gong audio signal emitted by the keypad buzzer is enabled or disabled by confirming selection with **OK** key**.**

```
KP01:KP 01
GONG FUNCTION
```

10. Press the ▼ key, until "SOUND TIME ENTRY" disappears from the display.
    Press the **OK** key and use the ▼ and ▲ keys to select if you want to enable or disable the sound time entry signal with the buzzer on the keypad, confirming the choice with the **OK** key.

```
KP01:KP 01
SOUND TIME EXIT
```

11. Press the ▼ key, until "SOUND TIME EXIT" disappears from the display.
12. Press the **OK** key and use the ▼ and ▲ keys to select if you want to enable or disable the sound time exit signal with the buzzer on the keypad, confirming the choice with the **OK** key.

```
KP01:KP 01
SOUND TIME ENTRY
```

13. Press ▼ key until "NAME" appears.

```
KP01:KP 01
NAME
```

14. Select with **OK** key.
    Give the keypad a descriptive name, by following the information in paragraph 4.1.1.

```
NAME
KP01:KP 01
```

15. Press key ▼ until "FUNCTION KEYS" appears.
16. Press **OK** key and use keys ▼ and ▲ to enable or disable function keys "Fire", "Silent panic" and "Emergency" (see § 8.1.7 and 8.2.7), confirming choices by **OK** key.

```
KP01:KP 01
FUNCTION KEYS
```

17. Program the other keypads by following the same procedure from step 7; otherwise, press **ESC** repeatedly to exit from the menu.

```
FUNCTION KEYS
FIRE ALARM
```

4.7 READERS PROGRAMMING

ASSOCIATION TO PARTITIONS
Note: The key readers are assigned exclusively to the AWAY mode, to ensure full operability throughout the system.

The MP504TG assigns the LEDs 1 and 2 rigidly to the type of arming chosen, that is, if partially armed (STAY), LED 1 (top left) is turned on, but if totally armed (AWAY) LEDs 1 and 2 are turned on.
For further information see section 8.3.

To program an electronic or proximity key reader, access, from Technician menu « PROGRAMMING » / « READERS ».
Then select the number of reader to be programmed.
Reader submenu is then accessed where there can be configured:

- **Name**: it is possible to give a descriptive name of up to 24 characters long to the key reader (see § 4.1.1).

4.8 ADVANCED PROGRAMMING

4.8.1 Remote management system code setting

To set the system code used for remote management with Hi-Connect software, follow the instructions below:
1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “PROGRAMMING” appears on the display.

4. Press **OK** key to confirm.

5. Press ▼ key until “ADVANCED” appears.

6. Press **OK** key to confirm.
   “SYSTEM CODE” appears.

7. Press **OK** key to confirm. The system code appears. Enter the new code, with 8 digits.
8. Press **OK** key to confirm the code and then **ESC** key repeatedly to exit from the menu.

4.9 SYSTEM GENERAL PARAMETERS - TIMING

The system general parameters that can be configured are the following:

- **Burglar / Tamper/ Panic time**: it is the activation time of alarm outputs (for example the siren sound time) for burglar, tamper and panic alarms. It is possible to select: 30, 60, 90, 180 seconds and 9 minutes.
- **Pre-alarm time**: it is the activation time of pre-alarm outputs (for example siren sound time). It is possible to select: 30, 60, 90, 180 seconds and 9 minutes.
- **Emergency alarm time**: it is the activation time of outputs (for example siren sound time) for emergency alarms. It is possible to select: 30, 60, 90, 180 seconds and 9 minutes.
- **Alarms count**: it is the allowed number of alarm repetitions, also for new alarms; "no count" means that alarm signalling will be generated at every new event. The values that can be selected are: DISABLED, 2, 4, 6 and 8.
  Alarm count is reset at each system activation and at midnight (8.00).
- **Lack of power time**: it is time that must elapse without mains before the Lack of power event is generated. Times that can be selected are: 1, 2 and 4 hours.

To change system general parameters follow the instructions below:

1. Enter on keypad the Installer code (default 0000) and press OK key.
2. Press **MENU** key.
3. Press ▼ key until "PARAMETERS" appears on the display.

```
Ut00: INSTALLER
PARAMETERS
```

4. Press **OK** key to confirm.

```
PARAMETERS
T BURGLAR ALARM
```

5. Press ▼ key until the parameter to be changed appears and confirm with **OK** key.

```
T BURGLAR ALARM
30s
```

6. Change the value by using ▼ and ▲ keys. Press **OK** key to confirm the new value.

```
PARAMETERS
T BURGLAR ALARM
```

7. Change another parameter, by following the same procedure from point 4, or press **ESC** key repeatedly to exit from the menu.

4.10 COMMUNICATOR

Warning: information contained in this chapter assumes that control panel MP504TG is connected to at least one PSTN telephone line or to an ADSL connection through interface Ethernet (LAN) – see Installation Manual at paragraph System Connection Capability.

4.10.1 Telephone numbers

MP504TG control panel communicator can store up to 4 telephone numbers and/or IP addresses, each number can contain up to 28 digits or pauses, in any configuration.
Each pause lasts 2 seconds; for longer times, put several pauses in sequence. Pauses are entered with ▼ key and are indicated with a "P" in the display.
It is also possible to choose which telephone network (channel) will use the communicator for external connections: the urban phone line (PSTN) or via ADSL (LAN). The choice is of course possible only if the lines are available (PSTN phone line connected, Ethernet interface connected and configured).

ENTERING IP ADDRESSES

In calls on LAN channel, telephone number corresponds to the fixed IP address of remote PC provided with Hi-Connect.
To enter IP address, following syntax has to be observed:

nnn.nnn.nnn.nnn:ppppp

where: the 12 digits ***n***, separated by a dot in 3-digit groups, correspond to IP address
the 5 digits ***p*** correspond to port address
dots "**.**" And colon "**:**" can be entered by repeatedly and rapidly pressing key 1.

For more information refer to Ethernet interface and Hi-Connect SW Instruction Manual.

4.10.2 Telephone number storing

To store a telephone number follow the instructions below:

1. Enter on the keypad the Master code (default 1111), or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TELEPHONE DIALER” appears on the display.

```
Us01: MASTER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press **OK** key to confirm.

```
PHONE NUMBERS
TEL.NUMBER
```

6. Press **OK** key to confirm.

```
TEL.NUMBER
T01:
```

7. Select with ▲ and ▼ keys the memory location to be used and confirm selection with **OK** key. The display cursor blinks.

```
TEL.NUMBER
T01:■
```

8. Enter the telephone number. To rectify a digit, position the cursor on it using keys ◄ and ► and overwrite it. To delete the number, press **ESC** key. Press **OK** key to store entered number.
9. If you have to store another telephone number, select with ▲ and ▼ keys the memory location to be used and confirm selection with **OK** key. Then repeat step 8.
10. Press **ESC** key to go back to the upper level of the menu.
11. Press ▼ key until “PHONE LINE” appears on the display.

```
PHONE NUMBERS
PHONE LINE
```

12. Press **OK** key to confirm.

```
PHONE LINE
T01:xxxxxxxx
```

13. Select with ▲ and ▼ keys the telephone number to be configured and confirm the selection with **OK** key.

```
T01:xxxxxxxx
SELECT LINE
```

14. Press **OK** key to confirm.
15. Select with ▲ and ▼ keys if the telephone number must be associated to PSTN network or to LAN network (it is possible only if in the control panel is installed the LAN module interface). This programming procedure specifies on which channel (PSTN or LAN) If both networks are enabled, the network associated here will be the master “channel”.

```
SELECT LINE
PSTN LINE
```

    The IP addresses are assigned to the LAN network. The lines assigned to the single number must be pre-emptively enabled (see § 4.10.18 Enabling phone lines)
    If a telephone number is associated to a disabled network, no calls will be sent to that number. Confirm selection with **OK** key.
16. Press **ESC** key to go back to the upper level of the menu. If another number must be associated, repeat from step 13.
17. Press **ESC** repeatedly to exit from the menu.

4.10.3 Telephone number change

To change a stored telephone number follow the instructions below:

1. Enter on the keypad the Master code or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TELEPHONE DIALER” appears on the display.

```
Us01: MASTER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press **OK** key to confirm.

```
PHONE NUMBERS
TEL.NUMBER
```

6. Press **OK** key to confirm.

```
TEL.NUMBER
T01:xxxxxx
```

7. Select with ▲ and ▼ keys the telephone number to be changed and confirm the selection with **OK** key. The display cursor blinks.
8. Press **ESC** key to delete the number and enter the new telephone number. To rectify a digit, position the cursor on it using keys ◄ and ► and overwrite it. Press **OK** key to store entered number.
9. Press **ESC** key repeatedly to exit from the menu.

```
TEL.NUMBER
T01:■xxxxx
```

4.10.4 Telephone number deleting

To delete the stored telephone number follow the instructions below:

1. Enter on the keypad the Master code (default 1111), or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TELEPHONE DIALER” appears on the display.

```
Ut01: MASTER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press **OK** key to confirm.

```
PHONE NUMBERS
TEL.NUMBER
```

6. Press **OK** key to confirm.

```
TEL.NUMBER
T01:xxxxxx
```

7. Select with ▲ and ▼ keys the telephone number to be changed and confirm the selection with **OK** key. The display cursor blinks.
8. Press **ESC** key to delete the number. Press **OK** key to confirm deleting.
9. Press **ESC** key repeatedly to exit from the menu.

```
TEL.NUMBER
T01:■xxxxx
```

4.10.5 Vocal messages

In the presence of vocal synthesis module (SV504) the control panel is capable of sending appropriate vocal messages via the telephone communicator following alarm, failure, status change and technological events. All vocal messages must be recorded by logging on to the appropriate menu with the Installer code. To record / play, a special headset with a microphone is used, which is to be connected directly to the vocal synthesis card. Each vocal call begins with the base message, i.e. the control panel presentation of the duration of 10" followed by the specific message of each event, which last 5" each.
It is necessary for the installer to record all foreseen messages because the memory of the SV504 vocal synthesis memory is initially empty.

Example:
Burglar event detected from any input.
In this case, the communicator will send to the programmed phone numbers with vocal send type and with the burglar event enabled, the following message:

BASE MESSAGE (10”)	EVENT MESSAGE (5”)
Residential complex “Pink Port ” apartment 5	BURGLAR

The following table shows all recordable vocal messages for the foreseen events:

Event / alarm	i.e. recorded messagge	Generated for
Burglar alarm	*Burglar alarm*	opening burglar input
Tamper alarm	*System tamper*	tamper device (Tamper, SAB or lack of communication)
		imbalance of double bal. input, tamper Input opening
Panic	*Panic*	
Silent panic		silent panic input opening
		keypad function key pressed
Hold-up alarm	*Attack in progress*	
		hold-up code entered
Fire alarm	*Fire alarm*	fire input opening
		keypad function key pressed
Emergency Alarm	*Emergency request*	emergency input opening
		keypad function key pressed
Technological event type	*Technological service*	technological inputs 1 – 2 – 3 opening
PSTN telephone line Failure alarm (*)	*System failure*	fault detected on PSTN telephone line
LAN network failure alarm (*)	*System failure*	abnormality detection on the LAN network
System failure alarm (*)	*System failure*	abnormality detection on the system
Continued mains voltage absence alarm (*)	*Mains voltage failure*	the mains voltage in the control panel is off for a longer time than the programmed "Lack of power time”
Battery low alarm	*Battery failure*	control panel battery low or missing
Arming	*Arming executed*	STAY or AWAY arming
Disarming	*Disarming executed*	STAY or AWAY disarming

(*) The recordable vocal message for failure events is unique and valid for PSTN, LAN failure, System failure. Therefore record an appropriate vocal message that can be valid for the three failures indicated.

4.10.6 Vocal messages listening

Warning: to play the vocal messages, it is necessary to use the headset with a microphone, which is to be connected directly to the SV504 vocal synthesis card (installer only).

To listen to vocal messages follow the instructions below:

1. Enter on the keypad the Master code (default 1111), or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TELEPHONE DIALER” appears on the display.
4. Press **OK** key to confirm.

```
Us01: MASTER
TELEPHONE DIALER
```

5. Press ▼ key until “VOCAL MESSAGES” appears. Press **OK** key to confirm.

```
TELEPHONE DIALER
VOCAL MESSAGES
```

6. Press **OK** key to confirm. “MESSAGE LIST” appears.

```
VOCAL MESSAGES
MESSAGE LIST
```

7. Press **OK** key to confirm. Select message to be listened by key▼.

```
MESSAGE LIST
BASE MESSAGE
```

8. Press **OK** key to confirm. “PLAY” appears.

```
BASE MESSAGE
PLAY
```

9. Press **OK** key to confirm. “PLAY IN PROGRESS...” appears and you will able to listen to the recorded message.

```
PLAY
IN PROGRESS...
```

10. After listening, press **ESC** key repeatedly to exit from the menu.

4.10.7 Vocal messages recording

Warning: to record the vocal messages, it is necessary to use the headset with a microphone, which is to be connected directly to the vocal synthesis card (installer only).

To record vocal messages follow the instructions below:

1. Enter on the keypad the Installer code, and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TELEPHONE DIALER” appears on the display.

```
Us00: INSTALLER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until “VOCAL MESSAGES” appears. Press **OK** key to confirm.

```
TELEPHONE DIALER
VOCAL MESSAGES
```

6. Press **OK** key to confirm. “MESSAGE LIST” appears.

```
VOCAL MESSAGES
MESSAGE LIST
```

7. Press **OK** key to confirm. Select message to be listened by key▼.

```
MESSAGE LIST
BASE MESSAGE
```

8. Press **OK** key to confirm. “PLAY” appears.

```
BASE MESSAGE
PLAY
```

9. Press ▼ key until “RECORD” appears. Press **OK** key to confirm.

```
BASE MESSAGE
RECORD
```

10. "RECORDING IN PROGRESS..." appears and it is possible to record the selected message by speaking at a reasonable distance from the microphone of the headset included in the synthesis. The base message maximum duration is 10", for the other messages it is 5" and stops automatically when the maximum time limit expires (not able to be abbreviated).

```
RECORD
IN PROGRESS...
```

Apart from the base message, the recordable messages for the events are:
Burglar – Technological – Fire Alarm – Audible panic – Medical emergency – Hold-up – Arming – Disarming – Tamper – Lack of power – Low Battery - System failure.

11. Listen again to the just recorded message, by selecting "PLAY" with ▼ key and confirm with **OK** key.
12. If the recording is satisfactory, complete the recordings for all messages available in the menu by repeating this process for each of them, otherwise you can redo each recording by repeating step 9. When you have finished, exit the menu by pressing the **ESC** key several times.

4.10.8 Alarm sending

The communicator can send the programmed events in 3 different types:

- **Vocal**: the communicator sends alarms by voice messages customized by the user.
- **Numerical**: the communicator sends alarms by numerical codes. This mode is used for connection to alarm reception centres: supported protocols are IDP, ADF, C200B.
- **Modem**: the communicator exchanges information (sending and receiving) with a PC provided with Hi-Connect software.

Depending on the type of alarm to be sent, it is possible to choose between one or more types of communication. The following table shows the possibilities.

Event	Sending priority	Type of Communication		
		vocal	numerical	Modem
Burglar	1	■	■	■
Pre-alarm	1		■	■
Technological type 1 alarm	7	■	■	■
Technological type 2 alarm	7	■	■	■
Technological type 3 alarm	7	■	■	■
Fire alarm	5	■	■	■
Panic	0	■	■	■
Silent panic	0	■	■	■
Medical emerg.	4	■	■	■
Hold up-alarm	0	■	■	■
Arming/Disarming	1	■	■	■
Maintenance	8		■	■
Excluded Inputs				
Tamper	8		■	■
Lack of power	8		■	■
Low battery	3	■	■	■
System failure	6	■	■	■
Wrong code	3		■	■

If more than one alarm is generated at the same time, it will be signalled following the priority (0= maximum priority, 8=minimum priority).

For each phone number, it is then possible to decide which alarm messages to send.

To program the sending type and enable the respective events, do the following:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "TELEPHONE DIALER" appears on the display.

```
Us00: INSTALLER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until "SENDING MODE" appears.

```
TELEPHONE DIALER
SENDING MODE
```

6. Press **OK** key to confirm.

```
SENDING MODE
T01:xxxxxx
```

7. Select with ▼ and ▲ keys the telephone number to which the alarm sending is associated and press **OK** key to confirm.
8. Select with ▼ and ▲ keys the sending mode (vocal, IDP, ADF, modem , SMS, C200B, C200B P.P.) and confirm the selection with **OK** key.

```
T01:xxxxxx
VOCAL
```

9. Select with ▼ and ▲ keys the type of event to be sent or not (burglar, technological, fire, panic etc.) and confirm the selection with **OK** key.

```
VOCAL MESSAGES
BURGLAR
```

10. Select with ▼ and ▲ keys if the selected alarm must be sent or not (to the telephone number selected at step 7) and confirm the selection with **OK** key.
11. Follow the same procedure from step 9 to associate to the telephone number other alarm types (with sending mode selected at step 8).
12. Press **ESC** key to go to the upper level of the menu.
13. Follow the same procedure from step 6 to configure the alarm message sending mode also for the other stored telephone numbers.
14. Press **ESC** key repeatedly to exit from the menu.

```
BURGLAR
SEND
```

```
TELEPHONE DIALER
SENDING MODE
```

4.10.9 Sequence of alarm message sending and block of calls

When one or more alarm events occur, the communicator:

1) In case of different and simultaneous events identifies the event with the highest priority.
2) calls the telephone number configured for that alarm event.
3) For each telephone number and sending mode, the communicator performs up to 3 call attempts
4) It is possible to block the vocal calls cycle to any successive numbers by entering the code 12 in DTMF from any telephone that has answered, played the message and received the dial tone to the block code.
   The vocal calls for burglar events can also be interrupted by disarming the system. This service can be useful in case of false alarms, for example. Keep in mind that the call immediately started on the first available phone number cannot be interrupted and continues on that number until the attempts have ended. No further calls will be made on any successive numbers.

WARNING! If an answering machine answers a telephone number configured for voice sending, and the answer check is enabled (both for fixed telephone and mobile), the communicator can receive an “answer” that will be considered as a successfully delivered alarm message and so no other call attempts will be tried. In this case, if alarm sending mode is voice only, with a single telephone number, it is possible that the receiver does not receive the message or listens to it too late (the same situation can occur, even if seldom, if there are several telephone numbers and each one has an answering machine). In this case it is suggested to disable the answer check.

4.10.10 PSTN parameters

The communicator allows to configure the following parameters of PSTN connection:

- **Standard Nation**: it is possible to select the nation where the MP504TG control panel is installed. The technical parameters of the connection to the PSTN telephone line will be set automatically.
  Available countries are: Italy – France – Germany – Czech Republic – Poland – Spain – Portugal – Greece – Great Britain.
- **PABX connection**: if the communicator is not connected directly to the outside telephone line, but is connected to a switchboard (PABX), it is possible select the number (from 0 to 9) that the communicator automatically dials to use the outside line.
- **Tone line check**: it is possible to choose if the communicator will dial telephone numbers only when there is the dial tone (tones line check enabled) or even if there is no dial tone (tones line check disabled).
- **Answer control**: : it is possible to choose between the following options:
  - **enabled**: the vocal message is sent in line only after the phone number dialled has answered, the vocal telephone number that has answered is not called again.
  - **disabled**: the voice message is sent immediately after the telephone number dialling, without waiting for the answer. The alarm message is repeated for 3 times. Besides in this condition the control panel carries out 3 vocal calls to every number, regardless of its answer. However, the call sequence can be stopped with the DTMF code 12, as described in § 4.10.9

WARNING! If “ PABX connection” programming is enabled, it is strongly encouraged to disable the PSTN line test (see § 4.10.11)

To configure PSTN parameters follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.

```
Us00: INSTALLER
TELEPHONE DIALER
```

3. Press ▼ key until "TELEPHONE DIALER" appears on the display.
4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until "PSTN PARAMETERS" appears.

```
TELEPHONE DIALER
PSTN PARAMETERS
```

6. Press **OK** key to confirm.

```
PSTN PARAMETERS
NATION
```

7. Press the **OK** key. Select the nation in which the MP504TG control panel is installed with the ▼ and ▲ keys, and press the **OK** key to confirm.

```
NATION
ITALY
```

8. Press ▼ key until "PABX CONNECTION" appears.

```
PSTN PARAMETERS
PABX CONNECTION
```

9. Press the **OK** key. With the ▼ and ▲ keys, select between DISABLED (the communicator is directly connected to the urban telephone line or NUMBER:0, NUMBER:1, etc. (number to use the outside line via the switchboard) and confirm the choice with **OK.**

```
PABX CONNECTION
DISABLE
```

10. Press ▼ key until "TONE LINE CHECK" appears.

```
PSTN PARAMETERS
TONE LINE CHECK
```

11. Press **OK** key. Select with ▼ and ▲ keys if the tones control is enabled or disabled and confirm the selection with **OK** key.

```
TONE LINE CHECK
DISABLE
```

12. Press ▼ key until "ANSWER CONTROL." appears.

```
PSTN PARAMETERS
ANSWER CONTROL
```

13. Press **OK** key. Select with ▼ and ▲ keys if the communicator must enable or disable the answer check and confirm the selection with **OK** key.
14. Press **ESC** key repeatedly to exit from the menu.

```
ANSWER CONTROL
DISABLE
```

4.10.11 PSTN line test

MP504TG control panel can control periodically the trunk line, by verifying the dial tone, in order to check if connection is full operating; if it is not operating, it generates a “Telephone Failure” event. This event is generated after 3 unsuccessful consecutive tests.

Note: if PSTN line test is enabled, it is encouraged to enable also Tones line check.

Warning: if the control panel, as suggested, is the first device of the telephone line, every line control generates the interruption of telephone calls, if present, because for each test the control panel seizes the trunk line for some seconds.

For PSTN line test it is possible to select:

- **Disabled**: no telephone line check (suggested selection if MP504TG control panel is connected to a PABX extension line).
- **24h**: telephone line control is always performed, every 15 minutes, also if the system is disarmed.
- **System ON**: presence check of the telephone line is carried out every 15 minutes, only if the system is armed in AWAY mode

To configure the PSTN line test follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TELEPHONE DIALER” appears on the display.

```
Us00: INSTALLER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until “PSTN LINE TEST” appears.

```
TELEPHONE DIALER
PSTN LINE TEST
```

6. Press the **OK** key to confirm. Select with the ▲ and ▼ keys whether to disarm the test or to always perform it (24 H) or only when the system is armed in AWAY mode (SYSTEM ON) and confirm the choice with **OK.**
7. Press **ESC** key repeatedly to exit from the menu.

```
PSTN LINE TEST
DISABLE
```

4.10.12 Periodic communication test

MP504TG control panel can automatically call, at fixed time intervals, remote management and alarm reception centres, if they need a periodical confirmation for system correct operation.
It is possible to select the time interval between two calls among 1, 4, 8, 12, 24, 48 (=2 days), 72 (=3 days), 96 (=4 days), 120 (=5 days), 144 (=6 days) and 168 (=1 week) hours.
The time interval count will start at synchronization hour programmed by the menu.

To configure and activate the cyclic call follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "TELEPHONE DIALER" appears on the display.

```
Ut00: INSTALLER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until "PERIOD COMM TEST" appears.

```
TELEPHONE DIALER
PERIOD COMM TEST
```

6. Press **OK** key to confirm. Select with the ▲ and ▼ keys whether to disable the test whether to always perform it (24 H) or only when the system is armed in AWAY mode (System ON) and confirm the choice with OK.

```
PERIOD COMM TEST
DISABLE
```

7. If DISABLE has been selected, go to step 13; otherwise "ASSIGN PHONE N." appears.

```
PERIOD COMM TEST
ASSIGN PHONE N.
```

8. Press **OK** key to confirm. Select with ▲ and ▼ keys the telephone number to which the periodi comm. test is sent and confirm the selection with **OK** key.

```
ASSIGN PHONE N.
T01:xxxxxxxx
```

9. Press ▼ key until "SET HOUR" appears on the display.

```
PERIOD COMM TEST
SET HOUR
```

10. Enter the time (hour and minutes) of the first call; the programmed time indicates the start of the interval between a call and the next one. Confirm the entered time with **OK** key.

```
SET HOUR
        12.00
```

11. Press ▼ key until "INTERVAL" appears on the display.

```
PERIOD COMM TEST
INTERVAL
```

12. Press **OK** key to confirm. Select with ▲ and ▼ keys the interval time, in hours, between the cyclic calls and confirm the selection with OK key.

```
INTERVAL
1h
```

13. Press **ESC** key repeatedly to exit from the menu.

4.10.13 Remote control backup

This function manages the calls for any event sent to the telephone numbers programmed as Numerical and Modem. If Backup function is enabled, if the first Numerical number and the first Modem number answers the call, no other calls will be sent for that event to other numbers programmed in the same mode. If the first call is not successful, the control panel sends the call to the next number and so on, up to correct sending/reception of the event to be signalled, or up to the end of attempts.
A call is defined as successful when it has received the acknowledgment (correct sending confirmation) by the reception centre.
By disabling the Backup function, the communicator performs anyway calls to all the numbers programmed as numerical or modem.

To enable alarm reception Backup function follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "TELEPHONE DIALER" appears on the display.

```
Us00: INSTALLER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until "REM CTRL BACKUP" appears.

```
TELEPHONE DIALER
REM CTRL BACKUP
```

6. Press **OK** key to confirm. Select with ▲ and ▼ keys if the call is disabled or enabled.
7. Press **ESC** key repeatedly to exit from the menu.

```
REM CTRL BACKUP
ENABLE
```

4.10.14 Answer machine

To ensure that the MP504TG control panel responds to incoming phone calls on the PSTN line, it is necessary to enable the answer machine. The enabling of the answer machine is necessary for using DTMF commands from the remote phone, or if the control panel is intended to answer the incoming call via the modem coming from the installer that must be connected via the Hi-Connect remote management software. When you enable the answer to incoming calls, it is necessary to also specify after how many rings it will answer the communicator (for compatibility with other equipment, for example answering machines).

To enable the Answer machine function follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "TELEPHONE DIALER" appears on the display.

```
Us00: INSTALLER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until "ADVANCED" appears. Press **OK** key to confirm.

```
TELEPHONE DIALER
ADVANCED
```

6. "ANSWER MACHINE" appears. Press **OK** key to confirm.

```
ADVANCED
ANSWER MACHINE
```

7. Press **OK** key to confirm. Select PSTN with ▲ and ▼ keys and press **OK** key to confirm.

```
ANSWER MACHINE
PSTN
```

8. Select with ▲ and ▼ keys if the PSTN responder is enabled or disabled; in case of 'enabling' will appear the rings number: 2 RING, 4 RING, 8 RING. Press **OK** key to confirm the selection.

```
PSTN
DISABLED
```

9. Press **ESC** key repeatedly to exit from the menu.

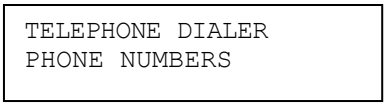
4.10.15 Remote control code

When MP504TG control panel is connected to an Alarm reception centre, the control panel must communicate the subscription code provided by the centre.

To store the subscriber code follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "TELEPHONE DIALER" appears on the display.

4. Press **OK** key to confirm.



5. Press ▼ key until "ADVANCED" appears. Press **OK** key to confirm.

6. Press ▼ key until "SUBSCRIBER CODE" appears. Press **OK** key to confirm.

7. Enter the subscriber code (8 digits) and press **OK** key to confirm. To change an unwanted digit move with ◄ key and overwrite it.

8. Press **ESC** key repeatedly to exit from the menu.

4.10.16 Return Call

If desired, the installer can enable Call Back for remote management operations. In this way, it is possible to connect to the control panel remotely via a PC with Hi-Connect software, call the control panel and immediately call again from this in an automatic mode. In doing so, the cost of the telephone connection is borne by user of the control panel.
For Call Back it is possible to choose:

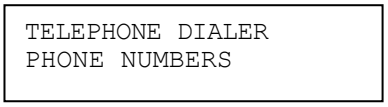
- **Disabled**: the control panel, after receiving the call, continues with the connection procedure with Hi-Connect; the telephone call cost is charged to the installer or to the remote management centre.
- **Type A**: the control panel after answering the call, withdraws from the telephone line and then re-calls the first Modem type number stored between those programmed.
- **Type B**: the control panel after answering the call, withdraws from the telephone line and then re-calls the specific phone number sent by Hi-Connect during the previous connection; the cost of the telephone call is borne by the owner of the control panel.

If configuration Type A is used, an additional security feature for the connection is implemented, because the link will be possible only with a specific telephone number programmed during installation.

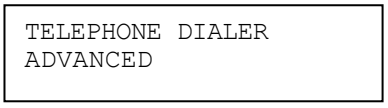
To set the Call Back follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "TELEPHONE DIALER" appears on the display.

4. Press **OK** key to confirm.



5. Press ▼ key until "ADVANCED" appears on the display. Press **OK** key to confirm.



6. Press ▼ key until "RETURN CALL" appears on the display. Press **OK** key to confirm.

7. Select with ▼ and ▲ keys if the return call is disabled or enabled as type A or type B. Press **OK** key to confirm.

8. Press **ESC** key repeatedly to exit from the menu.

4.10.17 Call delay

In order to avoid false alarms, it is possible to delay the sending of vocal calls. In this case, the communicator, after the event that generates burglar alarm has occurred, wait for 30 seconds before starting the vocal calls. If, before the 30 seconds have elapsed, you enter the Master code or a user code or an enabled key, the vocal calls for burglar alarms are cancelled.

Warning: call delay does not affect the sending of numerical or modem calls, that will be sent as soon as the event occurs.

To set Call delay follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TELEPHONE DIALER” appears on the display.

```
Us00: INSTALLER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until “ADVANCED” appears. Press **OK** key to confirm.

```
TELEPHONE DIALER
ADVANCED
```

6. Press ▼ key until “CALL TIME DELAY” appears. Press **OK** key to confirm.

```
ADVANCED
CALL TIME DELAY
```

7. Select with ▼ and ▲ keys if the call delay is enabled or disabled and press **OK** key to confirm.

```
CALL TIME DELAY
ENABLE
```

8. Press **ESC** key repeatedly to exit from the menu.

4.10.18 Phone line enabling

In order to make or receive calls, as well as to have any LAN module (Ethernet interface) installed, it is necessary to enable the used phone lines. Each telephone line can be enabled separately. More than one line can be enabled.
To enable the telephone networks follow the instructions below:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TELEPHONE DIALER” appears on the display.

```
Us00: INSTALLER
TELEPHONE DIALER
```

4. Press **OK** key to confirm.

```
TELEPHONE DIALER
PHONE NUMBERS
```

5. Press ▼ key until “ADVANCED” appears. Press **OK** key to confirm.

```
TELEPHONE DIALER
ADVANCED
```

6. Press ▼ key until “PHONE LINE ENABL” appears. Press **OK** key to confirm.

```
ADVANCED
PHONE LINE ENABL
```

7. Press **OK** key to confirm.

```
PHONE LINE ENABL
PSTN LINE
```

8. Select with ▼ and ▲ keys if PSTN network is enabled or disabled and press **OK** key to confirm the selection.

```
PSTN LINE
ENABLE
```

9. Press ▼ key until “LAN NETWORK”. Press **OK** key to confirm.

```
PHONE LINE ENABL
LAN NETWORK
```

10. Select with ▼ and ▲ keys if LAN network is enabled or disabled and press **OK** key to confirm the selection .

```
LAN NETWORK
ENABLE
```

11. Press **ESC** key repeatedly to exit from the menu.

4.11 INSTALLER

4.11.1 Installer enabling

In order to operate on the system, the Installer must be enabled. For security reasons, the Installer enabling expires after inserting a user or Master code or a Key.

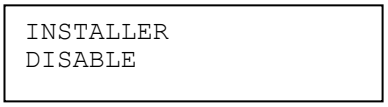
Note: at the first system power-on and after every reset, the Installer is automatically enabled.

To enable the Installer follow the instructions below:

1. Enter on the keypad the Master code (default 1111) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “ENABLE” appears on the display.

4. Press **OK** key to confirm.

5. Press **OK** key to confirm.



6. Press ▼ key to select ENABLE and confirm with **OK** key**.**

7. Press **ESC** key repeatedly to exit from the menu.

4.11.2 Installer disabling

The installer is automatically disabled when a user or master code is entered key, or after inserting a key.

4.11.3 Code change

The Installer can freely change his access code, as described in the following procedure:

1. Enter on the keypad the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “SETTINGS” appears on the display. Press **OK** key to confirm.

4. Press ▼ key until “CHANGE CODE” appears and confirm with **OK** key.

5. “NEW” appears. Enter a new code (from 4 to 6 digits) and press **OK** key to confirm.

6. Enter gain the new code to confirm.
7. Press **ESC** key repeatedly to exit from the menu.

4.12 USERS

4.12.1 User enabling

In order to operate on the system, users must be enabled. According to factory settings all users are disabled.

To enable a user follow the instructions below:

1. Enter on the keypad the Master code (default 1111) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “ENABLE” appears on the display.

```
Us01: MASTER
ENABLE
```

4. Press **OK** key to confirm.

```
ENABLE
INSTALLER
```

5. Press ▼ key until “USER” appears and confirm with **OK** key.

```
ENABLE
USER
```

6. Select with ▲ and ▼ keys the user to be enabled confirm the selection with **OK** key.

```
USER
Us02:...
```

7. Press **OK** key**.**

```
Us02:...
ENABLE/DIS USER
```

8. Select with ▲ and ▼ keys ENABLE and confirm the selection with **OK** key.

```
ENABLE/DIS USER
ENABLE
```

9. Press **ESC** key to go to the upper level of the menu and follow the same procedure from step 6 for the other users to be enabled, or press **ESC** key repeatedly to exit from the menu.

```
USER
Us02:...
```

4.12.2 User disabling

The procedure to disable a user is similar to the user enabling procedure described in paragraph 4.12.1.*User enabling*. The only difference consists in selecting “DISABLE” at step 8.
When a user is disabled, his configuration and his parameters are not deleted; these data will be valid again as soon he will be enabled again. By entering a disabled user code, the access to the menu is forbidden, but this event is not considered by the counter that generates the wrong code alarm, where present.

4.12.3 Code change

Every user can freely change his access code. To change the code follow the instructions below:

1. Enter on the keypad the code of the user (included Master and Installer) that wants to change the code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “SETTINGS” appears on the display. Press **OK** key to confirm

```
Us02:...
SETTINGS
```

4. Press ▼ key until “CHANGE CODE” appears and confirm with **OK** key.

```
SETTINGS
CHANGE CODE
```

5. “NEW” appears. Enter a new code (from 4 to 6 digits) and press **OK** key to confirm.

```
CHANGE CODE
NEW:------
```

6. Enter again the new code to confirm.
7. Press **ESC** key repeatedly to exit from the menu.

```
CHANGE CODE
CONFIRM:------
```

4.12.4 User code reset

When a user has forgotten his code, it is possible to reset the code to default.

To reset a code to default follow the instructions below:

1. Enter on the keypad the Master code (default 1111) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "SETTINGS" appears on the display. Press **OK** key to confirm.

```
Us01:MASTER
SETTINGS
```

4. Press ▼ key until "USERS" appears and confirm with **OK** key.

```
SETTINGS
USERS
```

5. Press ▼ key until "DEFAULT CODE" appears and confirm with **OK** key.

```
USERS
CONFIGURE USER
```

6. Select with ▲ and ▼ keys the user to be configured and confirm the selection with **OK** key.

```
DEFAULT CODE
Us02:...
```

7. Confirm the selection with **OK** key**.**

```
Us02:...
ARE YOU SURE?
```

8. The code of the selected user is reset to default value. Press **ESC** key repeatedly to exit from the menu.

```
USERS
DEFAULT CODE
```

4.12.5 User a clear-text name

To give a user a clear-text name makes his identification easier during enabling, configuration and Event log reading operations.

To give a user a clear-text name follow the instructions below:

1. Enter on the keypad the Master code or Installer code or User code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "SETTINGS" appears on the display. Press **OK** key to confirm

```
Us01:MASTER
SETTINGS
```

4. Press ▼ key until "USERS" appears and confirm with **OK** key.

```
SETTINGS
USERS
```

5. "CONFIGURE USER" appears. Press again **OK**.

```
USERS
CONFIGURE USER
```

6. Select with ▲ and ▼ keys the user to be configured and confirm the selection with **OK** key.

```
CONFIGURE USER
Us02:...
```

7. Confirm the selection with **OK** key**.**

```
Us02:...
ASSIGN PARTITIONS
```

8. Press ▼ key until "NAME" appears and confirm with **OK** key.

```
NAME
Us02:...
```

9. Enter with the keypad the new name, up to 24 characters, and confirm with **OK** key. (for further information see paragraph 4.4.1).

```
Us02:Andrea
NAME
```

10. Press **ESC** key repeatedly to exit from the menu.

4.13 KEYS

Note: The keys are assigned exclusively to the AWAY mode, to ensure full operability throughout the system.

4.13.1 Key acquisition

The system can manage up to 24 electronic and proximity keys.

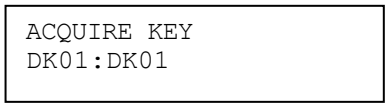
For electronic or proximity key acquisition by the system follow the instructions below:

1. Enter on the keypad the Master code or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "SETTINGS" appears on the display.
4. Press **OK** key to confirm.

5. Press ▼ key until "KEYS" appears.

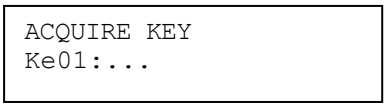
6. Press **OK** key to confirm.

7. Press again **OK** key. The readers list appears. Select with ▼ and ▲ keys the reader that will acquire the key and confirm with **OK** key.



8. The 4 front LEDs of the reader start blinking to indicate that it is ready to receive a key to be stored.

9. Insert the electronic key or bring near the transponder key. The reader LEDs stop blinking and turn on green steady. On the keypad display appears the address assigned to the key. Remove the acquired key.



10. To acquire other keys, insert or bring them near, according to the type, and wait until on the keypad display appears a new address. After acquisition of all the keys, press **ESC** key repeatedly to exit from the menu.

4.13.2 Key deleting

To delete an electronic or proximity key from the system follow the instructions below:

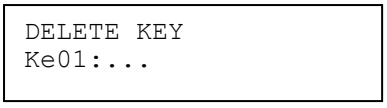
1. Enter on the keypad the Master code or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "SETTINGS" appears on the display.
4. Press **OK** key to confirm.

5. Press ▼ key until "DELETE KEY" appears. Press **OK** key to confirm.

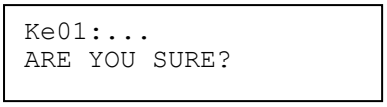
6. Press **OK** key to confirm.

7. Press ▼ key until "DELETE KEY" appears. Press **OK** key to confirm.

8. Select with ▼ key the key to be deleted and press **OK** key to confirm.



9. Press **OK** key to delete or **ESC** key to undo.



10. Delete the next key, by following the same procedure from step 8 or press **ESC** key repeatedly to exit from the menu.

4.13.3 Key configuration

A name can be programmed for each key, a name that is clear to easily identify the key events in the Event log and in the messages.

To name an electronic or proximity key, do the following:

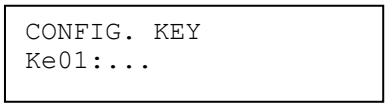
1. Enter on the keypad the Installer or Master code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "SETTINGS" appears on the display.
4. Press **OK** key to confirm.

5. Press ▼ key until "KEYS" appears.

6. Press **OK** key to confirm.

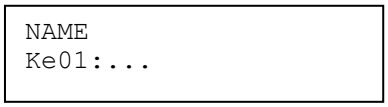
7. Press ▼ key until "CONFIG. KEY" appears. Press **OK** key to confirm.

8. Select with ▼ key the key to be configured and press **OK** key to confirm.



9. "NAME" appears, press **OK** key to confirm.

10. Give the key a descriptive name, with 24 characters max., and press **OK** key to confirm. (for further information see paragraph 4.4.1).
11. Configure another key, by following the same procedure from step 8, or press **ESC** key repeatedly to exit from the menu.



4.13.4 Key enabling

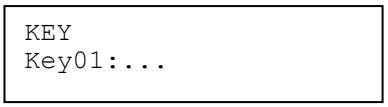
To use an electronic or proximity key it is necessary to enable it.
However, after acquisition keys are automatically enabled.

To enable a key follow the instructions below:

1. Enter on the keypad the Master code (default 1111) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "ENABLE" appears on the display.
4. Press **OK** key to confirm.

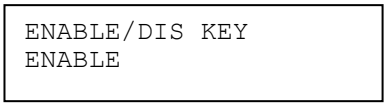
5. Press ▼ key until "KEY" appears and confirm with **OK** key.

6. Select with ▲ and ▼ keys the key to be enabled and confirm the selection with **OK** key.



7. Press **OK** key**.**

8. Select with ▲ and ▼ keys ENABLE and confirm the selection with **OK** key.



9. Press **ESC** key to go to the upper level of the menu and follow the same procedure from step 6 for other keys to be enabled, or press **ESC** key repeatedly to exit from the menu.

4.13.5 Key disabling

The procedure to disable a key is similar to the procedure used for enabling, described in paragraph 4.13.4 *Key enabling*. The only difference consists in selecting “DISABLE” at step 8.
When a key is disabled, its configuration and its parameters are not deleted; they will be valid again as soon it will be enabled again.

Enabling and disabling functions can be very useful, especially if combined with the time programmer to allow temporary entering to domestic helps or cleaners.

4.14 TIMING PROGRAMMER

4.14.1 Functioning principles

The timing programmer is used to automate repetitive operations, such as arming/disarming of the system or the commandable outputs. The timing programmer uses a week based cycle: the same commands repeat every week. Every day of the week can be freely configured as working, pre-holiday and holiday; each type can correspond up to 8 timed commands freely created by the user. It is possible to program several commands for the same hours.

The automatic arm command is signalled in advance by keypads (the buzzer rings and the timing programmer LED blinks) and by arm of the outputs programmed as arm warning, if present.
The advance of these signals is set by “WARNING TIME” parameter.
During the pre-arm it is possible to defer the system arm, by following the procedure described in paragraph 8.1.12 *Deferred automatic system arm*.

Available commands for the timing programmer are the following:

Command	Description	Notes and examples
System arming	Arm the programmed STAY or AWAY mode	
System disarming	Disarm the programmed STAY or AWAY modes	
Commandable output activation	It activates the commandable output	
Commandable output deactivation	It deactivates the commandable output	
Key or user code enabling	It enables a key or a code	Domestic help or office cleaners: by combining the two commands it is possible to allow the domestic help to stay at home or cleaners in office, only in given days and time.
Key or user code disabling	It disables a key or a code	

Warning: the time programmer does not manage midweek holidays (Christmas, St. Stephen's day, New Year's Day, Epiphany, Easter Monday, August holiday, etc.), that will be considered as the day of the week in which they occur.

The timing programming is always stored in the control panel and it is possible to enable or disable it, without deleting the stored configurations, by following the procedures described in paragraphs 8.1.13 *Timing programmer enabling* and 8.1.14 *Timing programmer disabling*.
The time programming status (enabled or disabled) is displayed in the keypad by the timing programmer LED [7].
Commands performed by the timing programmer are active until the opposite command is given (by the programmer or by a user with keypad or reader): in fact the programmer sends commands, but it does not check system or outputs state.

Example of operation
An office is open from Monday to Friday, from 9 a.m. to 6 p.m. Days from Monday to Friday have been programmed as working days, Saturday and Sunday as holidays. The first command set in the working day, at 8:55, is the burglar system disarming and the last, at 18:05, the burglar system arming; during holidays there are no commands.

In practice, with enabled timing programmer, the system is automatically armed at the end of every working day and it is disarmed in the morning of the following day. After arm on Saturday evening, it is not deactivated until Monday morning, because on Saturday and Sunday there are no disarm commands.

If it is necessary to enter in protected premises, a user can manually disarm the system with the keypad or the reader also on Saturday and Sunday. He must remember to arm again the system when he leaves the office, otherwise premises will be without any protection.

4.14.2 Programming procedure

Suggestion: before starting programming procedure, fill in the specific tables (see paragraph 10.15 *Timing programmer)*: your work will become easier.

Warning: for time programmer correct operation, control panel date and time must be correct (to change time and date see paragraph 4.3 Time/Date Setting – Summer Time).

To program the timing programmer follow the instructions below:

1. Enter on the keypad the Master or Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “SETTINGS” appears on the display.

```
Us00: INSTALLER
SETTINGS
```

4. Press **OK** key to confirm.

```
SETTINGS
EXCLUDE/INCLUDE
```

5. Press ▼ key until “TIMING PROGRAMMER” (P.O.) appears and confirm with **OK** key.

```
SETTINGS
P.O.
```

6. Press **OK** key to confirm.

```
P.O.
DAY TYPE
```

7. Press again **OK** key.

```
DAY TYPE
MONDAY
```

8. Press again **OK** key and select with ▼ and ▲ keys the day type (working, pre-holiday and holiday) to be assigned to the displayed day of the week. Confirm the selection with **OK** key.
9. Go to the next day with▼ key.
10. Follow the same procedure from step 8. When every day of the week has the type indication, go to step 11.
11. Press **ESC** key to go to the upper level of the menu.

```
MONDAY
WORKING DAY
```

12. Press ▼ key ; “COMMANDS TYPE” appears.

```
P.O.
COMMANDS TYPE
```

13. Press again **OK** key and select with ▼ and ▲ keys the day type (working, pre-holiday and holiday) to be configured.
    Confirm the selection with **OK** key.

```
COMMANDS TYPE
WORKING DAY
```

14. Press again OK key to select the command number, from 01 to 08.

```
WORKING DAY
COMMAND N:01
```

15. Press **OK** key to confirm. Enter with keys the time for the planned programmer actions. (midnight = 00:00) and confirm the entered time with **OK**.

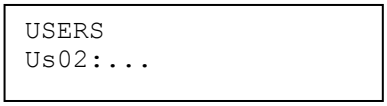
```
COMMAND N:01
COMMAND TYPE
```

16. Press ▼ key until “COMMAND TYPE” appears and confirm the selection with **OK** key.
17. Select among NO ACTION, ARM (ENABLE) and DISARM (DISABLE), and confirm the selection with **OK** key. With ARM (ENABLE) and DISARM (DISABLE) it is also necessary to select among SYSTEM , OUTPUTS, USERS, KEYS, by using ▼ and ▲ keys and confirm with **OK** key**.**

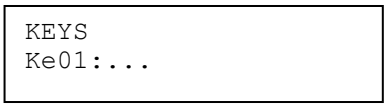
```
COMMAND TYPE
NO ACTION
```

18. According to the selection can appear:

    USERS: Select with ▼ and ▲ keys the user to be enabled/disabled and confirm the selection with **OK** key.



    KEYS: Select with ▼ and ▲ keys the key to be enabled/disabled and confirm the selection with **OK** key.



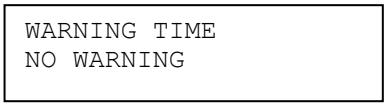
    SYSTEM: choose the STAY or AWAY mode to be armed / disarmed, by moving the cursor with the ◄ and ► keys, confirm the position of the cursor in the desired mode with the ▲ and ▼ keys and confirm with **OK**.

    OUTPUTS: Confirm the selection with **OK** key (on the commandable output only).

19. Now it is possible to add other actions to the selected day type (follow the same procedure from step 13 and select a new action) or program another day type (follow the same procedure from step 8).
20. After programming the commands for the different day types, press **ESC** key repeatedly, back to “COMMANDS TYPE”.

21. Press ▼ key; “WARNING TIME” appears.

22. Press **OK** key. Select the warning time with ▼ and ▲ keys and confirm the selection with **OK** key. Available values are No warning, 5, 10, 15 and 20 minutes. The warning time is applied to all the commands of all the days of the week.
23. Press **ESC** repeatedly to exit from the menu.



4.14.3 Command deleting

To delete a command follow the procedure for programming; in operation selection choose “NO ACTION”. To stop all the programming procedures it is not necessary to delete them, but it is sufficient to disable them (see paragraph 8.1.14 *Timing programmer disabling)*.

5 PROGRAMMING WITH KP500L KEYPAD

Access to the various parameters for programming the MP504TG system via the KP500L LED keypad takes place by entering the pre-defined codes described below. The explanations of specific functions to be programmed are shown in section 4.

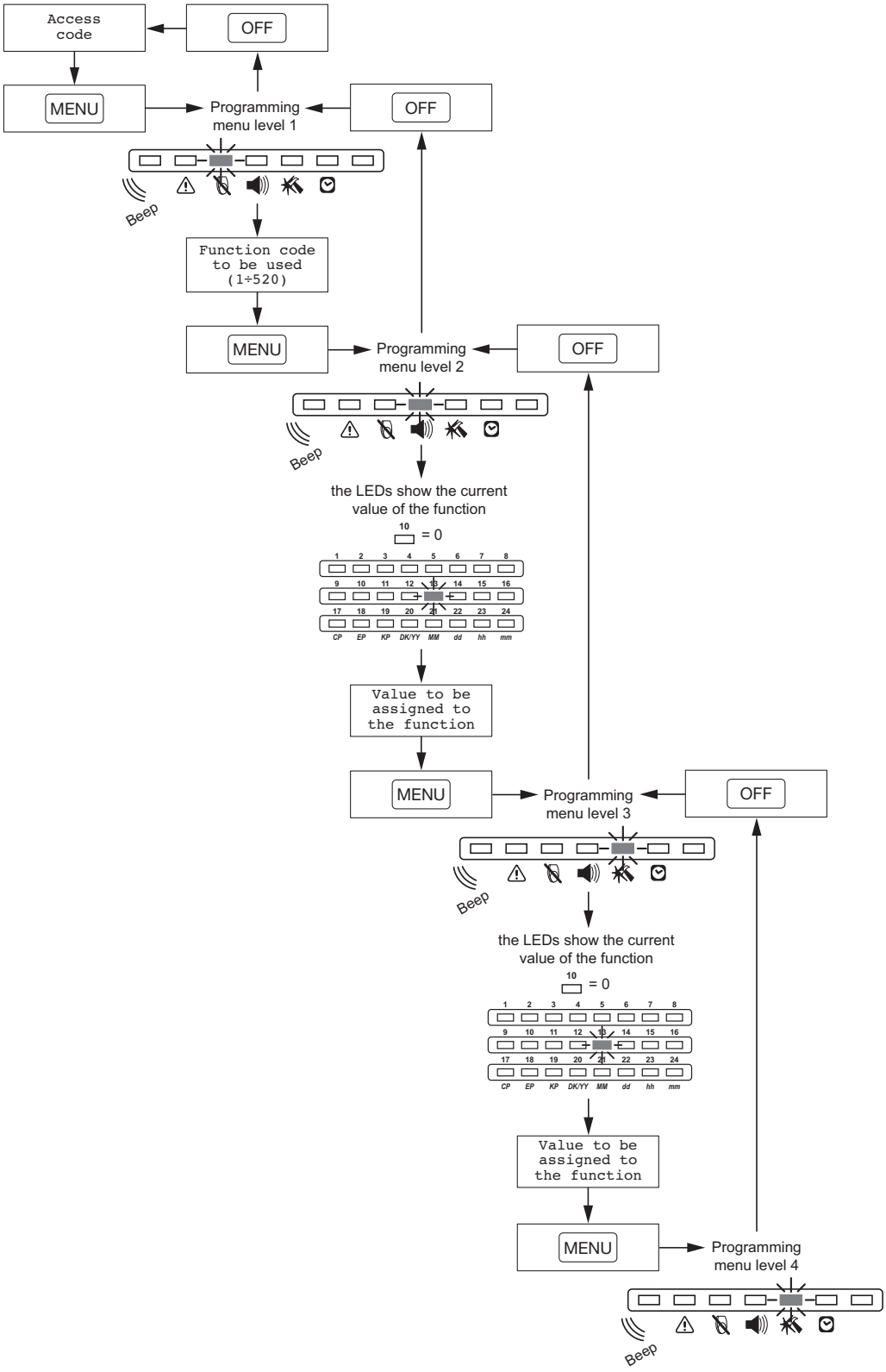
Warning: with the KP500L it is not possible to perform the following programming of the MP504TG system:

- edit the logic numbers of the inputs and the outputs
- edit the attributes of the inputs (release type, AND inputs)
- assign an input to a videocamera
- enter IP addresses
- select the LAN
- disable/enable the PSTN and LAN phone lines
- program the timing programmer.

If these options are necessary, use a KP500D/EN display keypad, or a PC with Hi-Connect software 3.10 or higher.

5.1 PROGRAMMING VIA KP500L LED KEYPAD

To access the programming, follow the procedures described in the following table:



After entering the programming mode, the operations to be carried out are indicated in the tables for each programming.

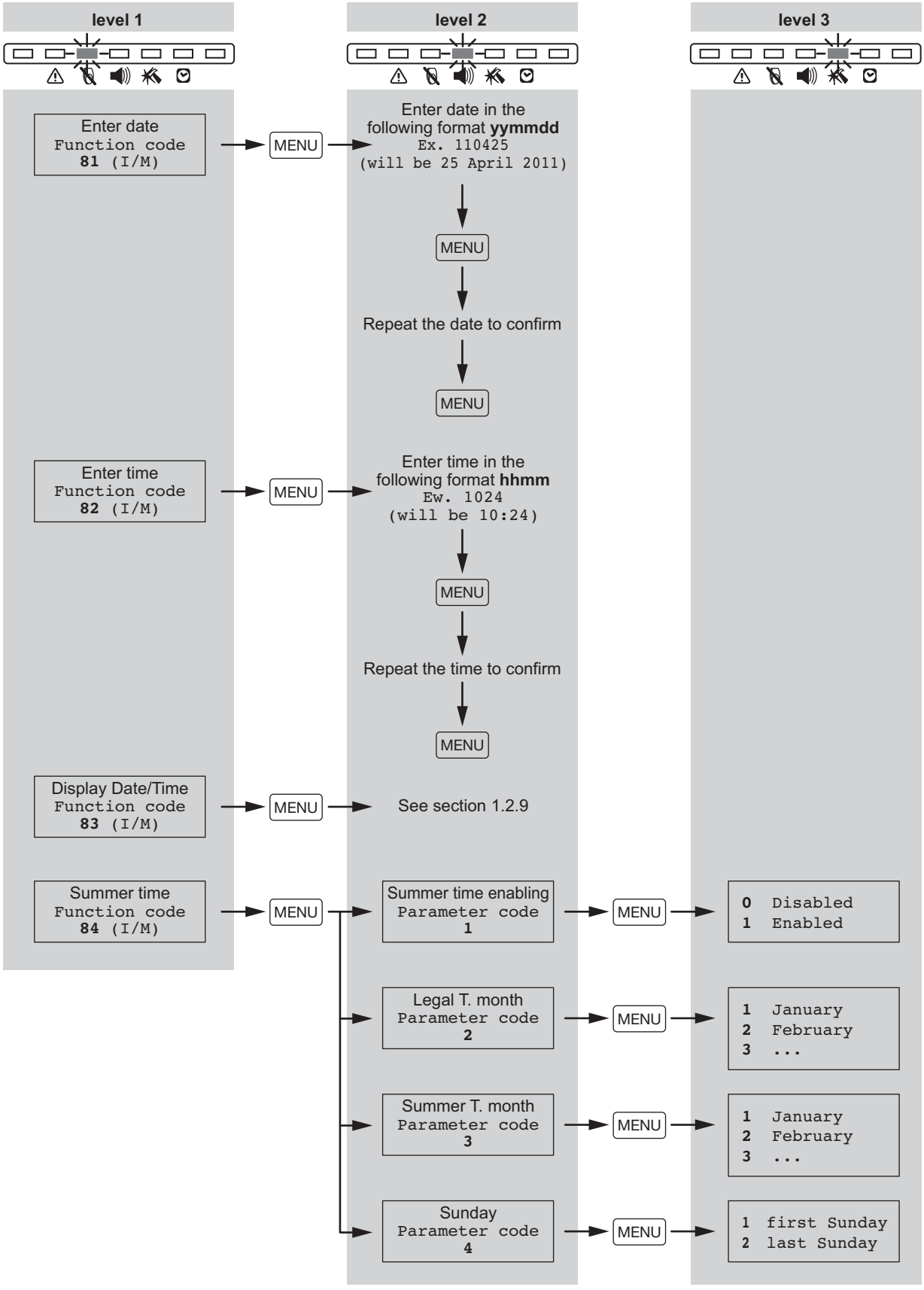
The various functions / programming are available only to enabled users. In the following table, the enabled users are shown as follows:

(I) = Installer **(M) = Master (main user)** **(U) = User**

5.2 SETTING OF THE DATE AND TIME – SUMMER TIME

The date and time are used in the recording of in the log and for Time programmer functions.

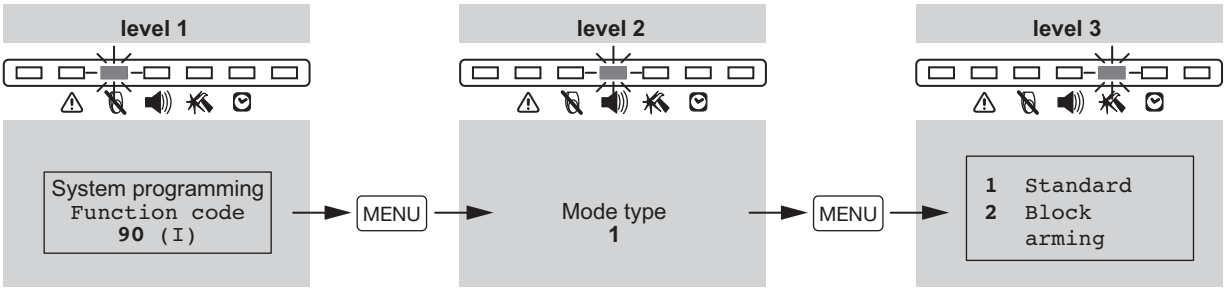
To enter the date and time, refer to the following table:



5.3 ARMING MODE: STANDARD / BLOCK ARMING

There are two types of activation mode: Standard / Block arming.

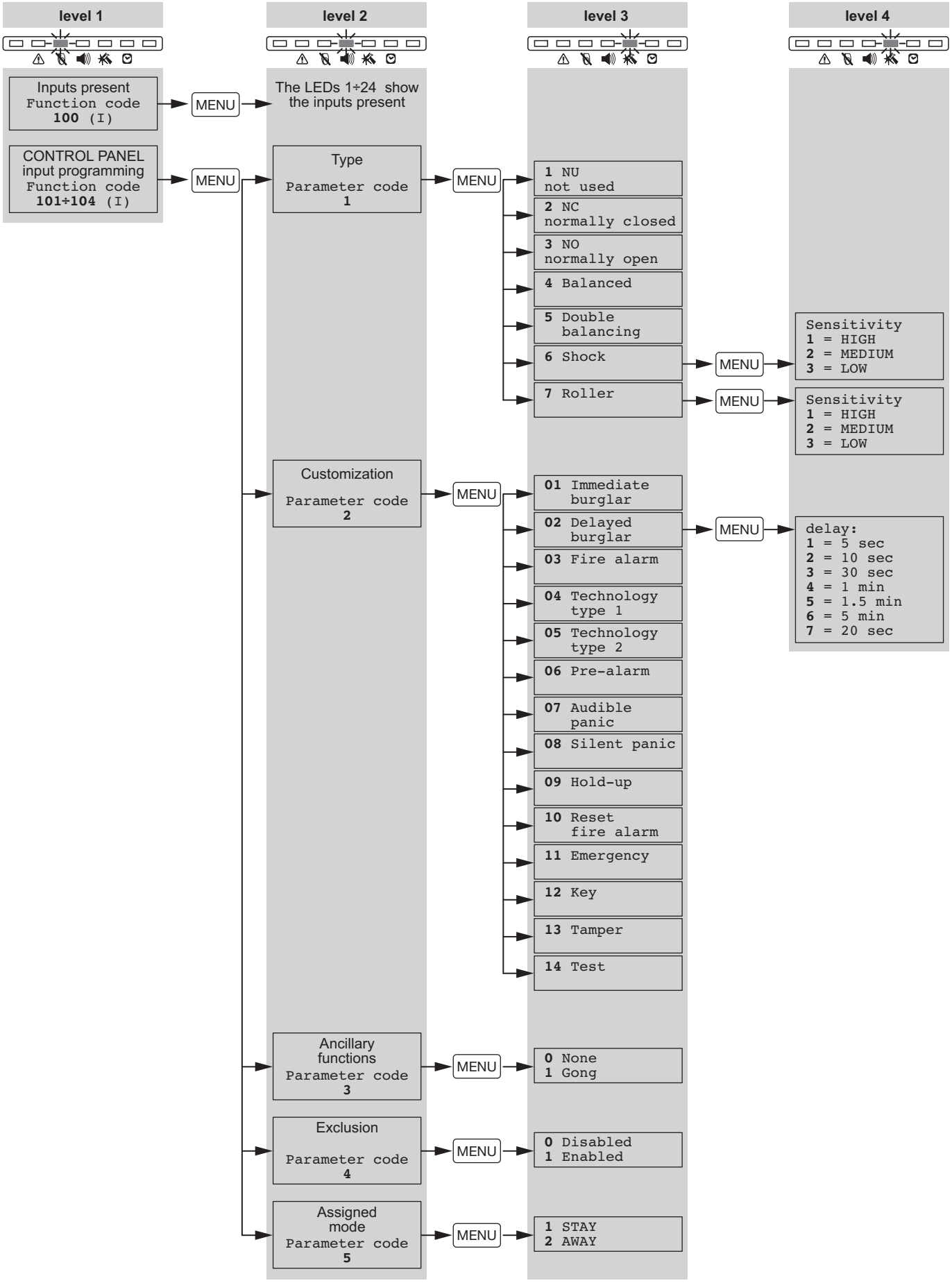
Refer to the following table:

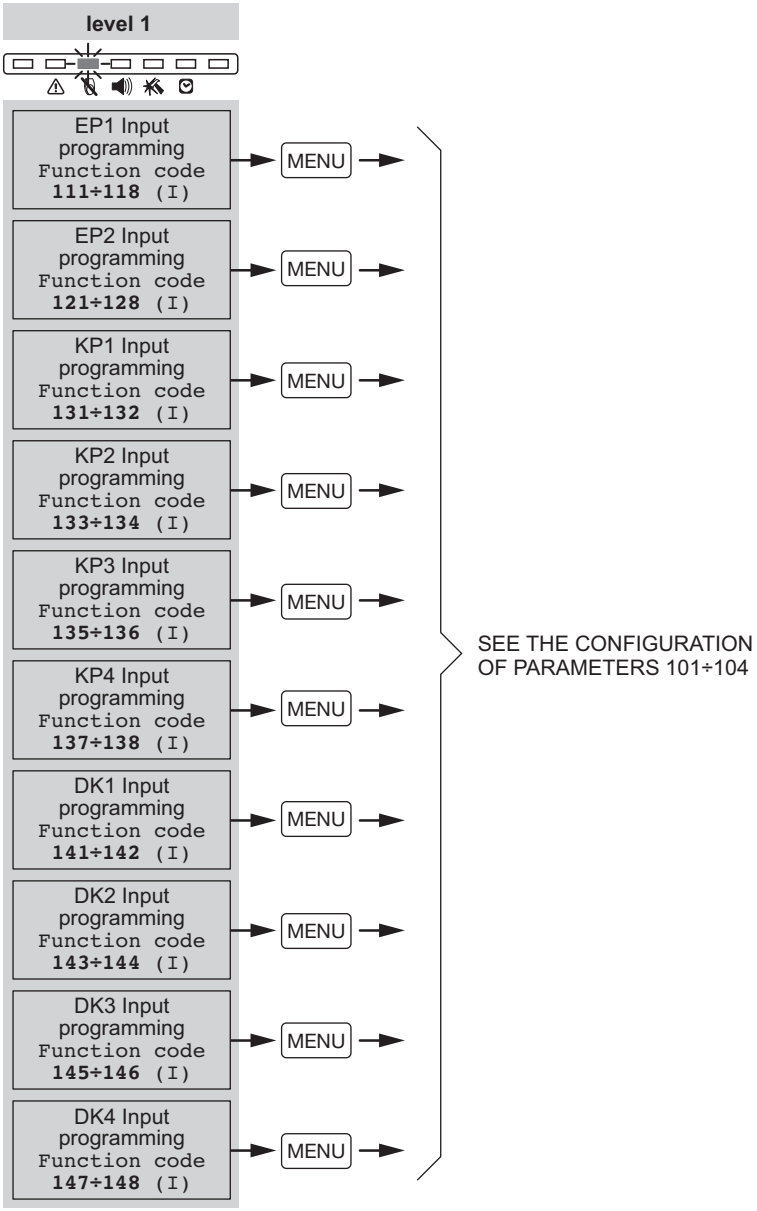


5.4 INPUTS PROGRAMMING

For types and customizations of the input, refer to sections 4.4.2. and 4.4.4.

For input programming, refer to the following table:

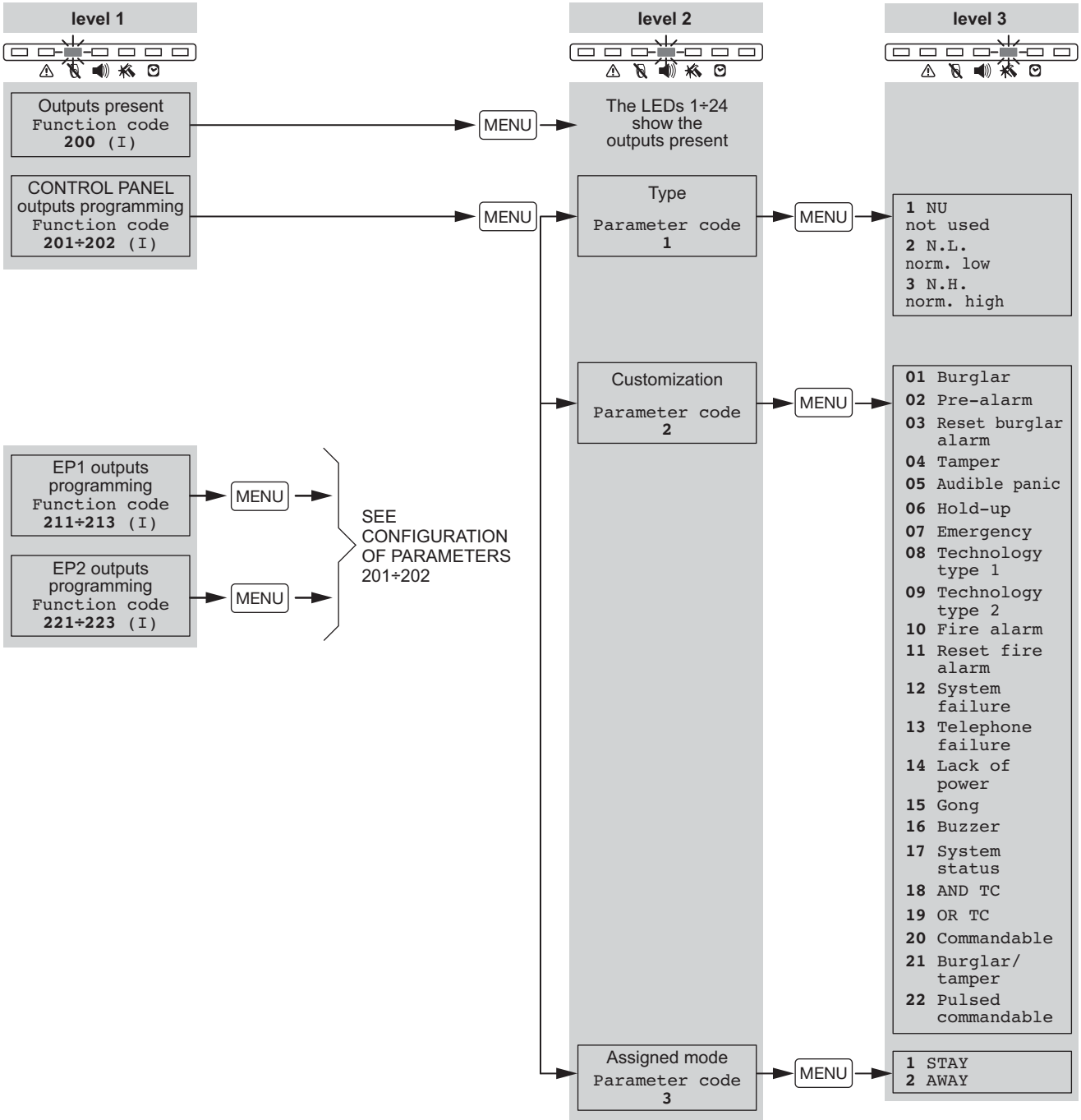




Warning: with the KP500L keypad, it is not possible to edit the logic numbers, the attributes (release type, AND inputs) and the assignation to a videocamera.
If these options are necessary, use a KP500D/EN display keypad, or a PC with Hi-Connect software 3.10 or higher.

5.5 OUTPUTS PROGRAMMING

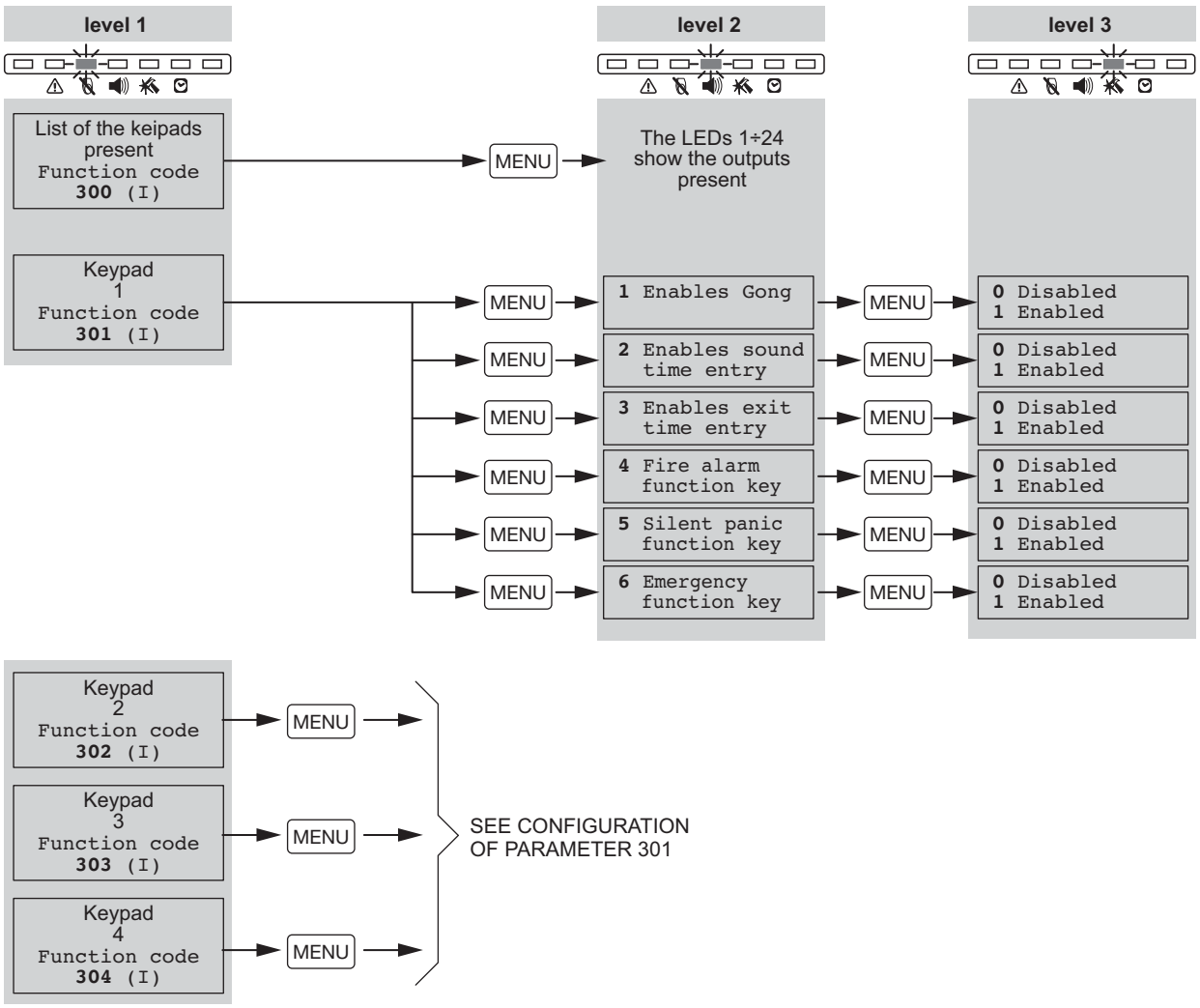
For types and customizations of the outputs, refer to sections 4.5.2. and 4.5.4.
For output programming, refer to the following table:



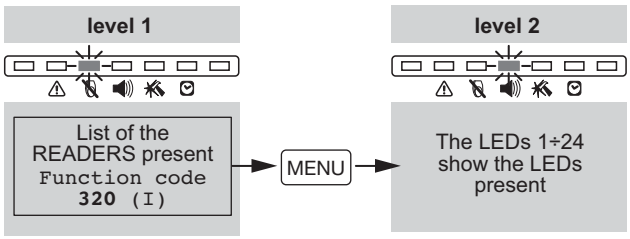
Warning: with the KP500L keypad, it is not possible to edit the logic numbers.If these options are necessary, use a KP500D/EN display keypad, or a PC with Hi-Connect software 3.10 or higher.

5.6 KEYPADS PROGRAMMING

Refer to the following table:



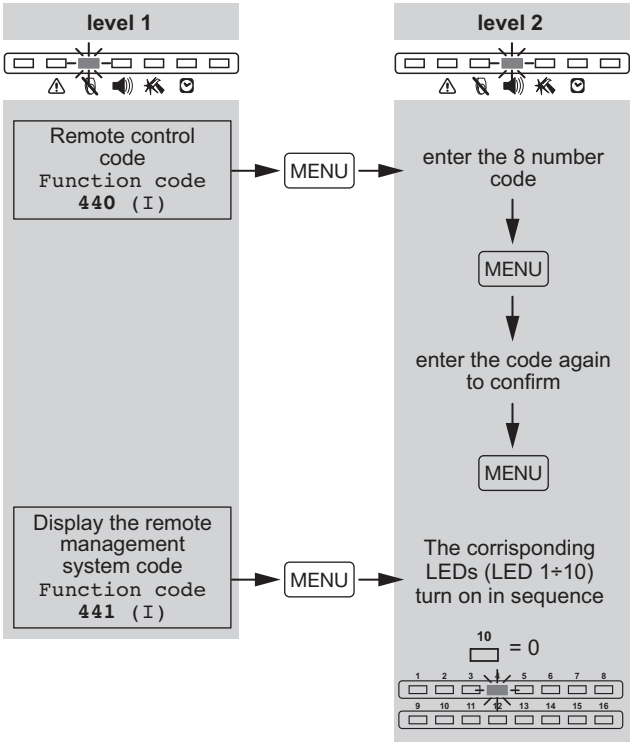
5.7 READERS PROGRAMMING



5.8 ADVANCED PROGRAMMING

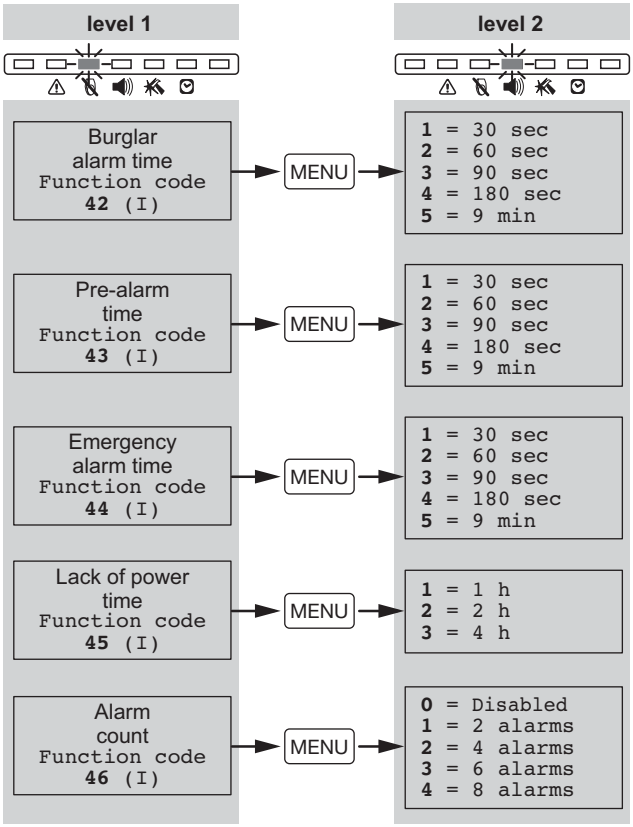
5.8.1 Remote control code entry

Refer to the following table:



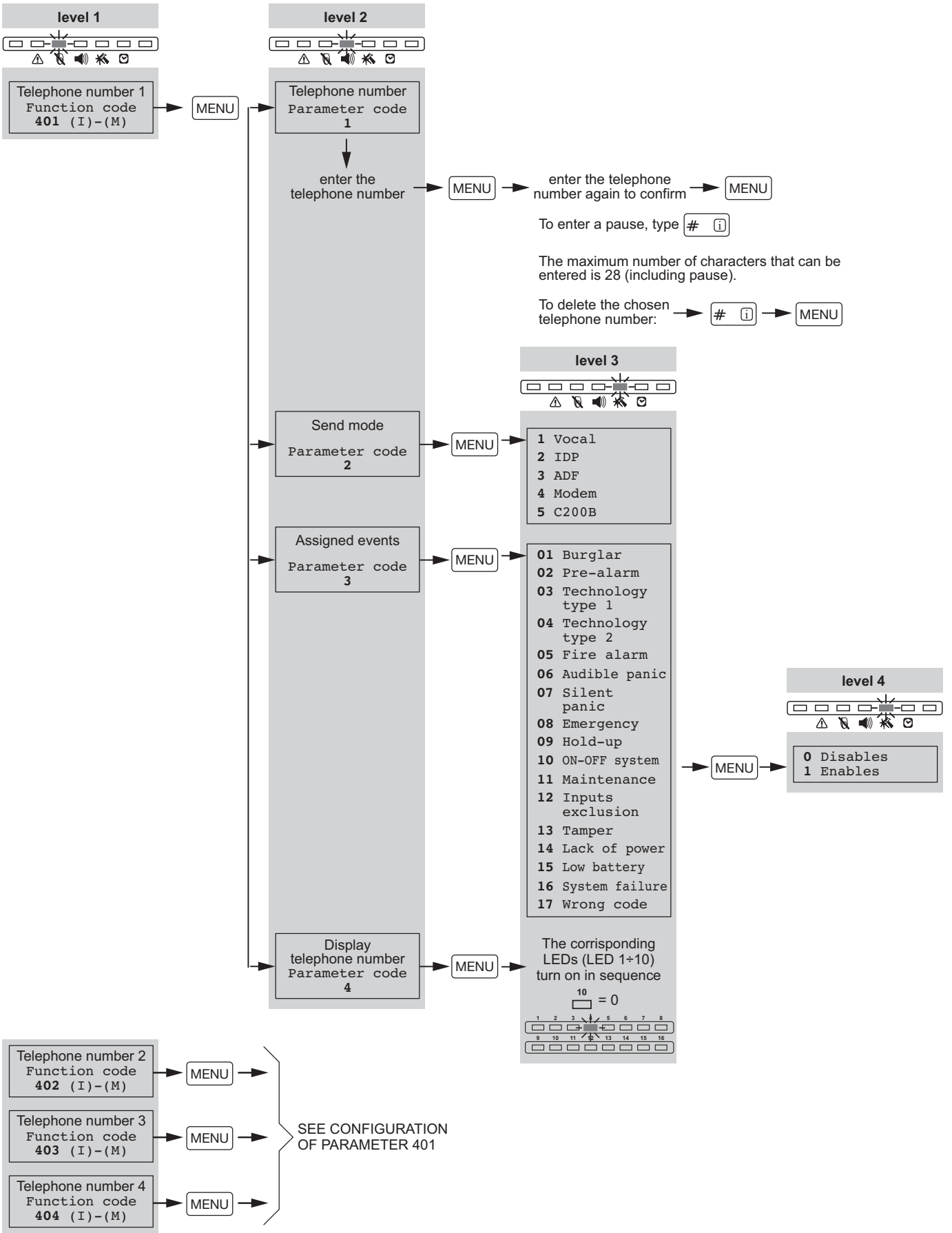
5.9 GENERAL SYSTEM PARAMETERS - TIMINGS

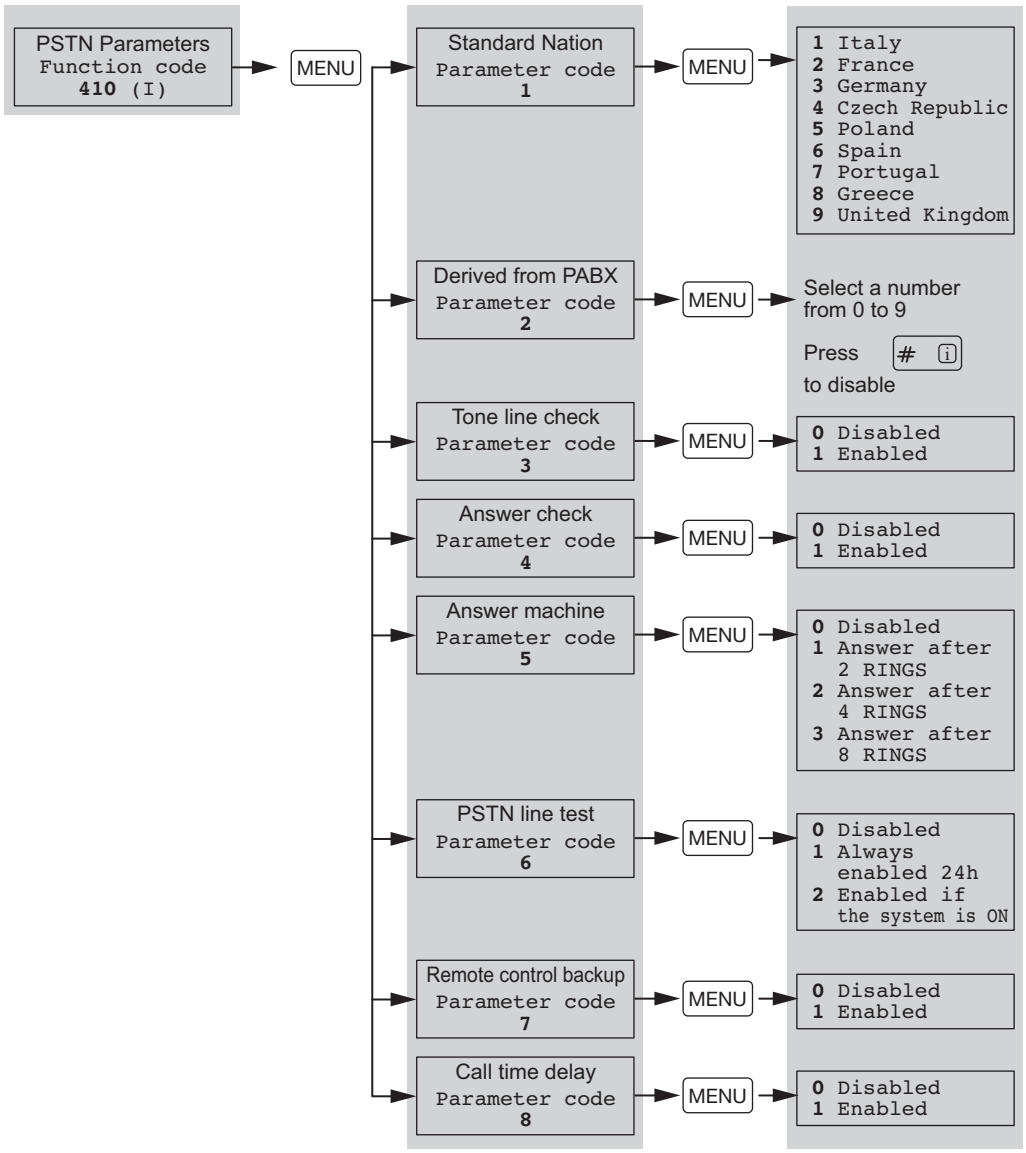
Refer to the following table:

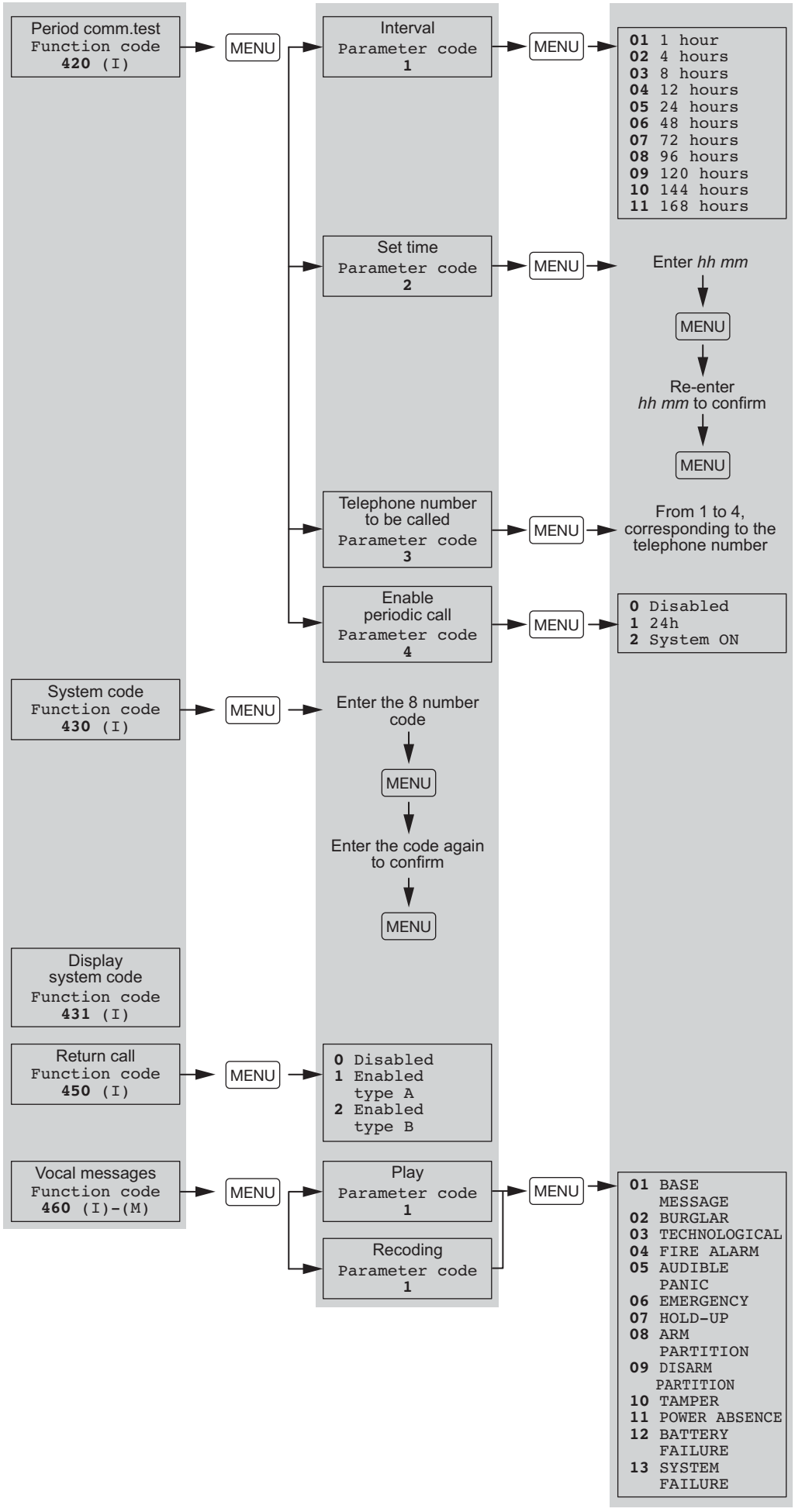


5.10 TELEPHONE COMMUNICATOR

Refer to the following table:




PSTN Parameters
Function code
410 (I)
MENU
Standard Nation
Parameter code
1
MENU
1 Italy
2 France
3 Germany
4 Czech Republic
5 Poland
6 Spain
7 Portugal
8 Greece
9 United Kingdom
Derived from PABX
Parameter code
2
MENU
Select a number from 0 to 9
Press # i to disable
Tone line check
Parameter code
3
MENU
0 Disabled
1 Enabled
Answer check
Parameter code
4
MENU
0 Disabled
1 Enabled
Answer machine
Parameter code
5
MENU
0 Disabled
1 Answer after 2 RINGS
2 Answer after 4 RINGS
3 Answer after 8 RINGS
PSTN line test
Parameter code
6
MENU
0 Disabled
1 Always enabled 24h
2 Enabled if the system is ON
Remote control backup
Parameter code
7
MENU
0 Disabled
1 Enabled
Call time delay
Parameter code
8
MENU
0 Disabled
1 Enabled


Period comm.test
Function code
420 (I)
MENU
Interval
Parameter code
1
MENU
01 1 hour
02 4 hours
03 8 hours
04 12 hours
05 24 hours
06 48 hours
07 72 hours
08 96 hours
09 120 hours
10 144 hours
11 168 hours
Set time
Parameter code
2
MENU
Enter hh mm
MENU
Re-enter
hh mm to confirm
MENU
Telephone number
to be called
Parameter code
3
MENU
From 1 to 4,
corresponding to the
telephone number
Enable
periodic call
Parameter code
4
MENU
0 Disabled
1 24h
2 System ON
System code
Function code
430 (I)
MENU
Enter the 8 number
code
MENU
Enter the code again
to confirm
MENU
Display
system code
Function code
431 (I)
Return call
Function code
450 (I)
MENU
0 Disabled
1 Enabled
type A
2 Enabled
type B
Vocal messages
Function code
460 (I)-(M)
MENU
Play
Parameter code
1
Recoding
Parameter code
1
MENU
01 BASE
MESSAGE
02 BURGLAR
03 TECHNOLOGICAL
04 FIRE ALARM
05 AUDIBLE
PANIC
06 EMERGENCY
07 HOLD-UP
08 ARM
PARTITION
09 DISARM
PARTITION
10 TAMPER
11 POWER ABSENCE
12 BATTERY
FAILURE
13 SYSTEM
FAILURE

EXAMPLES

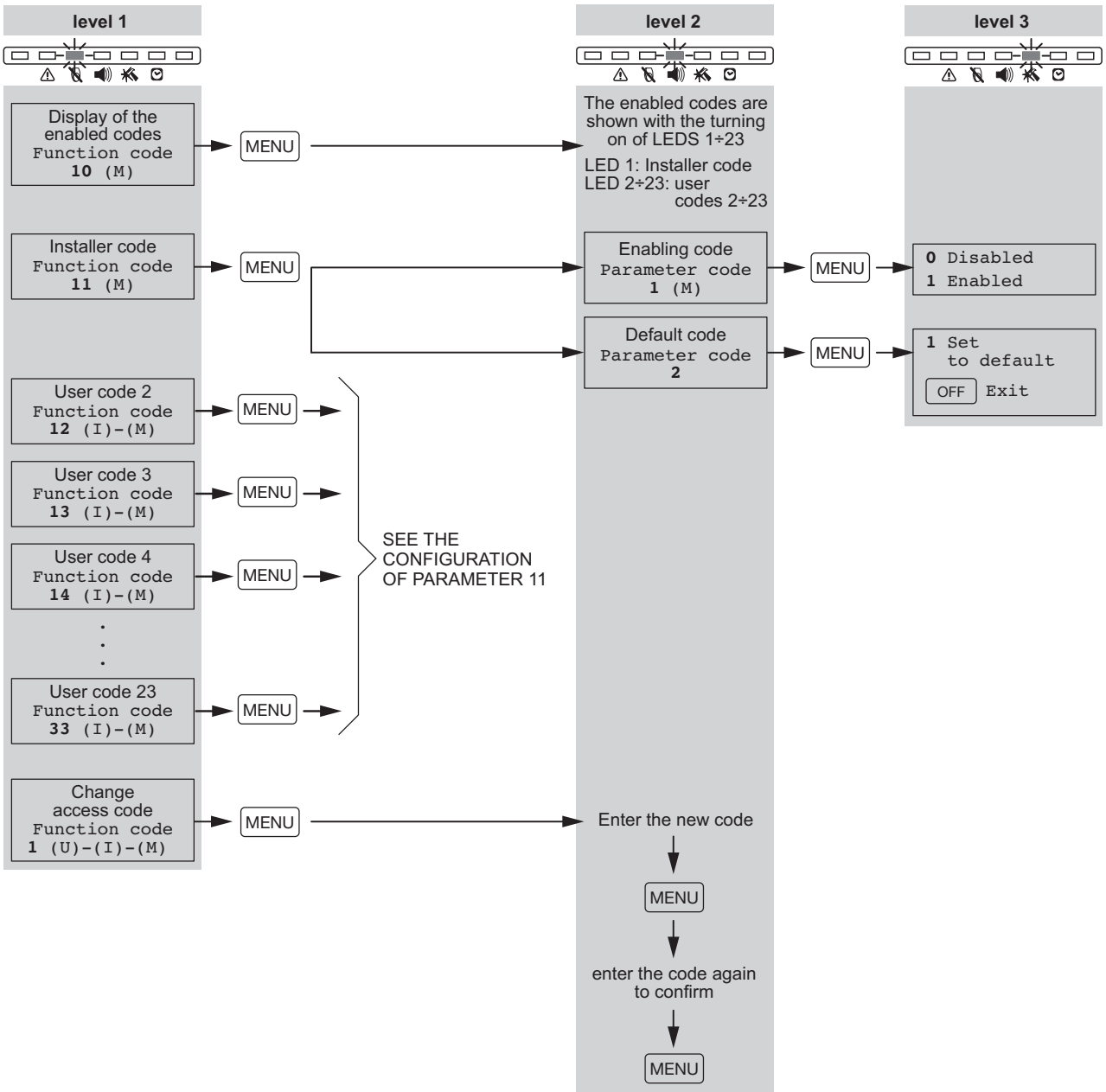
1. To enter the telephone number 0113986711:
   Enter the ***Installer Code*** (default 0000) or the ***Master Code*** (default 1111) MENU, 401 MENU, 1 MENU, 0113986711 MENU, 0113986711 MENU.
2. To delete the 1st telephone number:
   Enter the ***Installer Code*** (default 0000) or the ***Master Code*** (default 1111) MENU,
   401 MENU, 1 MENU, # , MENU.

5.10.1 Enabling phone lines

Warning: with the KP500L keypad, it is not possible to enter IP addresses, select LAN network and disable/enable the PSTN and LAN phone lines.
In the event of using a KP500D/EN display keypad, or a PC with Hi-Connect software 3.10 or higher.

5.10.2 Installer and users enabling

Refer to the following table:

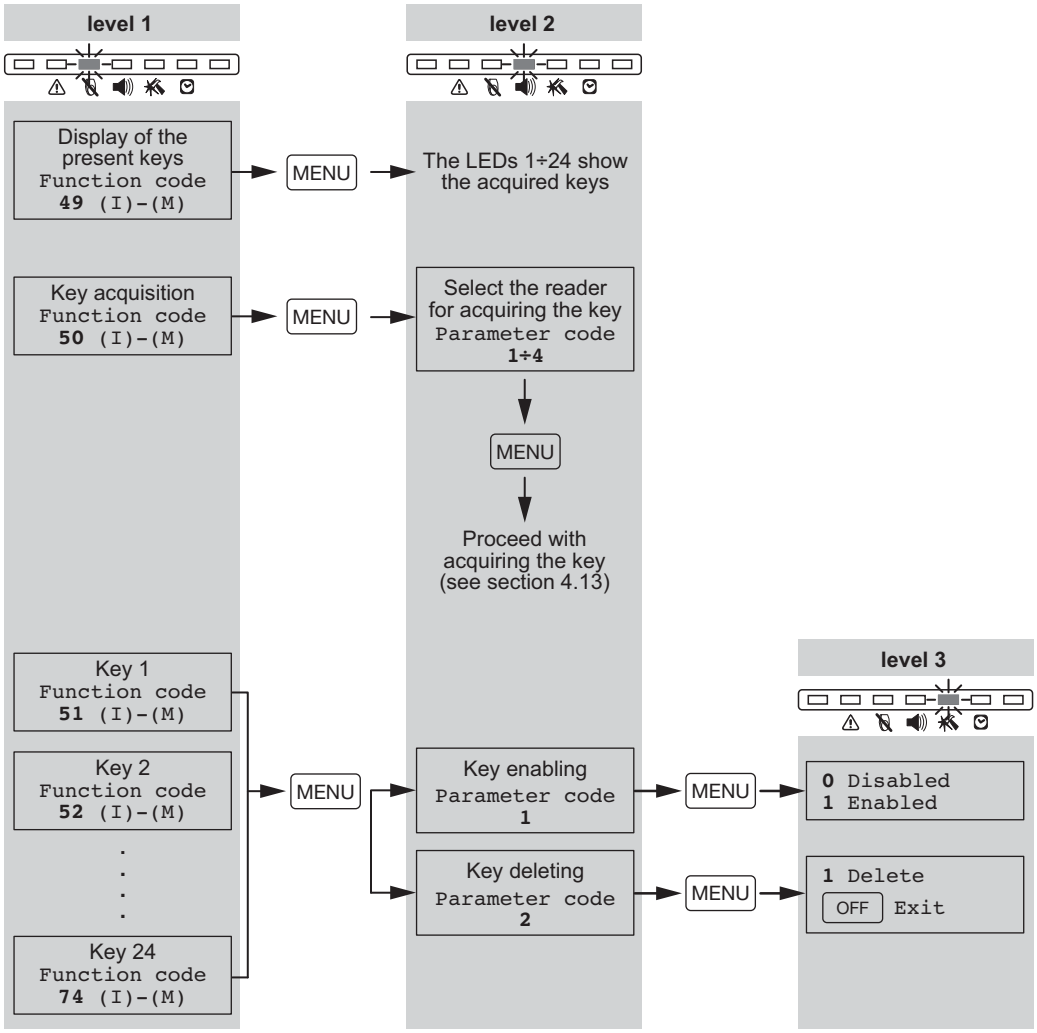


EXAMPLES

1. To enable the installer code:
   Enter the ***Master Code*** (default 1111) MENU, 11 MENU, 1 MENU, 1 MENU.
2. To change your access code:
   Enter your access code MENU, 1 MENU, new code MENU, new code MENU.

5.11 KEYS

Refer to the following table:



5.12 TIMING PROGRAMMER

Warning: with the KP500L keypad, it is not possible to program the timing programmer.

To program the timing programmer, use a KP500D/EN display keypad, or a PC with Hi-Connect software 3.10 or higher.

6 PROGRAMMING BY COMPUTER

6.1 PROGRAMMING BY COMPUTER

All the configurations made by KP500D/EN keypad can carried out, in an easier and friendly way, also with a PC and Elkron Hi-Connect software. All instructions for its use are described in the software manual. It is necessary to enable the access by PC as follows: : Master menu – Enable – Advanced – Enable remote access.
The control panel can be programmed by PC in the following ways:

- **Local**, by connecting the PC to the control panel via an USB port.
- **Remote**, by connecting the PC to the control panel via a modem and the telephone line; this connection allows also system remote maintenance and management.
- **Deferred**, by storing the programming planned in laboratory on an USB key and then transfer it in the control pane.

6.1.1 Technical prerequirements for data transfer

To connect the PC to the control panel or for data transfer only is needed:

Connection type / transfer	**Requested items**
Connection via USB port	IT-USB Kit (complete with USB cable)
Connection via PSTN telephone line	PC side: Modem
Connection via ADSL (*)	Ethernet interface ADSL Modem PC side: Modem
Data download from USB key	Interface for USB key - IT USB/KEY USB key

For further information see Installation manual at paragraph - System Connection Capability.

6.1.2 Personal computer requirements

Personal computer minimum configuration:

- Pentium IV processor
- 256 MB Ram minimum
- 1,8 Ghz CPU
- 80 GB Hard Disk
- Windows 2000/XP Service Pack 2/Vista/7
- CD ROM reader
- available serial port or USB port

6.1.3 Saving data to USB key and restoring data

By using the interface for USB key - IT USB/KEY, it is for safety reasons possible to save carried out programming into USB key. Instructions for connecting the interface in control panel MP504TG are in *Installation manual MP504TG.*

It is possible to separately save, in file form:

- programming and configuration for the whole system
- codes and keys
- event log

This data is saved into folder “MP504TG”, and into subfolder having system code number as its name. Folders, if not already present on the key, are automatically created by control panel.
All files have system number as their name and are differentiated as to their extension depending on their content.

E.g.: with control panel having system code 12345678, on USB there will be
folder MP504TG

12345678.cfg	is the file which contains programming data, configuration data and control panel SW version
12345678.cod	is the file which contains codes and keys
12345678.sto	is the file which contains event log

Programming and configuration “.cfg” data Files
File 12345678.cfg can be read and edited on PC with software Hi-Connect rev. 3.10 or higher and can be recovered by control panel.
This function is useful, as an example, to restore the configuration of a control panel, copy its configuration into another control panel or transfer, into a control panel, a configuration that was previously prepared at the laboratory.

Codes and keys “.cod” data Files
File 12345678.cod cannot be for safety reasons read by software Hi-Connect 3.10 or higher and its content is encoded.
It can only be recovered by control panel to be at any time able to restore previously saved codes and keys, or to copy them from one control panel to another.

Event log “.sto” data Files
File 12345678.sto can be read on PC with software Hi-Connect 3.10 or higher.
This function is useful, as an example, to carry to and see on the PC the events that are stored by a control panel.

To save data to USB key and restore it, access item «MAINTENANCE» / «DATA TRANSFER» from Technician menu:

- «SALVA PROGR.» to save control panel data to USB key
  - « CONFIGURATIONS »
  - « KEYS CODES »
  - « EVENT LOG »

- « RECOVER PROGR.» to copy data from to USB key to control panel
  - « CONFIGURATIONS »
  - « KEYS CODES »

To save and restore codes and keys Master User code has also to be entered.

Files saving and restoring operations can take some minutes; during these operations there appears on the display:

```
WAIT PLEASE
```

Warning: as long as USB/KEY interface yellow LED is on, USB key must not absolutely be removed and control panel must not be powered off!

At the end, if the operation was completed correctly, “OK” confirmation appears; if it was not, “KO” appears.

7 SYSTEM TEST

7.1 SYSTEM TEST BY KP500D/EN LCD KEYPAD

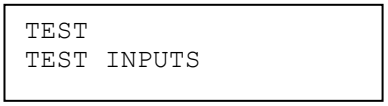
When installation and configuration of system devices is finished, it is necessary to verify that the system is working properly.

7.1.1 Inputs test

To verify if inputs are working properly follow the instructions below:

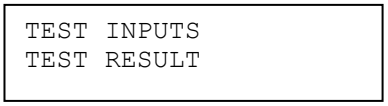
1. Enter on the keypad the Master code or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TEST” appears on the display.

4. Press **OK** key to confirm.



5. “INPUTS TEST IN PROGRESS...” appears.
6. Prompt <u>all</u> system detectors (for example, walk in front of volumetric detectors and open the doors with magnetic contacts). Every time a detector is activated, on the keypad the inputs LED turns on.

7. At the end press **OK** key to display the test result. Two different lists are available: the first list, i.e. “TEST OK INPUTS”, signals all those inputs which were prompted during the test, while the second list, i.e. “TEST KO INPUTS”, signals those inputs which were subjected to variations. If all inputs opened regularly, <u>no input must be present</u> in the second list.
8. At the end press **ESC** key repeatedly to exit from the menu.



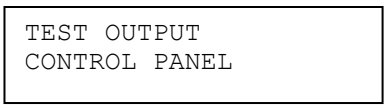
7.1.2 Outputs test

To verify if outputs are working properly follow the instructions below:

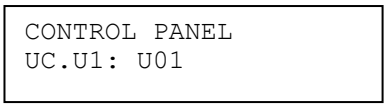
1. Enter on the keypad the Master code or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TEST” appears on the display.
4. Press **OK** key to confirm.

5. Press ▼ key until “TEST OUTPUT” appears.

6. Press **OK** key. “CONTROL PANEL” appears.



7. Confirm with **OK** key. The outputs list appears.
8. Select with ▲ and ▼ keys an output and press **OK** key. Press again **OK** to activate the output; after verifying that the output is working properly, press **OK** key to deactivate it.
9. Follow the same procedure from step 7 for all the outputs.



10. If there are EP508 expansions, follow the same procedure from step 6 by selecting every time a different bus device, whose outputs must be controlled.
11. After controlling all the outputs of all devices, press **ESC** key repeatedly to exit from the menu.

7.1.3 Battery test

To control the control panel battery state follow the instructions below:

1. Enter on the keypad the Master code or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TEST” appears on the display.
4. Press **OK** key to confirm.

```
Ut01:MASTER
TEST
```

5. Press **OK** key. “TEST BATTERY” appears.
6. Press **OK** key to confirm.

```
TEST
TEST BATTERY
```

7. “TEST BATTERY IN PROGRESS...” appears.

The battery test lasts for about 1 minut after which the system updates information about the battery state indicated by the LEDs and in the event log (if there are changes)

```
TEST BATTERY
IN PROGRESS...
```

8. At the end press **ESC** key repeatedly, to exit from the menu.

7.1.4 Vocal call test

To verify if vocal calls are working properly follow the instructions below:

1. Enter on the keypad the Master code or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TEST” appears on the display.
4. Press **OK** key to confirm.

```
Ut01:MASTER
TEST
```

5. Press ▼ key until “ADVANCED” appears on the display.

```
TEST
ADVANCED
```

6. Press **OK** key. “VOCAL CALL” appears.

```
ADVANCED
VOCAL CALL
```

7. Confirm with **OK** key. Appears the list of the telephone numbers programmed as vocal sending. NOTE: also appear telephone number digits.

```
VOCAL CALL
T01:xxxxxxxx
```

8. Select with ▲ and ▼ keys the telephone number to which the test call must be sent and press **OK** key. The communicator performs the call with the channel programmed for the selected telephone number and sends the basic message for three times.

```
T01:xxxxxxxx
PSTN
```

9. Follow the same procedure from step 8 for all the telephone numbers to be tested.
10. Press **ESC** key repeatedly to exit from the menu.

7.1.5 Alarm reception centre call test

To verify if numerical calls are properly carried out, follow the instructions below:

1. Enter on the keypad the Master code or the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “TEST” appears on the display.
4. Press **OK** key to confirm.

```
Ut01:MASTER
TEST
```

5. Press ▼ key until “ADVANCED” appears on the display.

```
TEST
ADVANCED
```

6. Press **OK** key. “VOCAL CALL” appears.

```
ADVANCED
VOCAL CALL
```

7. Press ▼ key until “PROTOCOL CALL” appears on the display. Confirm with **OK** key.

```
ADVANCED
PROTOCOL CALL
```

8. Appears the list of the telephone numbers programmed with numerical or modem sending.
9. Select with ▲ and ▼ keys the telephone number to which the test call must be sent and press **OK** key. The communicator calls the Alarm reception centre and sends the test call parameters for a correct identification of the event.
10. Follow the same procedure described in the previous step for all the numbers to be tested.
11. Press **ESC** key repeatedly to exit from the menu.

7.1.6 Final tests

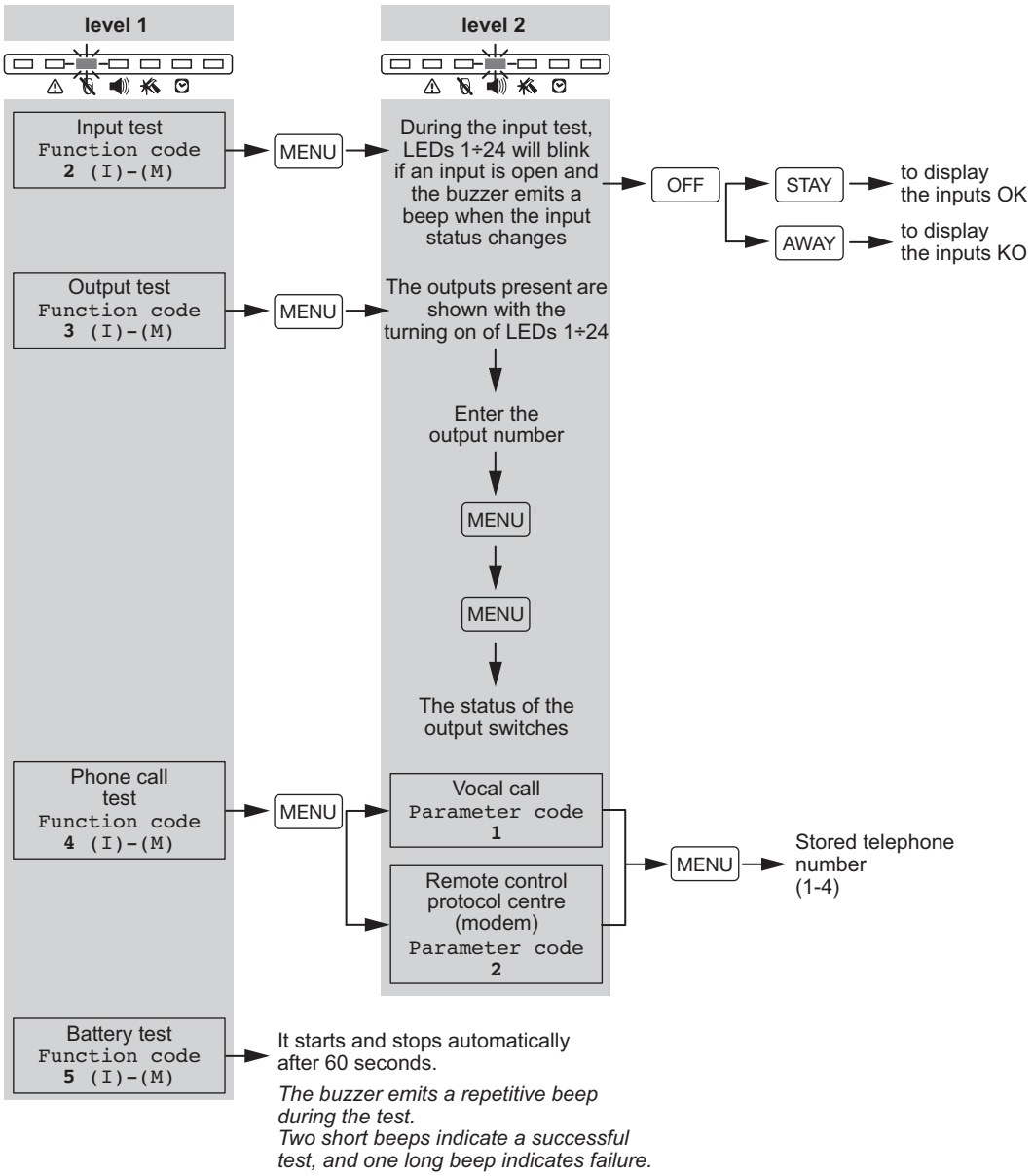
In addition to the above mentioned tests perform the following checks:

- Arming and disarming of the system (STAY and AWAY) with the keypads, if present, using all user codes set.
- Arming and disarming of the system (STAY and AWAY) with the readers, if present, using all keys available.
- Remote control of the system - if there is a telephone answer machine function – with a landline or via a modem (in these cases, you may need the help of an external collaborator).

At the end of installation, we recommend deleting all the events stored from the memory, in order to deliver a "clean" system - see 0.

7.2 SYSTEM TEST BY KP500L LED KEYPAD

Refer to the following table:



For further information see § 7.1

7.2.1 Final tests

In addition to the above test, perform the following checks:

- Arming and disarming of the system (STAY and AWAY) with the keypads, if present, using all user codes set.
- Arming and disarming of the system (STAY and AWAY) with the readers, if present, using all keys available.
- Remote control of the system - if there is a telephone answer machine function – with a landline or via a modem (in these cases, you may need the help of an external collaborator).

7.3 USERS TRAINING

At the end of installation, we recommend deleting all the events stored from the memory, in order to deliver a "clean" system. See § 8.1.11.

Having ascertained proper operation of the burglar system, end users can be shown the main operations to be performed on the system. For this training phase to achieve the best results, follow these indications:

- If possible directly involve all persons who will use the MP504 system: if only one person is taught, they may forget something or not be able to pass on the correct information to the others.
- First execute an operation (such as arming and disarming of the system) and then personally invite everyone to repeat it in your presence, so that if there was any doubt or problem you will be able to help them.
- Invite people to ask any questions: if all doubts are removed, users will be able to use the system easier.

Main instructions to be given to users concern:

- Total arming of disarming (AWAY) of the system.
- Partial arming of disarming (STAY) of the system.
- How to recognize different signalling: burglar, tamper attempt, flat battery, etc. (on display and acoustic).
- How to read the events stored in the control panel (Event log).
- How to change time and date, especially when time is changed from Solar Time to Summer Time and vice versa.
- How to enable remote management.
- How to carry out the system periodical test.

8 SYSTEM MANAGEMENT

8.1 USE OF THE KP500D/EN LCD KEYPAD

The plant can be armed either totally in AWAY mode, or partially in STAY mode. Arming with the keypad is more flexible, while doing it with electronic or proximity key is more simple and immediate.
If at the time of arming, there are inputs open, the system behaves as established in the programming (arming mode Standard or Block type arming).

8.1.1 Total arming (AWAY) with the LCD keypad

To arm the entire burglar alarm system (AWAY mode), starting from the disarmed system, do the following:

1. Enter on the keypad the Master code or a valid User code.
2. Press **ON*** key.
3. The display shows two empty boxes, the first corresponds to STAY mode, and the second to AWAY mode.
4. The buzzer indicates the arming is in progress. If you want to speed up the process, press the **ON** key, the arming will be immediate. (To exit without arming, press **ESC**)
5. After 5 seconds, the status LED will turn remain on and the second box corresponding to the AWAY mode turns black, indicating the successful arming, which is also confirmed by the word "EXECUTED" appearing on the first line of the display. The display returns to the standard display automatically after one minute. To bring the display forward, press **ESC**.

Warning: if instead of an empty box is an "O", it means that there is at least one open input assigned to the corresponding mode. See the details of which input it is via the menu item «OPEN INPUTS», and take action to close it or to exclude it.

8.1.2 Partial arming (STAY) with the LCD keypad

To partially enable the system (STAY mode), starting from the disarmed system, do the following:

1. Enter on the keypad the Master code or a valid User code.
2. Press **ON** key.
3. The display shows two empty boxes, the first corresponds to STAY mode, and the second to AWAY mode.
4. While the keypad buzzer sounds and within 5 seconds, enter the number 1 on the keypad: the cursor on the first box corresponding to the STAY mode blinks.
5. Wait another 5 seconds or press the **ON** key to instantly enable; the blinking status LED turns on and the first box corresponding to
   STAY mode turns black, indicating the successful enabling, also confirmed by the message “EXECUTED” appearing on the first line of the display.
6. The display automatically turns back to the standard screen after one minute. In order to obtain in advance the standard screen, press **ESC** key.

Warning: if the red LED on the reader blinks, it means that there is at least one input open in the system. Before carrying out the arming, identify which input it is and take action to close it or exclude it.

8.1.3 Total disarming (AWAY) with the LCD keypad

To disarm the entire system, starting from any previously armed mode, STAY or AWAY, do the following:

1. Enter on the keypad the Master code or a valid User code.
2. Press **OFF** key.
3. The display for a moment shows which mode (AWAY or STAY) is armed and proceed directly to total disarming.
4. The buzzer signals the disarming in progress, the two boxes turn white, the message "EXECUTED" appears on the display and the status LED turns off.
5. The display automatically turns back to the standard screen after one minute. In order to obtain in advance the standard screen, press **ESC** key.

8.1.4 Disarming from the keypad under hold-up

When you are threatened and forced by a criminal and there is a risk to your life, it is possible to disarm the system from a keypad by generating the hold-up alarm at the same time, which if programmed, can be sent via telephone communicator as a vocal, digital and modem message. The hold-up event is not detectable locally in any way (no sirens, no optical signals, etc.).
To disarm the system under hold-up, just increase the last number of your user code and then proceed with the disarming. For example, if the user code is 0021, just type 0022; if the user code is 29, just type 30; if it is 39 just type 40, etc.

8.1.5 Stop of the active alarms

The modes to stop an alarm in progress are described in § 2.1.1. However, remember that:

- generally the outputs that have switched to an alarm event (sirens, etc..) return to idle, by entering a valid code on a keypad.
- the vocal alarm calls cycle can be interrupted by the phone that he has received the call by entering the numbers "1 2" after the message has finished and a beep is heard (it is necessary for the telephone to use the DTMF tone keypad)
- the vocal alarm calls cycle can be cancelled by entering a valid code on a keypad, as long as it is entered with 30 seconds of the start of the even and the call time delay is armed (see section 4.10.17 Call time delay).
- The vocal calls for burglar events can also be interrupted by disarming the system. This service can be useful in case of false alarms, for example. Keep in mind that the call immediately started on the first available phone number cannot be interrupted and continues on that number until the attempts have ended. No further calls will be made on any successive numbers.

8.1.6 Wrong code entering

If a wrong access code is entered for 4 consecutive times, the control panel considers that event as a tamper attempt and generates a tamper alarm, by activating all the configured alarm outputs and telephone calls, if present.
Once a correct code is entered, the wrong code counter is reset.

8.1.7 Function keys with direct access

The keypad has 3 keys preprogrammed for the following alarms:

- fire 
- emergency 
- silent panic 

By pressing every key for 3 seconds at least, the control panel generates the respective event without entering any code.
Each single function key must be enabled in advance; see paragraph 4.6 *Keypads programming.*

8.1.8 Date and time changing

Date and time stored in MP504TG control panel are used for the correct operation of the timing programmer and to store events in the event log.

In order to change date and time shown on the display follow the procedure described in paragraph 4.3 Time/Date Setting – Summer Time.

8.1.9 Read the event log file

The Event log stores the last 1,000 events (arming, disarming, alarms, tampers, etc.) that have affected the system.
Events are stored from the most recent to the oldest, that is to say the most recent event is the one with the lowest identification number. As you add a new event, all the events stored slide one position.
When the event log reaches its maximum size (1,000 events), each new event will cause the deletion of the oldest event stored in the memory.
The event log can be checked either by the Master user, or by the other users.

To read the event log file follow the instructions below:

1. Enter the Master code or a valid User code on the keypad and press the **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “EVENT LOG” appears on the display. Press **OK** key to confirm.

```
Ut01:MASTER
EVENT LOG
```

4. “READ EVENT LOG” appears. Press **OK** key to confirm.

```
EVENT LOG
READ EVENT LOG
```

5. Appear the 'list of the stored events', that is brows able with ▼ and ▲ keys. To understand information on the display see paragraph 8.1.10 *Meaning of event data*.
6. After reading press **ESC** key repeatedly to exit from the menu.

```
001 10:47 22/08
VALID CODE
```

8.1.10 Meaning of event data

In the event log an event is displayed as follows:
where

- **xxxx** is the event progressive number (0001 is the most recent event)
- **hh:mm** indicate event hour and minutes
- **dd/MM** indicate event day and month
- **<< Text >>** is the event description

```
xxxx hh:mm dd/MM
<< Text >>
```

According to the event type are available further information that can be displayed in cyclic mode by pressing **OK** key one or more time. For example: bus device and user.

8.1.11 Event log deleting

Warning: Event log deleting operation is not reversible!.

To delete the Event log follow the instructions below:

1. Enter on the keypad the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “EVENT LOG” appears on the display. Press **OK** key to confirm.

```
Us00: INSTALLER
EVENT LOG
```

4. “ERASE EVENT LOG” appears.

5. Press the ▼ key, until "ERASE EVENT LOG" disappears from the display. Press the **OK** key to confirm. “ARE YOU SURE?” appears. Press the **OK** key to start deleting old events

```
EVENT LOG
ERASE EVENT LOG
```

6. “ERASE EVENT LOG IN PROGRESS...” appears on the display and the event log is deleted.
7. After deleting, press repeatedly **ESC** key to exit from the menu.

```
ERASE EVENT LOG
IN PROGRESS ...
```

8.1.12 Deferred automatic system arm

During the warning time (configured by the programming procedure) before the burglar system automatic arm with the time programmer, it is possible to defer for 30, 60 or 90 minutes the arm; this operation can be performed several times, **but within midnight**..
Warning time is signalled by keypads with buzzers ringing and TIME PROGRAMMER (P.O.) LEDs flashing
To defer automatic arm its during this step necessary to:

- Press **MENU**: «MOVE COMMAND» appears »,
- press **OK**: Master code (default 1111) **OK**
- Select, by keys ▲ and ▼, deferred time; and confirm with **OK.**

8.1.13 Timing programmer enabling

To activate the timing programmer it is necessary to enable it.
Enabling is possible only if there are programmed timed commands.
To enable the timing programmer follow the instructions below:

1. Enter on the keypad the Master code (default 1111) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "ENABLE" appears on the display.
4. Press **OK** key to confirm.

```
Us01:MASTER
ENABLE
```

5. Press ▼ key until "TIMED COMMANDS" appears and confirm with **OK** key.

```
ENABLE
TIMED COMMANDS
```

6. Press ▼ key to select ENABLE and confirm with **OK** key**.**
7. Press **ESC** key repeatedly to exit from the menu.

```
TIMED COMMANDS
ENABLE
```

If enabling is accepted, the green LED "clock" on the keypads will turn on.

8.1.14 Timing programmer disabling

The procedure to disable the timing programmer is similar to the enabling procedure, described in paragraph 8.1.13 *Time programmer enabling*.
The only difference consists in selecting "DISABLE" at step 6.
By disabling the timing programmer any timed commands will be carried out. However timed commands are kept in memory and will be active after the next Timing Programmer (P.O) enabling.

8.1.15 Excluding input

In particular circumstances it may be necessary to temporarily exclude an input from the system, for example to carry out a test or because the connected detector is damaged and signals a false alarm, preventing the system arm. The exclusion of an input can reduce the safety provided by the system.
If the input is double balancing type, its exclusion prevents both alarm and tamper. However, its opening is signalled by the lighting of the open inputs LED of associated keypads.

Warning: can be excluded only inputs with EXCLUDABLE parameter, enabled with the programming procedure.

To exclude an input follow the instructions below:

1. Enter on the keypad a user code or the Master code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "SETTINGS" appears on the display.

```
Ut01:MASTER
SETTINGS
```

4. Press **OK** key to confirm. "INCLUDE/EXCLUDE" appears.

```
SETTINGS
INCLUDE/EXCLUDE
```

5. Press **OK** key. Appears the list of inputs that can be excluded.

```
INCLUDE/EXCLUDE
Inxx:...
```

6. Select with ▲ and ▼ keys the input to be excluded and confirm the selection with **OK** key.

```
Inxx:...
EXCLUDE          OK?
```

7. Confirm with **OK** key**.**
   Exclusion message will appear and also "excluded inputs" LEDs on the keypads will turn on.
8. Press **ESC** key repeatedly to exit from the menu.

```
EXCLUSION
Inxx:...
```

8.1.16 Input inclusion

To include again an input follow the instructions below:

1. Enter on the keypad a user code or the Master code (default 1111) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “SETTINGS” appears on the display.

```
Ut01:MASTER
SETTINGS
```

4. Press **OK** key to confirm. “INCLUDE/EXCLUDE” appears.

```
SETTINGS
INCLUDE/EXCLUDE
```

5. Press **OK** key. Appears the list of inputs that can be included.

```
INCLUDE/EXCLUDE
Inxx:...
```

6. Select with ▲ and ▼ keys the input to be included and confirm the selection with **OK** key.

```
Inxx:...
INCLUDE            OK?
```

7. Confirm with OK key. The input has been included in the system again.
8. Press **ESC** key repeatedly to exit from the menu.

```
EXCLUSION
Inxx:...
```

8.1.17 Display Info

In stand-by condition, the keypad display can show date and time or the system status. For each system keypad it is possible to select the displaying mode.

```
(((ELKRON)))
dd/mm/yyyy hh:mm
```

```
SYSTEM STATUS
□□....
```

To change the stand-by screen of the keypad display follow the instructions below:

1. On the keypad press **MENU** key.
2. Press ▼ key until “LCD INFO” appears on the display.
3. Press **OK** key to confirm.

```
SYSTEM STATUS
LCD INFO
```

4. Enter a valid User code or the Master or Installer code and press **OK**.

```
ENTER CODE
```

5. With ▼ and ▲ keys select between DATE / HOUR and SYNOPTIC (for system status) and confirm the selection with **OK** key.
6. Press **ESC** key repeatedly to exit from the menu.

```
LCD INFO
DATE / HOUR
```

8.1.18 Buzzer volume adjustment

It is possible to change the buzzer volume of every single keypad. For buzzer volume adjustment no user codes are needed.

To change the buzzer volume follow the instructions below:

1. On the keypad press **MENU** key.
2. Press ▼ key until “SET BUZZER” appears on the display.
3. Press **OK** key to confirm.

```
SYSTEM STATUS
SET BUZZER
```

4. Press ◄ and ► keys for adjustment; every time a key is pressed, the buzzer will emit a sound at the corresponding volume. Confirm the new volume by pressing **OK** key.
5. Press **ESC** key repeatedly to exit from the menu.

```
SET BUZZER
- ■■□□ +
```

Warning: if the volume level is decreased to 0 (no squares on) the buzzer will not signal any more the entry-exit time, gong and key pressing.

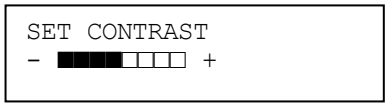
8.1.19 Display contrast adjustment

It is possible to modify the display contrast of every single keypad, in order to optimize it for the viewing angle relatively to the physical position of the keypad.
For contrast adjustment no user codes are needed.

To modify display contrast follow the instructions below:

1. On the concerned keypad press **MENU** key.
2. Press ▼ key until "SET CONTRAST" appears on the display.
3. Press **OK** key to confirm.

4. Press ◄ and ► keys to adjust the contrast. Confirm the new display contrast by pressing **OK** key.
5. Press **ESC** key repeatedly to exit from the menu.



8.1.20 Back-lighting adjustment of keypad and display

It is possible to change the brightness of display, keys and LEDs of every single keypad. For brightness adjustment no user codes are needed.

To change the keypad backlight brightness follow the instructions below:

1. On the concerned keypad press **MENU** key.
2. Press ▼ key until "SET BACKLIGHT" appears on the display
3. Press **OK** key to confirm.

4. Press ◄ and ► keys to adjust the brightness. Confirm the new brightness by pressing **OK** key.
5. Press **ESC** key repeatedly to exit from the menu.

Warning: if the level is decreased to 0 (no squares on), back-light will be totally turned off.

Warning: Back-light adjustment also affects status LEDs intensity (but they are not turned off by setting level 0); this adjustment affects keypad current consumption.

8.2 USE OF THE KP500L LED KEYPAD

8.2.1 Total arming (AWAY) with the LED keypad

To enable the entire burglar alarm system (AWAY mode), starting from the disarmed system, do the following:

Enter the user code, confirm by pressing MENU, press AWAY

8.2.2 Partial enabling (STAY) with the LED keypad

To partially enable the system (STAY mode), starting from the disarmed system, do the following:

Enter the user code, confirm by pressing MENU, press STAY

8.2.3 Total disarming with the LED keypad

To disarm the entire system, starting from any previously armed mode, STAY or AWAY, do the following:

Enter the user code, confirm by pressing MENU , press OFF

8.2.4 Disarming from the keypad under hold-up

When you are threatened and forced by a criminal and there is a risk to your life, it is possible to disarm the system from a keypad by generating the hold-up alarm at the same time, which if programmed, can be sent via telephone communicator as a vocal, digital and modem message. The hold-up event is not detectable locally in any way (no sirens, no optical signals, etc.).
To disarm the system under hold-up, just increase the last number of your user code and then proceed with the disarming.
For example, if the user code is 0021, type 0022; if the user code is 29, type 30; if it is 39 just type 40, etc.

8.2.5 Block of the alarms in progress

The modes to interrupt an alarm are detailed in section 2.1

8.2.6 Entry of an invalid code

If you enter 4 consecutive invalid access codes, the control panel interprets this as an attempt to sabotage and generates a tamper alarm, by arming all the alarm outputs in place and any phone calls.
As soon as you enter the correct code, the count of the wrong codes is cleared.

8.2.7 Function keys and direct access

The keypad has 3 pre-programmed keys for the following alarms:

- Fire alarm 1
- Emergency 4
- Silent panic 7

By holding a key for 4 seconds or more, the control panel generates the corresponding event without the need to type any code.

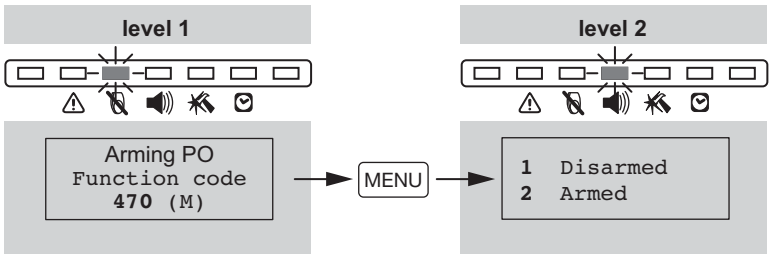
8.2.8 Changing the date and time

See reference in section 5.2.

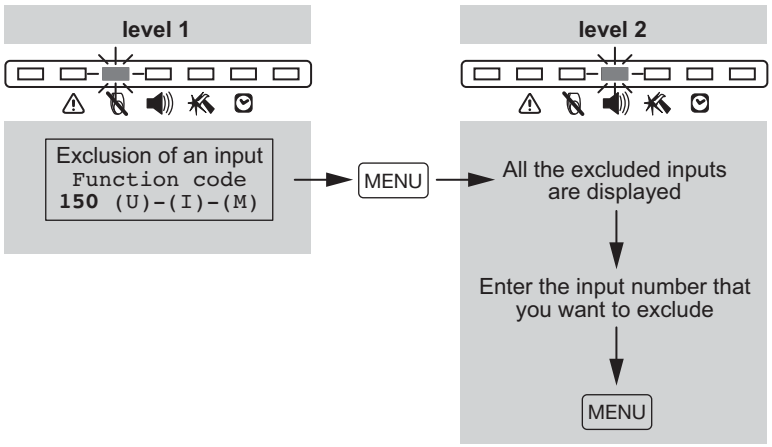
8.2.9 Postponement of the automatic arming of the system

Warning: the postponement of the automatic arming of the system can only be performed with the KP500D/EN display keypad.

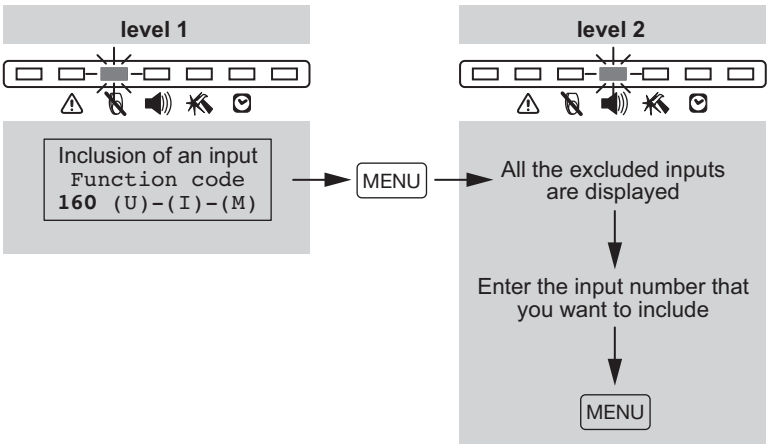
8.2.10 Arming and disarming the timing programmer (P.O.)



8.2.11 Exclusion of an input

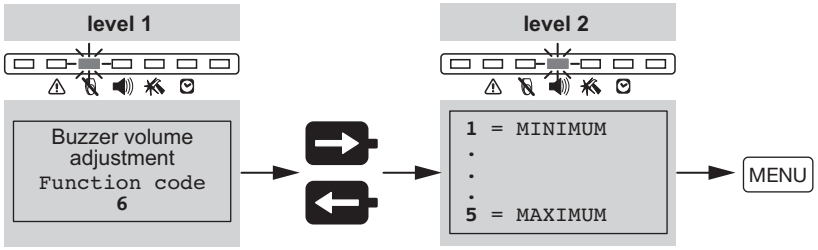


8.2.12 Inclusion of an input



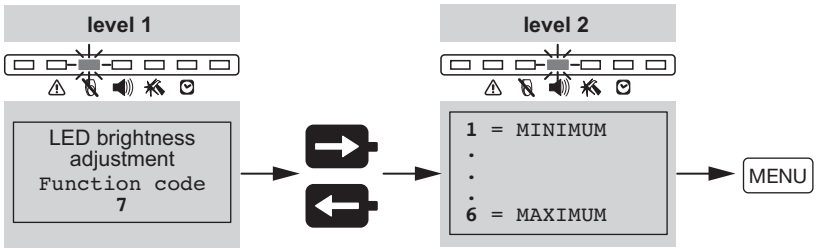
8.2.13 Buzzer volume adjustment

It is not necessary to enter a code to adjust the buzzer.



8.2.14 LED Adjustment

It is not necessary to enter a code to adjust the brightness of the LED.



8.3 USE OF THE READERS

8.3.1 Total arming (AWAY) with the electronic or proximity key

To arm the entire burglar alarm system , starting from the disarmed system, do the following:

1. Enter the electronic key into the reader, or bring the proximity key closer to the transponder of the proximity reader.
2. LEDs 1 and 2, which correspond the STAY and AWAY modes, remain on , then remove or push away the key.
3. LEDs 1 and 2 remain on, indicating that the AWAY mode has been armed.

Warning: if the red LED on the reader blinks, it means that there is at least one input open in the system. Before carrying out the arming, identify which input it is and take action to close it or exclude it.

8.3.2 Partial arming (STAY) with the electronic or proximity key

To partially arm the system (STAY mode), starting from the disarmed system, do the following:

1. Enter the electronic key into the reader, or bring the proximity key closer to the transponder of the proximity reader.
2. LEDs 1 and 2 remain on. Keep the key in position.
3. After 5 seconds, both LEDs turn off, and after another 5 seconds the rolling is armed, which offers the possibility of choosing which mode to arm, STAY or AWAY.
4. When LED 1 corresponding to STAY mode starts to blink, remove, then remove or push away the key; LED 1 will remain on, confirming the successful arming of STAY mode.

Note: If the system is armed in AWAY mode, the only possible operation is disarming, therefore the rolling will not start and the system will be disarmed upon the extraction of the key.

8.3.3 Total disarming with the electronic or proximity key

To disarm the entire system, starting from any previously armed mode, STAY or AWAY, do the following:
1. Enter the electronic key into the reader, or bring the proximity key closer to the transponder of the proximity reader.
2. When the LEDs corresponding to the armed STAY or AWAY mode turn off, remove or push away the key.

8.4 USER REMOTE MANAGEMENT

Warning: The information contained in this chapter consider that the MP504TG control panel has been connected to PSTN line and that SV504 module (Vocal synthesis card) has been correctly inserted.

8.4.1 Skipping the answer machine

To call the MP504TG control panel for remote management, using the PSTN line if there is an answer machine or a fax, it is necessary that the answer machine or fax answers after 2 rings. It is also necessary to enable the Answer machine function of the control panel, by planning a number of rings higher than that of the answer machine.

You can then call the MP504TG control panel for remote management using the following procedure:
- Call the control panel and hang up after the first ring. The control panel detects the incoming call without answering, because the number of rings is less than the one previously set.
- Call the control panel again within 30 seconds.
- The control panel engages the line immediately, after the first ring, without further considering the count of programmed rings. In this way, the answering machine or fax will receive only one ring and will not be able to engage the line in the place of the control panel.

This procedure is also carried out automatically by the Remote Management Centres with Hi-Connect software and function enabled.

8.4.2 Remote management with tone line guide

The call for remote management can be carried out either by landline phone, equipped with tone keypad (DTMF) or by cellular phone. To make use of all the functions, it is also necessary that on the control panel, the PSTN answer machine and the remote disarming are enabled (Master Menu - Enable – Advanced).

Using the remote management it is possible to:
- arm the STAY and/or AWAY modes. (menu number: 0)
- totally disarm the system (menu number: 1)
- request for system status summary (menu number: 9)

The system status summary emits vocal messages related to the system status and eventual failure(lack of power, battery low…)

In the remote management, the "*" (asterisk) key allows you to go back to the previous menu.

To carry out the remote management, do the following:
1. Via a landline or cellular phone, call the telephone number of the control panel.
2. In response, the communicator of the MP 504TG generates a double beep. Within 10 seconds, enter the master code or user code on the phone's keypad, and wait for the beep for confirmation after each number entered before entering the next. At the end of the number, press "#". If the code is recognized, it takes you to the selection menu indicated by a double beep and you can proceed with the appropriate commands. If the user does not send any command, the control panel waits for 30 seconds during which it periodically sends a double beep to indicate the presence of a communication. After the waiting time expires, the control panel closes the communication.
3. At the end of each command, the control panel plays back any other request by the caller, emitting a double beep for 30 seconds. You can perform a new command within this time. After the waiting time expires, the control panel closes the communication.
   To exit the remote management without waiting for the automatic time-out and close the communication when a command has just finished, press the * key until you hear the control panel hang up.

Note: If after 10 seconds from the response of the control panel, the user does not send any DTMF note, the communicator automatically switches to modem mode.

8.4.3 DTMF commands list table with tone line guide

Function	Menu	Accepted numbers	Action	Vocal messages
Arm	**0**	1 #	STAY arming (Partial)	• Arming message
		#	AWAY Arming (Total)	
Disarm	**1**	#	Total disarming	• Disarming message
System status summary	**9**		List: • Staus Arm / disarm • Failures present	• Arming or Disarming message • Failure or warming messages

8.5 PERIODIC TESTS

It is good practice to periodically check the correct operation of the burglar alarm system. The main tests to be performed are:
- Input tests
- Output tests
- Vocal call tests
- Remote control call tests (if present)

Refer to the procedures described in chapter 7 to verify the perfect operation of each system element.

Advice: perform a system test before any extended absence; for example, before the summer holidays.

8.6 MAINTENANCE BY LCD KEYPAD

In Maintenance menu are available some commands used for system "physical" management; for the complete maintenance procedure see *Installation manual* paragraph 5.1
Some of them do not require any physical operations and are described below.

8.6.1 Language change

This procedure was described before in paragraph 4.2 *Language selection*.

8.6.2 Device address display

To verify the address of a specific system bus device follow the instructions below:

1. Enter on the keypad the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "MAINTENANCE" appears on the display.
4. Press **OK** key to confirm.

```
Us00: INSTALLER
MAINTENANCE
```

5. Press ▼ key until "SHOW ADDRESSES" appears.
6. Press **OK** key to confirm.

```
MAINTENANCE
SHOW ADDRESSES
```

7. Select with ▲ and ▼ keys the device to be examined: EXPANSIONS, KEYPADS or READERS. Confirm the selection with **OK** key.

```
SHOW ADDRESSES
EXPANSIONS
```

8. Appears the address list of this device type, browse it with ▼ and ▲ keys.
9. Select the desired device and confirm with **OK** key.

```
EXPANSIONS
EPxx:EPxx
```

10. "IN PROGRESS…" appears.
    Consider all the installed devices: the device with the desired address will have the acquisition yellow LED blinking. Press the acquisition key on the selected device to confirm that the search has been successful and turn off the LED.
11. On the keypad where the installation started press **ESC** key repeatedly to exit from the menu.

```
EPxx:EPxx
IN PROGRESS...
```

8.6.3 Software release display

To know the software version in a bus device of the system (or of the control panel) follow the instructions below:

1. Enter on the keypad the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until "MAINTENANCE" appears on the display.
4. Press **OK** key to confirm.

```
Us00: INSTALLER
MAINTENANCE
```

5. Press ▼ key until "SW. REL" appears.

```
MAINTENANCE
SW. REL
```

6. Press **OK** key to confirm.
7. Select with ▲ and ▼ keys the device to be examined: CONTROL PANEL, EXPANSIONS, KEYPADS or READERS. Confirm the selection with **OK** key.

```
SW. REL
CONTROL PANEL
```

8. If CONTROL PANEL has been selected, it is possible to directly read the software version. In the other cases it is necessary to select the desired device from a list (with▼, ▲ and **OK** keys) before reading the software version.
9. Press **ESC** key repeatedly to exit from the menu.

```
CONTROL PANEL
REL. xx.xx
```

8.6.4 Partial reset

With partial reset, all configurations of the system device, included control panel configurations, are reset to factory settings. Codes, keys and event log are not deleted. To partially reset follow the instructions below:

1. Enter on the keypad the Installer code and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “MAINTENANCE” appears on the display.
4. Press **OK** key to confirm.

5. Press ▼ key until “PARTIAL RESET” appears and press **OK** key to confirm.

6. Press **OK** key to confirm or **ESC** key to undo the operation.

7. “IN PROGRESS...” appears on the display and the buzzer rings.
8. At the end of operation “MAINTENANCE” “PARTIAL RESET” appears again.

Now it is possible to program the system again.

8.6.5 Global reset

With global reset, all control panel configurations are reset to factory settings (inputs, outputs, times, timing programmer, telephone parameters) and all previously acquired devices are removed, by replacing respective configurations with factory settings and deleting the address:

1. Enter on the keypad the Installer code (default 0000) and press **OK** key.
2. Press **MENU** key.
3. Press ▼ key until “MAINTENANCE” appears on the display.
4. Press **OK** key to confirm.

5. Press ▼ key until “GLOBAL RESET” appears and press **OK** key to confirm.

6. Press **OK** key to confirm or **ESC** key to undo the operation.

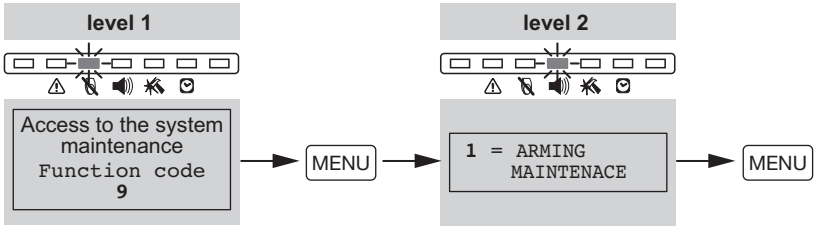
7. “IN PROGRESS...” appears on the display and the buzzer rings.
8. At the end of operation, on keypads appears a row of dots. Turn the system off and start again from chapter 4 *Start-up* in the Installation manual.

8.6.6 Backup-Restore

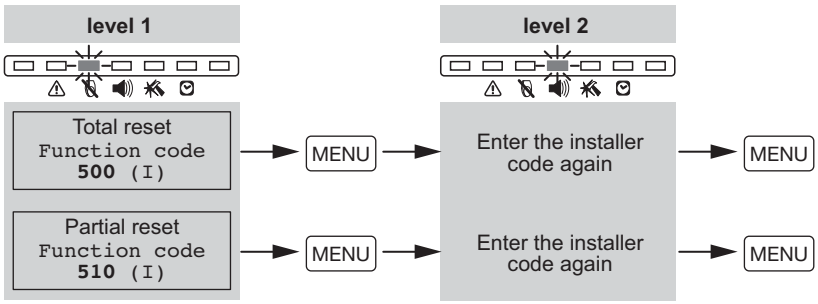
This procedure is already described in paragraph 6.1.

8.7 MAINTENANCE VIA THE LED KEYPAD

Refer to the following table:



8.7.1 Reset



9 MENU

9.1 MASTER MENU

The initial choices of the Master menu are:

SYSTEM STATUS	Shows the status of the system and allows the changing of the STAY and AWAY mode status.
EVENT LOG	It allows to read the list of the events stored in the control panel memory (see 9.1.1. *Event log submenu*).
SETTINGS	Allows you to exclude the inputs, set current time and date, change the master code, configure users, or return their codes to factory settings, to acquire, configure and delete electronic keys and transponders, to set the timing programmer (see 9.1.2 Settings Submenu).
ENABLE	Allows you to enable and disable installers, users, keys, timing programmer, access and remote disarming (see 9.1.3 Submenu Enabling).
TEST	Allows you to perform specific tests to check the perfect operation of the system. You can separately control the inputs and outputs of the control panel and other devices connected on the bus, the battery and vocal telephone calls to the remote control centres. (See 9.1.4 Test Submenu).
TELEPHONE DIALLER	It allows you to program or change phone numbers and play all messages (see 9.1.5 Telephone dialler submenu).

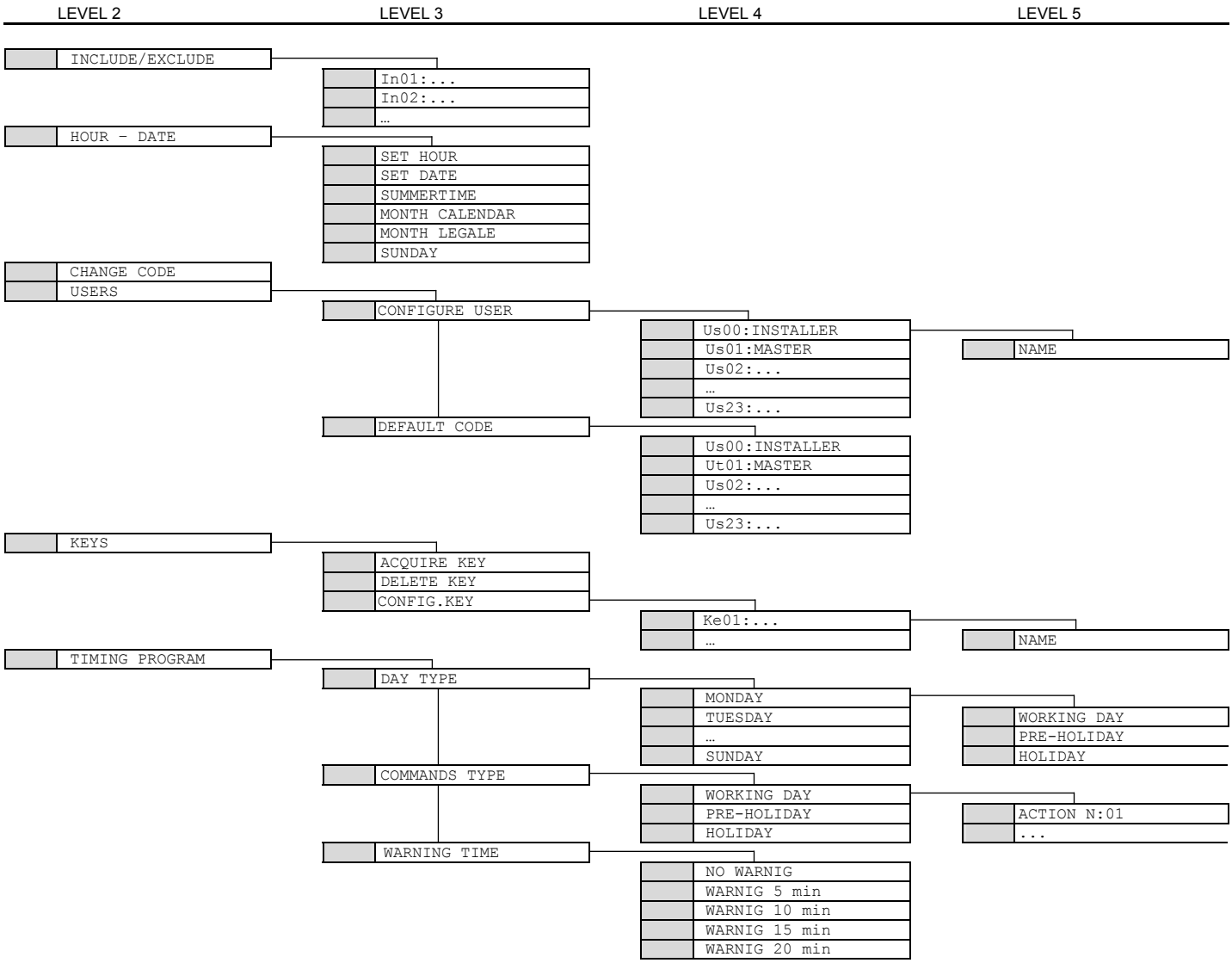
According to the selection it may be possible to access other items of the menu tree, as shown below.

Note: With the system armed, it is only possible to access the System Status option.

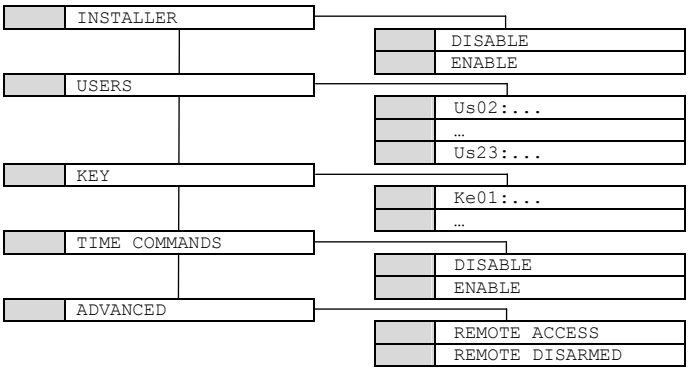
9.1.1 Event log submenu

	LEVEL 2
	READ EVENT LOG

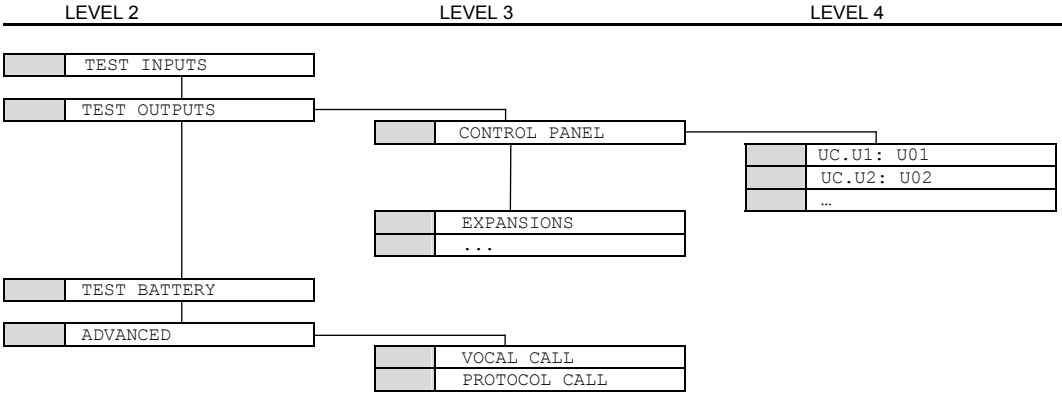
9.1.2 Settings submenu



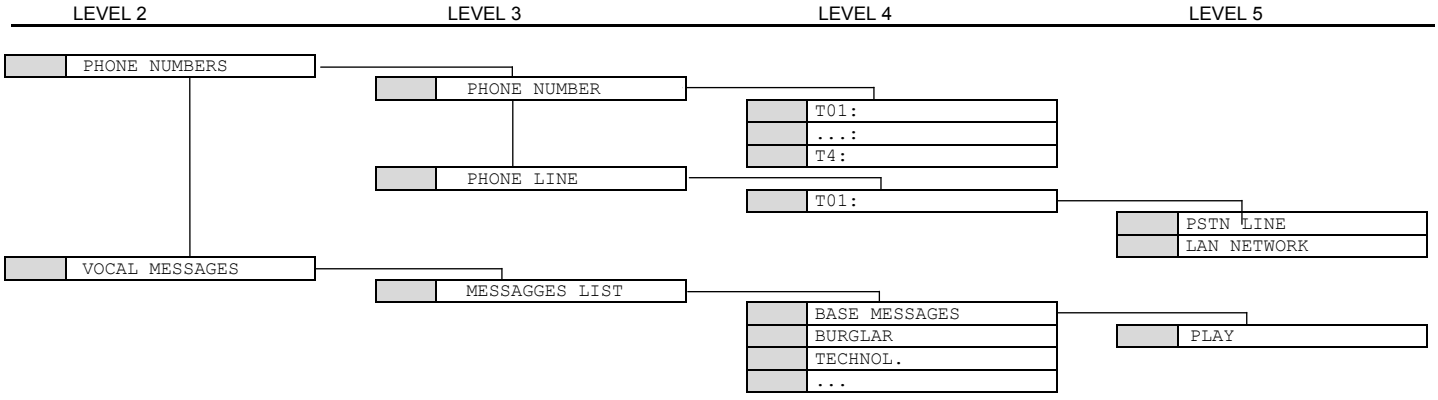
9.1.3 Enabling submenu



9.1.4 Test submenu



9.1.5 Telephone dialer submenu



9.2 INSTALLER MENU

The top level items of Installer menu are the following:

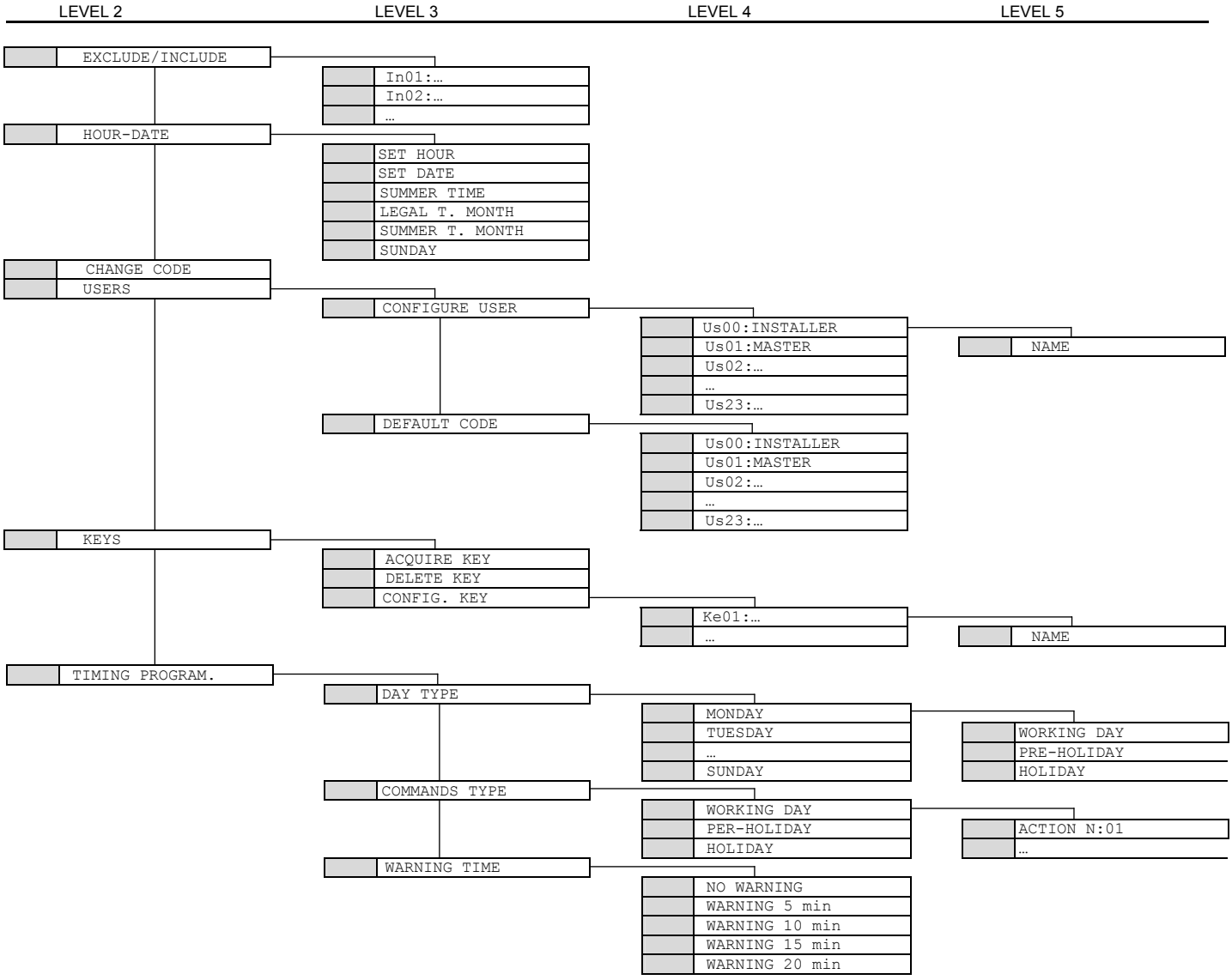
SYSTEM STATUS	Shows the status of the system and allows the changing of the STAY and AWAY mode status.
EVENT LOG	It allows to read and delete the list of events stored in the control panel (see 9.2.1. *Event log submenu*).
SETTINGS	Allows you to exclude the inputs, set current time and date, change the installer code, set up the users, or return their codes to factory settings, to acquire, set up and delete electronic keys and transponders, to set the timing programmer (see 9.2.2. Settings Submenu).
TEST	Allows you to perform specific tests to check the perfect operation of the system. You can separately control the inputs and outputs of the control panel and other devices connected on the bus, the battery and vocal telephone calls to the remote control centres. (See 9.2.3. Test Submenu).
PROGRAMMING	Allows you to set the arming mode, the inputs of the control panel and other peripheral buses, to set up the outputs of the control panel and the expansions, the keypads and readers and to program the system code for the remote management. (see 9.2.4. Programming Submenu).
PARAMETERS	It allows to set system general timings (see 9.2.5. *Parameters submenu*).
TELEPHONE DIALLER	It allows you to program or change the phone numbers to send alarms and messages, assign specific alarms to each telephone number, and to specify the send mode, to record and play to all vocal messages, to enable and set up other phone functions (see 9.2.6. Telephone Dialler Submenu).
MAINTENANCE	Allows you to carry out maintenance operations on the system and also change the language, acquire new devices, deleting devices, reset and save the performed programming (see 9.2.7 Maintenance Submenu).

With the system armed, it is only possible to access the System Status option.

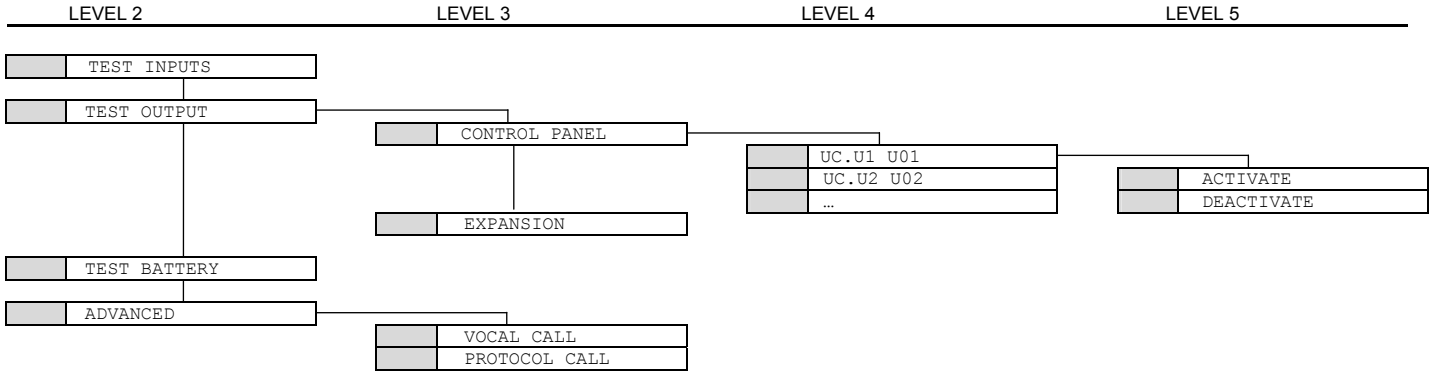
9.2.1 Event log submenu

LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
	READ EVENT LOG		
	ERASE EVENT LOG		

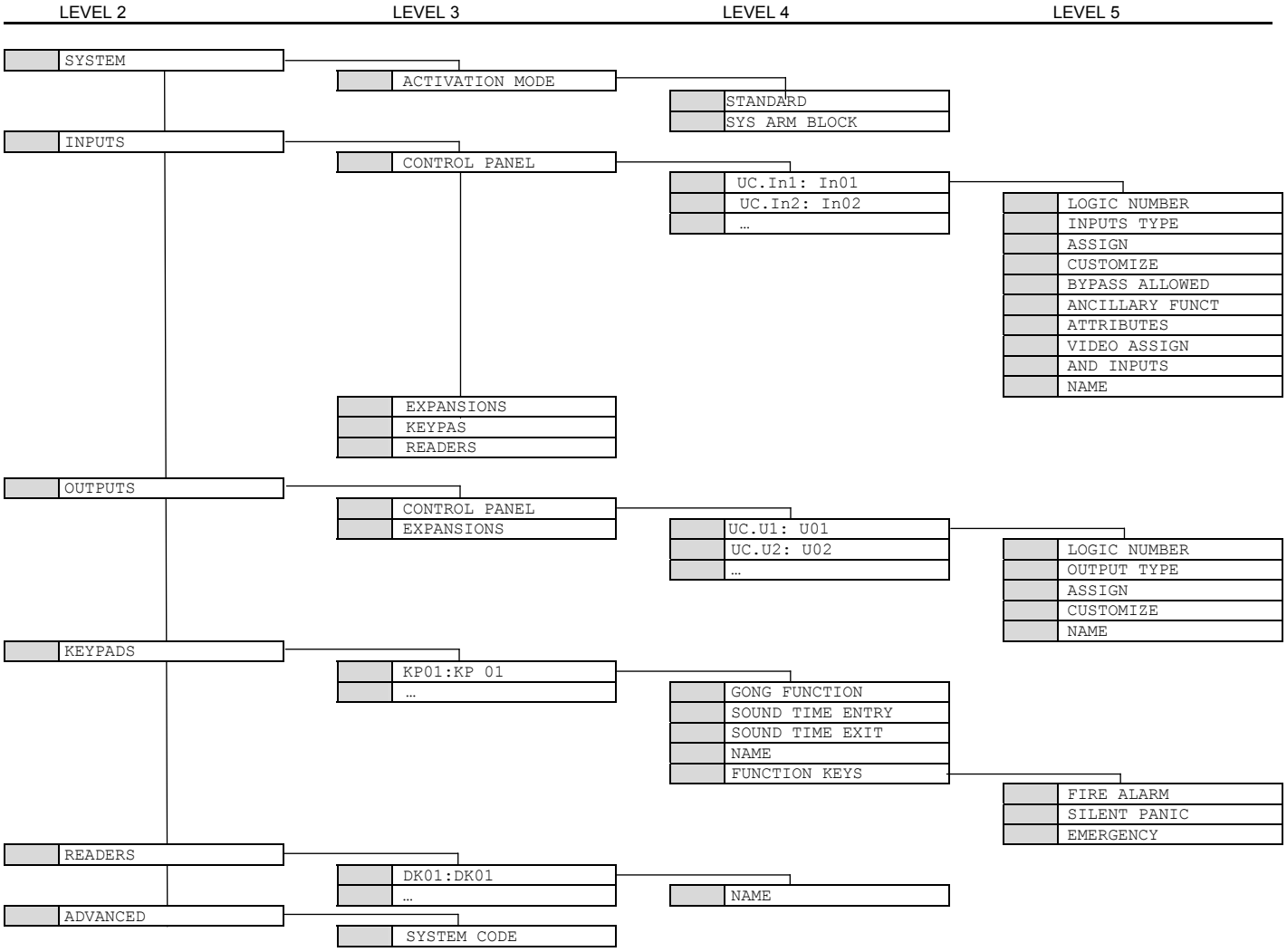
9.2.2 Settings submenu



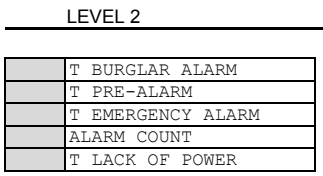
9.2.3 Test submenu



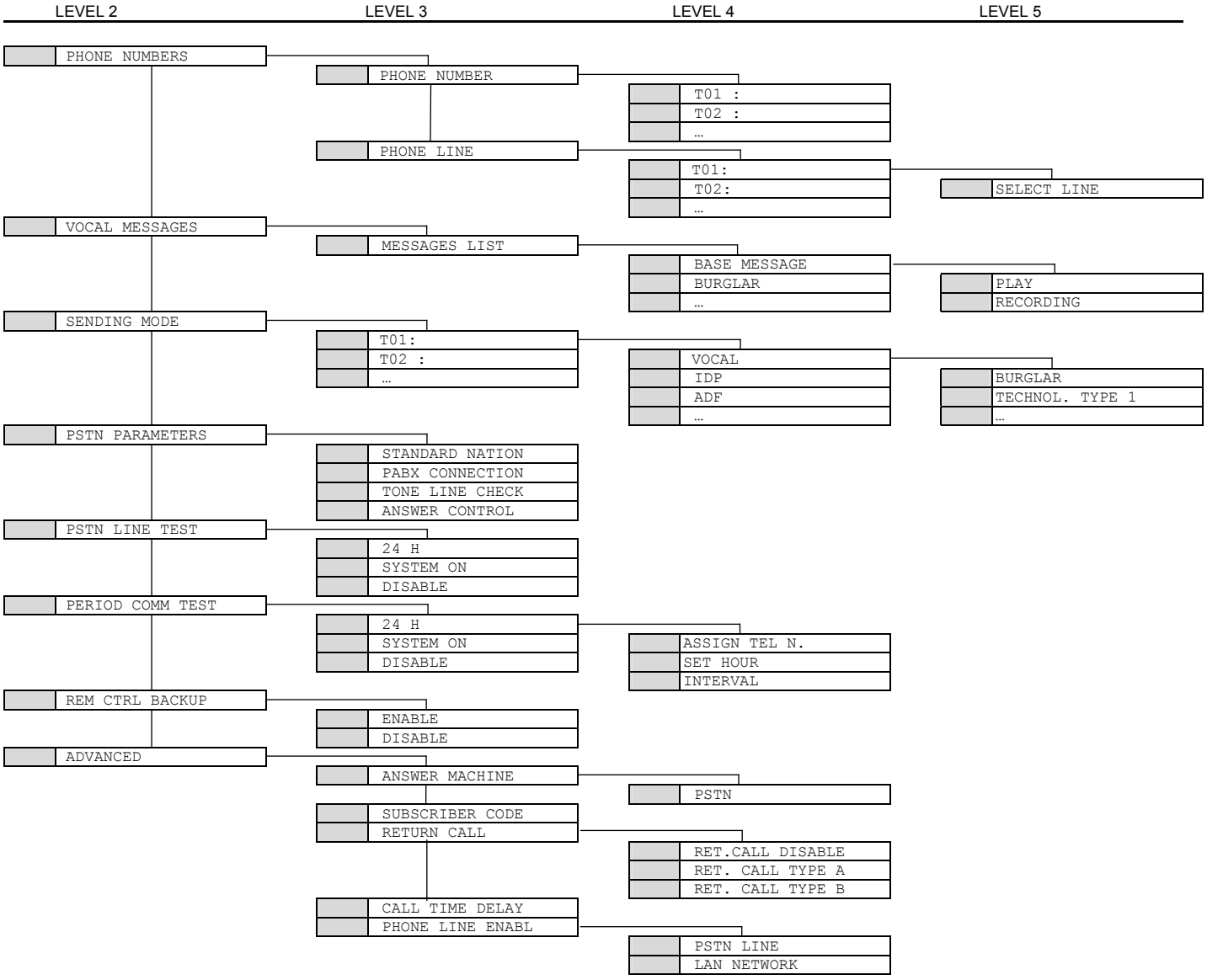
9.2.4 Settings submenu



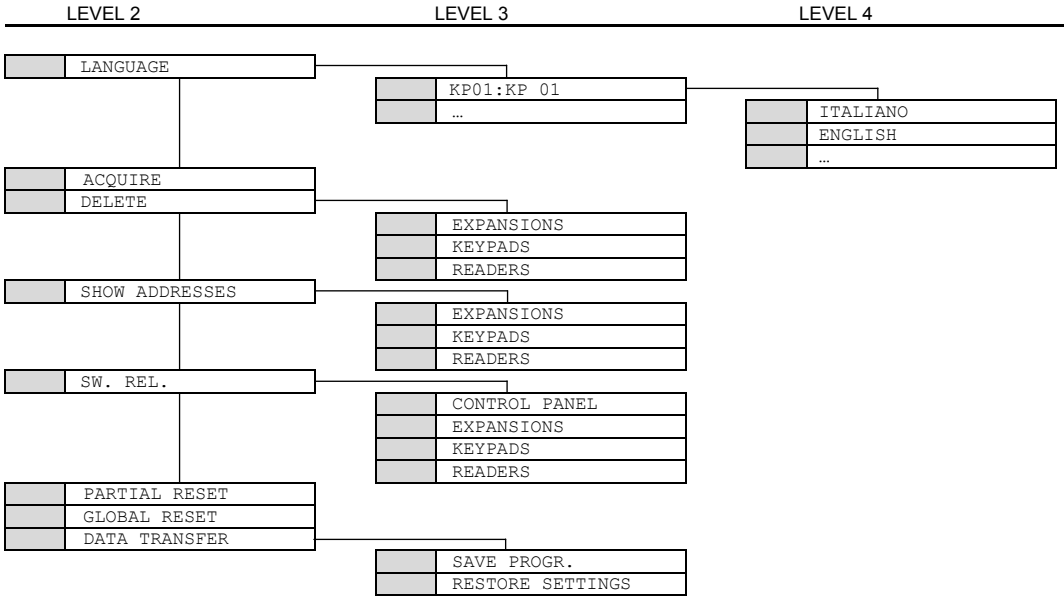
9.2.5 Parameters submenu



9.2.6 Telephone dialer submenu



9.2.7 Maintenance submenu



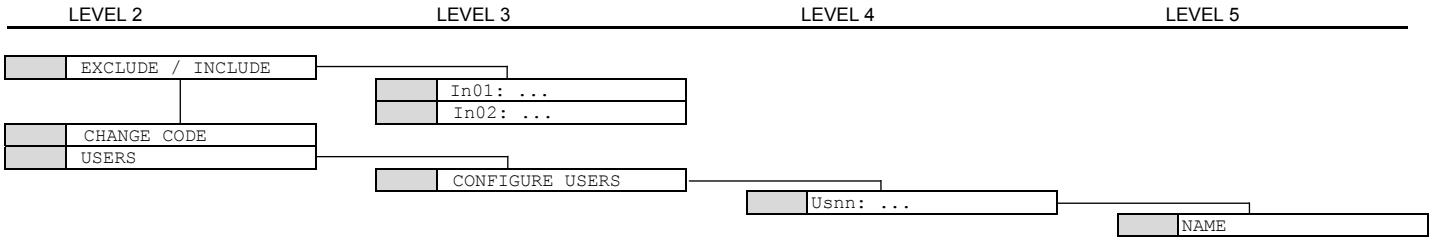
9.3 USER MENU

User menu start choices are:

SYSTEM STATUS	Shows the status of the system and allows the arming/disarming of the STAY and AWAY modes.
EVENT LOG	It allows to read the list of events stored into control panel (see § 9.1.1).
SETTINGS	Allows you to exclude / include inputs, to change your code and to name the code.

Depending on choice made, it can be possible to access other items in menu tree, as shown.
Apart from the System Status, all other options are only accessible when the system is disarmed.

9.3.1 Settings Submenu



10 CONFIGURATIONS SUMMARY TABLES AND FACTORY SETTING

10.1 SYSTEM CODE

System code (for Hi-Connect)	**Default : 55555555**	

10.2 SYSTEM PARTITIONS

	Activation Mode
1	
Default	Standard

10.3 USERS

	Default	**Name**	**Enabled**	**Code**
Installer	0000		--	
Master	1111		x	
User 2	0020		□	
User 3	0030		□	
User 4	0040		□	
User 5	0050		□	
User 6	0060		□	
User 7	0070		□	
User 8	0080		□	
User 9	0090		□	
User 10	0100		□	
User 11	0110		□	
User 12	0120		□	
User 13	0130		□	
User 14	0140		□	
User 15	0150		□	
User 16	0160		□	
User 17	0170		□	
User 18	0180		□	
User 19	0190		□	
User 20	0200		□	
User 21	0210		□	
User 22	0220		□	
User 23	0230		□	

10.4 KEYS

	Name	Enabled
Key 1		□
Key 2		□
Key 3		□
Key 4		□
Key 5		□
Key 6		□
Key 7		□
Key 8		□
Key 9		□
Key 10		□
Key 11		□
Key 12		□
Key 13		□
Key 14		□
Key 15		□
Key 16		□
Key 17		□
Key 18		□
Key 19		□
Key 20		□
Key 21		□
Key 22		□
Key 23		□
Key 24		□

10.5 GENERAL PARAMETERS

Parameter	Value	Default
Burglar alarm time (burglar, tamper, panic)		180 s
Pre-alarm time		180 s
Emergency alarm time		180 s
Alarms count		disabled
Lack of power time		1h

10.6 CONTROL PANEL INPUTS

							DEFAULT				
Attrib.	Bypass allowed							YES			
	Release type							SINGLE			
Ancill. Funct.	Gong										
Video assign											
AND inputs											
Association STAY/AWAY	STAY/AWAY	□ □	□ □	□ □	□ □			x □	x □	x □	x □
Customize	Input of test										
	Tamper										
	Key										
	Emergency										
	Reset fire alarm										
	Silent Panic										
	Panic										
	Pre-alarm										
	Technol Type 3										
	Technol. Type 2										
	Technol. Type 1										
	Fire alarm										
	Delayed							X			
	Immediate								X	X	X
Sensitivity											
Type								D.Bal.	D. Bal.	D. Bal.	D. Bal.
Name								...	...	...	...
Logical address								01	02	03	04
Physical address		I01	I02	I03	I04			I 01	I 02	I 03	I 04

Types: Not used (N.U.), Normally closed (N.C.), Normallly open (N.O.), Balanced (SB), Double balancing (DB), Shock (IN), Roller (TP)
If Shock or Roller is requested the sensitivity.

10.7 CONTROL PANEL OUTPUTS

STAY/AWAY mode assignation		STAY/AWAY	□ □	□ □	DEFAULT	AWAY	AWAY
Customize	Burglar/Tamper						
	Commandable						
	Pulse commandable						
	OR TC						
	AND TC						
	System Status						
	Buzzer						
	Gong						
	Lack of power						
	Tel. failure.						
	System failure						
	Reset fire alarm						
	Fire alarm						
	Technol. Type 3						
	Technol. Type 2						
	Technol. Type 1						
	Emergency						
	Hold-up						
	Panic						
	Tamper						x
	Reset burglar alarm						
	Pre-alarm						
	Burglar alarm					x	
Type*						N.H.	N.H.
Name							
Logical address						01	02
Physical address			U1	U2		U1	U2

Types: Not used (N.U.), Normally open (N.L.), Normally closed (N.H.)

10.8 EXPANSION INPUTS

Attrib.	Bypass allowed																
	Release type																
Ancill. Funct.	Gong																
Video assign																	
AND Inputs																	
Association STAY/AWAY	STAY/AWAY	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □
Customize	Input of test																
	Tamper																
	Key																
	Emergency																
	Reset fire alarm																
	Silent panic																
	Panic																
	Pre-alarm																
	Technol. type3																
	Technol. type2																
	Technol. type1																
	Fire alarm																
	1st Entry/Last exit																
	Last exit																
	Way																
	First entry																
	Delayed																
	Immediate																
Sensitivity																	
Type*																	
Name																	
Logical address																	
Physical address		I n1	I n2	I n3	I n4	I n5	I n6	I n7	I n8	I n1	I n2	I n3	In4	I n5	I n6	I n7	I n8
		Expansion 1								Expansion 2							

Attrib	Bypass allowed	YES							
	Release type	SINGLE							
Funz. Compl.	Gong								
Video assign									
AND input									
Association to partitions	1 2 3 4 5 6 7 8	□□□□□□□□ x	□□□□□□□□ x	□□□□□□□□ x	□□□□□□□□ x	□□□□□□□□ x	□□□□□□□□ x	□□□□□□□□ x	□□□□□□□□ x
Customize	Input of test								
	Tamper								
	Key								
	Emergency								
	Reset fire alarm								
	Silent panic								
	Panic								
	Pre-alarm								
	Technol. type3								
	Technol. type2								
	Technol. type1								
	Fire alarm								
	1st Entry/Last exit								
	Last exit								
	Way								
	First entry								
	Delayed	**X**							
	Immediate		**X**	**X**	**X**	**X**	**X**	**X**	**X**
Sensitivity									
Type*		D.Bil.	D.Bil.	D.Bil.	D.Bil.	D.Bil.	D.Bil.	D.Bil.	D.Bil.
Name									
Logical address									
Physical address		I n1	I n2	I n3	I n4	I n5	I n6	I n7	I n8
		DEFAULT							

10.9 EXPANSION OUTPUTS

	STAY/AWAY mode assignation	STAY/AWAY	□ □	□ □	□ □	□ □	□ □	□ □	AWAY	AWAY	AWAY
Customize	Burglar/Tamper										
	Commandable										
	Pulse Commandable										
	OR TC										
	AND TC										x
	System Status										
	Buzzer										
	Gong										
	Lack of power										
	Tel. failure										
	System failure										
	Reset fire alarm										
	Fire alarm										
	Technol. type3										
	Technol. type2										
	Technol. type1										
	Emergency										
	Hold-up										
	Panic										
	Tamper									x	
	Reset burglar alarm										
	Pre-alarm										
	Burglar alarm								x		
Type*									N.H.	N.H.	N.H.
Name											
Logical address									seq	seq	seq
Physical address			U1	U2	U3	U1	U2	U3	U1	U2	U3
			EXP 1			EXP 2			DEFAULT		

10.10 KEYPADS INPUTS

Attrib.	Bypass allowed									
	Release type									
Ancill. Funct.	Gong									
Video assign										
AND input										
Association STAY/AWAY	STAY/AWAY	□ □	□ □	□ □	□ □	□ □	□ □	□ □	□ □	
Customize	Input of test									
	Tamper									
	Key									
	Emergency									
	Reset fire alarm									
	Silent panic									
	Panic									
	Pre-alarm									
	Technol. type3									
	Technol. type2									
	Technol. type1									
	Fire alarm									
	1st Entry/Last exit									
	Last exit									
	Way									
	First entry									
	Delayed									
	Immediate									
Sensitivity										
Type*										
Name										
Logical address										
Physical address		A1	A2	A1	A2	A1	A2	A1	A2	
		KP1		KP2		KP3		KP4		

Default: All keypads inputs are configured as “NOT USED”

10.11 READERS INPUTS

Attrib.	Bypass allowed									
	Release type									
Ancill. Funct.	Gong									
Video assign										
AND input										
Association STAY/AWAY	STAY/AWAY	□ □ □	□ □ □	□ □ □	□ □ □	□ □ □	□ □ □	□ □ □	□ □ □	
Customize	Input of test									
	Tamper									
	Key									
	Emergency									
	Reset fire alarm									
	Silent panic									
	Panic									
	Pre-alarm									
	Technol. type3									
	Technol. type2									
	Technol. type1									
	Fire alarm									
	1st Entry/Last exit									
	Last exit									
	Way									
	First entry									
	Delayed									
	Immediate									
Sensitivity										
Type*										
Name										
Logical address										
Physical address		A1	A2	A1	A2	A1	A2	A1	A2	
		DK1		DK2		DK3		DK4		

Default: All key readers inpus are configured as "NOT USED"

10.12 KEYPADS

	Name	Gong	Sound time entry	Sound time exit	Function keys			Masking
					Fire alarm	Silent Panic	Emergency	
KP01								
KP02								
KP03								
KP04								

Default: all options are disabled

10.13 READERS

	Name	Masking
LET01		
LET02		
LET03		
LET04		

Default: All key readers have Masking disabled.

10.14 COMMUNICATOR

Event	Burglar						x
	Pre-alarm						
	Technological 1						
	Technological 2						
	Technological 3						
	Fire alarm						
	Panic						
	Silent panic						
	Medical emergency						
	Hold-up						
	System ON-OFF						
	Maintenance						
	Excluded Inputs						
	Included Inputs						
	Tamper						x
	Lack of power						
	Low battery						
	System failure						
	Wrong code						
Sending mode							VOCAL
Telephone line	LAN						
	PSTN						x
Telephone number							
Position		**T1**	**T2**	**T3**	**T4**		Default

PARAMETER			DEFAULT	
PSTN parameter	Nation		Italy	
	PABX connection		disabled	
	Tones line check		disabled	
	Answer control		disabled	
PSTN line test			System ON	
Period comm. test			disabled	
	hour			
	interval			
	Telephone number			
Remote control backup			disabled	
Advanced	Answer machine	PSTN	disabled	
	Remote control code		66666666	
	Call back		disabled	
	Call time delay		disabled	
	Phone line enabling	PSTN	enabled	
		LAN	disabled	

10.15 TIMING PROGRAMMER

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Working							
Pre-holiday							
Holiday							

Default	Working	Working	Working	Working	Working	Pre-holiday	Holiday

	Command							**Hour : Minutes**	**Mode / Output /User/Key**							
	N.	Arm	Disarm	Output activation	Output deactivation	User/ Key enabling	User/ Key disabling		STAY (perimeter)	AWAY (total)						
Working day	1							:								
	2							:								
	3							:								
	4							:								
	5							:								
	6							:								
	7							:								
	8							:								
Pre-holiday	1							:								
	2							:								
	3							:								
	4							:								
	5							:								
	6							:								
	7							:								
	8							:								
Holiday	1							:								
	2							:								
	3							:								
	4							:								
	5							:								
	6							:								
	7							:								
	8							:								

Warning time	**Default : Disabled**	

NOTE

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