

HILTRON security



PROTEC6GSM **TM600GSM**

**6 zones + central unit
with gsm dialer
and integrated ir**

USER MANUAL
(for software version 2.25)

1 Introduction

1.1 Functional Characteristics

- Security alarm control unit with 2 delayed zones + 4 immediate zones + 24/7 protection line.
- GSM telephone dialler with pre-recorded voice messages and SMS.
- Infrared Sensor with a 3-beam lens and a maximum range of 5mt on "delayed zone 1"
- Common Voice Messages (customisable)
- System Partialization (from console, remote or key)
- The backlight of the panel can be activated keyboard and the sensor on the panel.
- Battery charger power supply with overload protection and battery polarity inversion.
- XM Series console connection for programming and control of the control panel.
- Connection for activation / deactivation accessories with signalling (type PX, SK or KBC).
- Voice-guided menu for controlling both locally and via telephone, notification about the status of the central, about open zones, excluded zones and alarm memory.
- Zone exclusion and a 24/7 protection line from both panel and remote connection.
- Output for external equipment activation by insertion on local/remote command.
- Programmable system partialization.
- Led power grid presence check, service fuse interrupted.
- Time signaling LED: output; entry; alarm and alarm memory.
- 1led for each status reporting area.
- SMS messages sent with system status indication, alarm zone / zone identification, power status. pre-recorded alarm telephone alert with indication of system status, zone status, status
- power supply and alarm memory.
- Programming from local or remote keypad on RS485 BUS with indications on the display.
- 16 contacts telephone directory
- Voice responder with pre-recorded help messages.
- Quad Band GSM telephone module.
- Display indication of the telephone company and signal strength.
- Remote environmental listening.
- Optional signaling of extended network absence.
- Request of residual telephone credit by SMS.
- Optional re-sending of SMS received.
- Central anti-tamper protection tamper.
- Anti-tamper tamper (PROTEC6GSM only).
- Battery compartment B12V7.5Ah.
- Degree of safety: 1.
- Environmental class: 2.
- Container in ABS (PROTEC6GSM) or metal (TM600GSM).

1.2 Technical Characteristics

	PROTEC6GSM	TM600GSM
Areas of immediate protection	4	
Areas of delayed protection	2	
Areas of anti sabotage protection "24h"	1 + Tamper	
Rated supply voltage	230V~ ±5% 50Hz	
Service output voltage	12Vcc ±10% (Max 1Ah)	
Backup Battery Compartment	(battery suggested B12V7.5Ah)	
Adjustable alarm duration	da 180 a 600 sec.	
Adjustable exit timing	da 0 + 60 sec	
Adjustable entrance timing	da 0 + 60 sec	
Coverage angle of the detector on the panel	H: 85°; V: 60°	
Maximum coverage of the detector on the panel	5mt	
Storable Phone numbers	16	
Maximum power consumption on services output	1A a 12Vcc	
Max current consumption (central unit only)	65mA@230Vac	
Maximum power absorption	150mA@230Vac	
Max current supplied by power supplier	35W (2,6Ah at 13,5V)	
Container	ABS	Metal
Safety Degree of container	IP40	IP30
Safety Degree	1	
Environmental Class	2	
Functioning Temperature	+5°C ÷ +40°C	
Dimensions (L)	280mm	285mm
Dimensions (H)	230mm	228mm
Dimensions (W)	96mm	95mm
Complies with Standard	CEI EN 50131-1	

2 Installation

2.1 Avvertenze generali

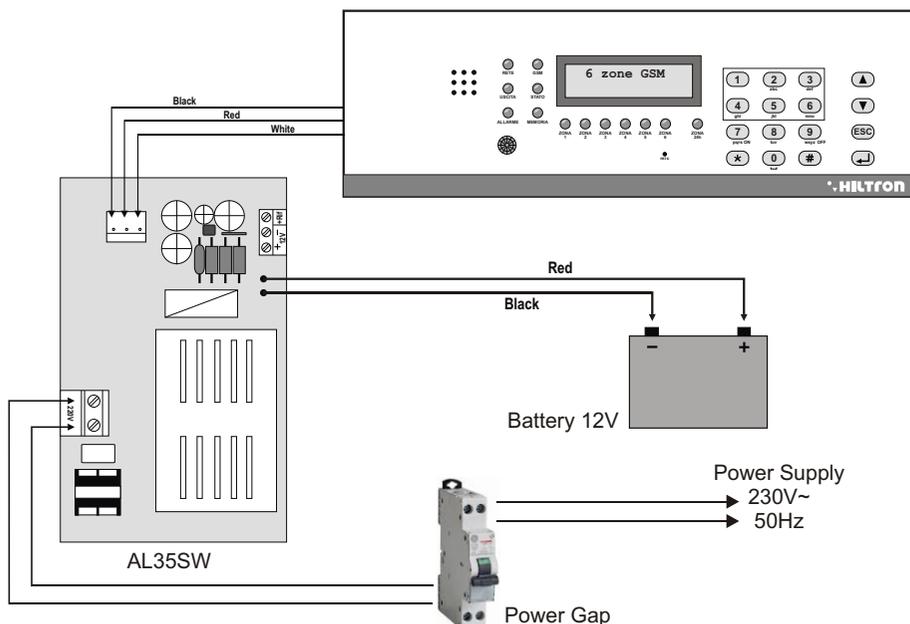
- Do not install this central unit in places subject to extreme temperatures and/or bad weather;
- For a solid and secure fixing it is advisable to make sure that the mounting surface is flat. Position the central unit at a height that allows easy access to the front panel.
- The connections must be carried out in compliance with CEI 79-3-2012 "Special regulations for burglar-proof, intrusion, alarm and anti-aggression systems".

2.2 Power Supply

The power supply to the entire system is supplied by the power supply unit-battery charger inside the control unit, which constantly keeps the battery charged (B12V7,5Ah).

WARNING

The 230V ~ mains voltage must be connected to the power supply / battery charger by two double-insulated conductors of 1.5mm² coming from a disconnector (eg a thermal magnetic circuit breaker) used exclusively for the burglar alarm control unit. Inside the control unit, position the two conductors in a sufficiently tidy manner, locking them by means of the supplied cable gland and possibly by means of cable ties..



Once the connections have been completed, insert the two wires with a faston connector coming from the power supply to the battery, respecting the connection polarity.
Red = [+] battery positive / Black = [-] negative battery.

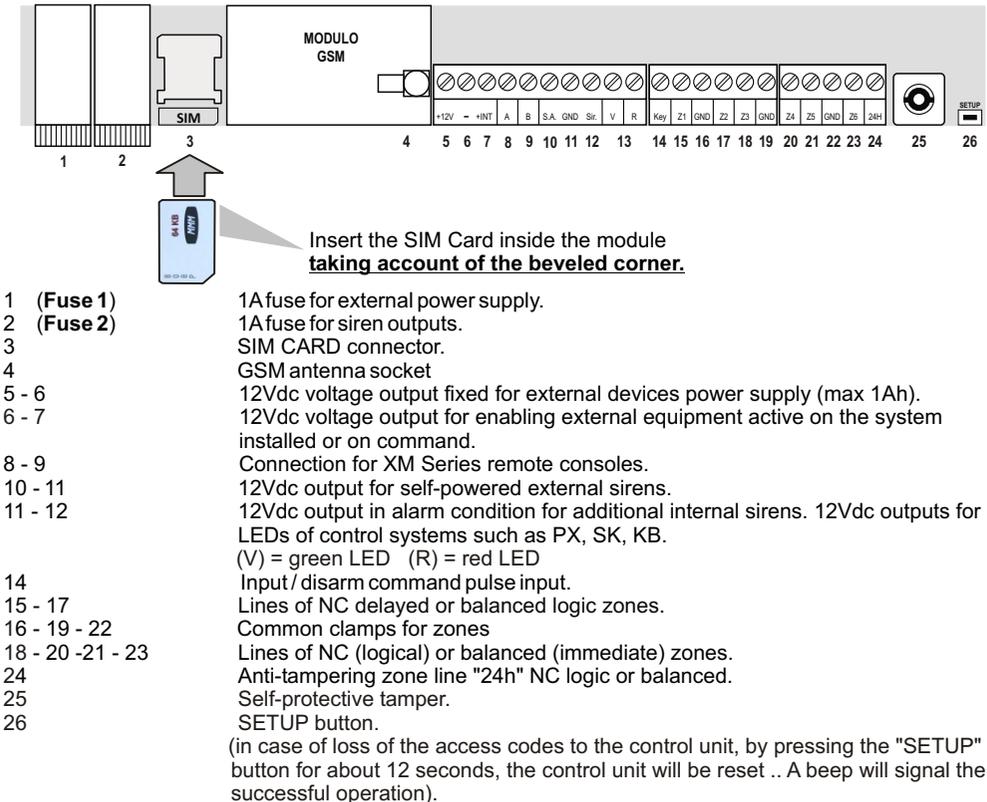
WARNING

The battery must always be connected so that the system can function properly. It is advisable to periodically check its efficiency by measuring the voltage on the two contacts after disconnecting the mains power supply through the appropriate disconnector (magnetohermic switch). If the voltage tends to drop significantly even in the presence of only the central load, it is necessary to replace it.

After connecting the battery of the control panel and the siren, the system can be switched on using the disconnector connected to the power supply. The NETWORK LED on the panel of the control unit stops flashing and remains steady to indicate the effective presence of the mains voltage.

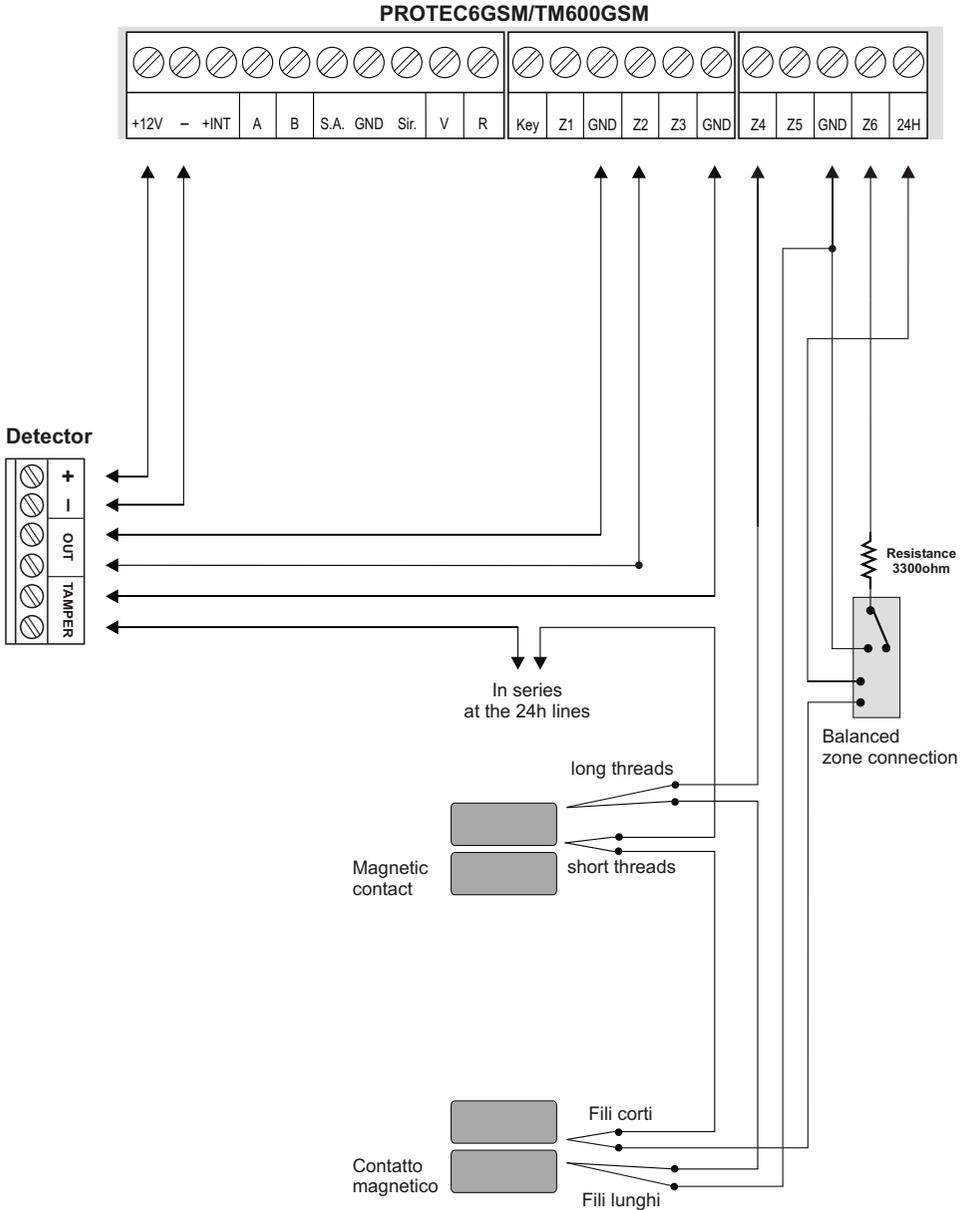
For safety reasons and for compliance with the regulations in force, it is advisable to make and check the connection to the ground system to all the devices that need it..

2.3 Connections

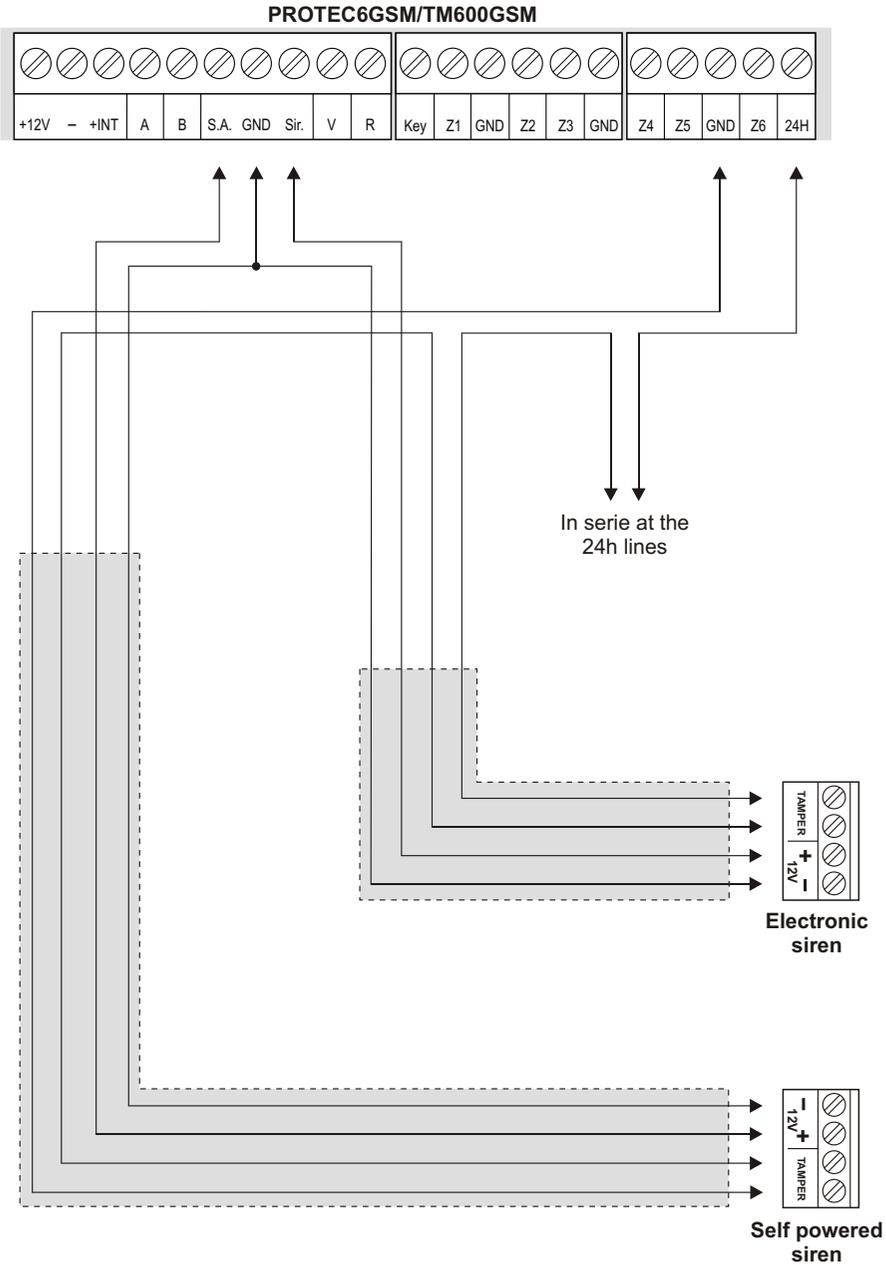


For a correct installation, it is advisable to follow the instructions on the following pages.

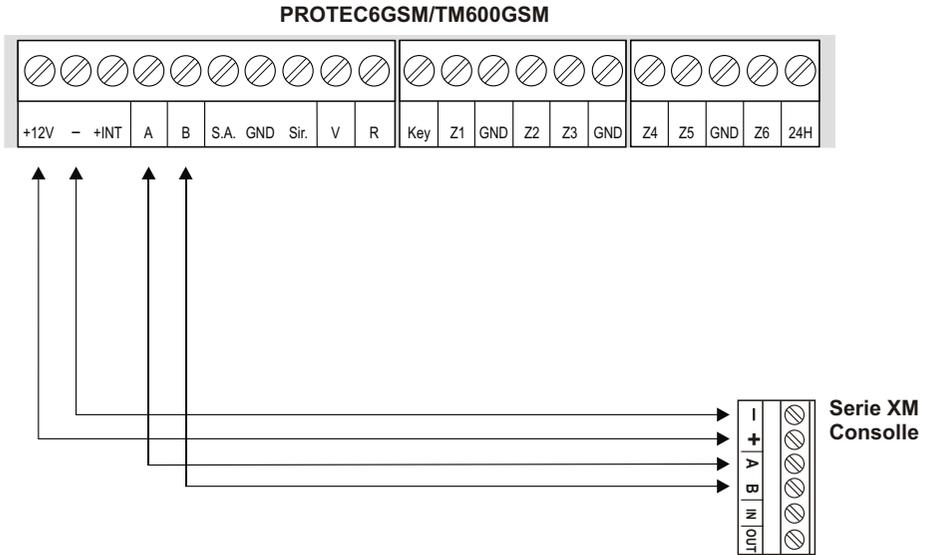
2.3.1 Connection of volumetric detectors and contacts



2.3.2 Siren Connection



2.3.4 Keypad connections XM Series / Tamper-proof (PROTEC6GSM)



CAUTION:

The console must be configured with Address 1:

Press **[*]** 3 times immediately after powering up the console, choose ID-1 with **[▼]**/**[▲]** and press **[#]**/**[↵]**

Only a single console can be connected

Can be connected only one external console.

INSTALLATION OF ANTI-TREATMENT TAMPER (Only PROTEC6GSM)

6mm hole for tear-proof tamper

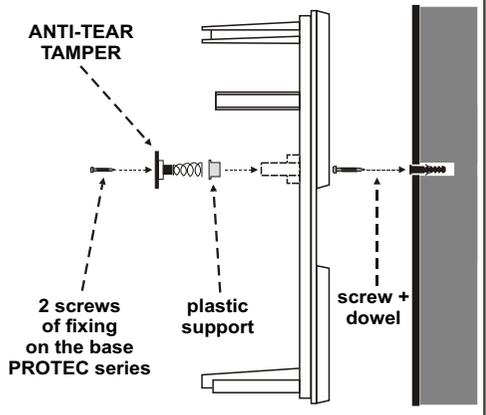
- Drill a 6mm hole and insert the supplied plug.
- Tighten the screw until the useful projection is obtained. It will be used to activate the tamper on the back of the PROTEC series control unit

Tamper installation at the PROTEC base

- Insert the supplied plastic support into the hole.
- Insert the cable to the card.
- Lock the tamper board on the base with the 2 screws of the central unit, making sure that the spring tamper goes to fit inside the appropriate housing.

Tamper connection to the central unit

- The anti-tamper tamper must be connected to the terminal on the 24H of the control unit, using the cable supplied.



3 Programming

Once the installation has been carried out and given the voltage to the control unit (PROTEC6GSM or TM600GSM), the following is displayed :



It is possible to interact with the control panel through 4 menus:

- **Programming menu:** accessed by entering the CODICE MASTER (5 5 6 7 8) the programming and the operating parameters of the control unit.
- **Command menu:** accessed by typing the COMMANDS code (2 3 4) command of the central unit.
- **Query menu:** access to the system disarmed from the local keypad without the need to enter any code to display the alarm memory and to exclude / include a zone for the subsequent insertion of the control panel.
- **Voice menu:** enabled by pressing the button (#) only from the local keypad. Through a voice guide you can access the command functions, by typing the COMANDI code on request.

3.1 Access to programming

5 6 7 8 #

When the central is off, enter the CODICE MASTER (default is 5-6-7-8) followed by the key (#) / (↵).
It displays:



NOTE: If you try to enter an incorrect code (after 15 keys pressed), the keyboard will lock for about 30sec. during which it does not accept further attempts. If, on the other hand, the keypad is not used for more than 1 minute, the control unit automatically terminates the programming mode.

using the buttons (▼) / (▲) you can select the items in this menu:

- | | |
|---------------------------|--|
| 1 - Contacts | 16 Telephone numbers. |
| 2 - Parameters | Configuration of the central unit |
| 3 - Codes | Modification of the MASTER Code and the COMMANDS Code. |
| 4 - Common Message | Possibility to record a common message |
| 5 - Delete Setup | Restore default values by resetting the phonebook and the personal configurations. |
| 6 - Info | Display of the Model; of the GSM module Firmware and the IMEI. |
| 7 - System Reset | Restarts the control unit and the GSM module. |
| 8 - Test | Make a test call. |

3.1.1 Contacts

5 6 7 8 # 1

Contacts entry

Once you have entered the programming menu, press (1) to display:



press (#) / (↵) you'll see:



Use (▼) / (▲) buttons to select one of the 16 positions in the phone book and then push dial (#) (1)

Insert a phone number (max 32 digits)

Numero 01
1 2 3 4 5 6 7 8 9 >

NOTE: To correct a typing error, use the button  to delete the last number entered in the phone book or select the wrong number using the buttons and type  /  in the new correct number.

To confirm, press  /  button .
To display :

Invio SMS all. ?
7=SI 9=NO

Press  or  to indicate to the control panel whether or not to send alarm SMS messages to the number set. Next request:

Avviso No Rete ?
7=SI 9=NO

Press  or  to indicate to the control panel whether or not to send a message to the number set in case of prolonged power failure.

SMS No Rete ?
7=SI 9=NO

Press  or  to indicate to the control panel whether or not to send a message to the number set in case of prolonged power failure.

Note: In the event of a power failure, the functions for sending SMS and VOICE CALL remain active for about 30 minutes, even if the control panel is off.

Delete numbers

To delete a phone number go to the "Phone Book" menu and press  /  until you see:

RUBRICA
Cancella Numeri

press  /  and then choose the contact you want to delete by pressing  /  until the number does not appear on screen:

Numero 03
1 2 2 6 6 8 8 9 9

By pressing  /  a message will appear on screen:

Vuoi cancellare ?
7=SI 9=NO

and by pushing  for a few moment another message will appear on screen:

CANCELLATO follow from → Numero 3
Non Programmato

to exit the "Delete Numbers" submenu, simply go back by pressing the key several times  / .

3.1.2 Parameters

Access the programming menu by pushing **2** or use **▼**/**▲** to see

```
25¥ ABCD
2-Parametri
```

then press **#**/**↵** .

Use **▼**/**▲** buttons to select and press **↵** or **#** to modify one of the options::

OUT + Int. Operation	Entry delay time
Partialization	Exit Delay Time
SMS forwarding	Alarm duration
Max 5 alarm cycles	Logical / Balanced Zones
IR on Delayed Zone 1	Key insertion

OUT +INT Functioning

This option indicates the control unit to manage the + INT output in two ways: Activate / Deactivate the output on ON-OFF command or on Arm / Disarm the control panel (**On on inserted**)

```
Funz. OUT +INT
Comando ON/OFF
```

by pushing **#**/**↵** the output setting can be changed:

```
Funz. OUT +INT
ON su inserito
```

To exit press **✱** or **ESC** .

Partialization

This option allows to set the zones to be included / excluded from the surveillance when the control panel is partially inserted:

using the **▼**/**▲** keys, scroll the PARAMETERS menu up to the "PARTIALIZATION" item"

```
Parzializzazione
```

push **↵**

Them select the setup screen "**Partial A Setting** "or " **Partial B setting**"

```
Imp. parziale A
>PPP-
```

Each "P" character represents the order of the numbers of the monitored zone when the panel is inserted in a partial way according to the chosen scheme.

Scrolling with the keys **▼**/**▲**, it will be possible to perform the same operation on the second scheme of partialization of the installation B.

When finished, press **ESC** to return to the main menu.

SMS Forwarding

If this function is enabled, the dialler sends all the received SMS to the first contact saved in the contact list.

```
Inoltro SMS
Abilitato
```

to change status, press **#** / **↵** :

```
Inoltro SMS
Disabilitato
```

When disabled, the dialler ignores all the received SMS.

Max. 5 alarm cycles

When this function is not enabled, the control unit will continue to signal the alarms by activating sirens and telephone dialler whenever an alarm occurs on the zone inputs on the 24h line and on the tamper.

```
Max 5 cicli all.
Disabilitato
```

to change status, press **#** / **↵** :

```
Max 5 cicli all.
Abilitato
```

By enabling this function, the control panel performs all the messages for a maximum of 5 times, then ignores any new alarms, until the control unit performs an activation / deactivation command.

IR on Delayed Zone

This option enables or disables the infrared detector on the panel and alarms zone 1 (delayed):

```
IR su Zona Rit 1
Disabilitato
```

to change status, press **#** / **↵** :

```
IR su Zona Rit 1
Abilitato
```

Entry delay time

The entry time is the time available to the user to access the protected environments and disarm the system before the alarm is activated. During this time, any activation of the sensors placed on the delayed protection zones (zone 1 and 2) will not cause alarms. By default the set time is 15 sec:

```
Tempo di entrata
015
```

to set the desired time (from 0 to 60sec), press **#** / **↵** and you'll see this message on screen:

```
Inserisci valore
>----<
```

enter the desired value (always 3 digits), press **#** / **↵** and a message like this will appear on screen::

```
Tempo di entrata
055
```

The display shows the new value. If the entered value is greater than the one allowed, the control unit emits a long "beep", and the display will show:

```
VALORE ERRATO
Min=000 Max=060
```

Exit Delay Time

The exit delay time is the time available to the user to leave the protected areas after the implant has been inserted.

During this time, any activation of the sensors placed on the delayed protection zones will not cause any alarm. By default, the set time is 30sec:

```
Tempo di uscita
030
```

Enter the desired value (always 3 digits) and press **#** / **↵** the display will show:

```
Inserisci valore
>----<
```

to set the desired time (from 0 to 60sec), press **#** / **↵** and the display will show:

```
Tempo di uscita
055
```

If the entered value is not allowed, the indication appears:

```
VALORE ERRATO
Min=000 Max=060
```

Alarm duration

This option allows you to adjust the duration of the acoustic signals of the alarms occurring in the control panel.

```
Durata allarme
180
```

To set the desired time (from 180 to 600sec), press **#** / **↵** and the display will show:

:

```
Inserisci valore
>---<
```

Enter the desired value (for example 500), press **#** / **↵** and the display will show:

```
Durata allarme
500
```

If the entered value is not allowed, the control unit emits a long "beep" and this message will appear:

```
VALORE ERRATO
Min=180 Max=600
```

Logical/Balanced Zones

This option allows you to change the operation of the zone inputs:

```
Zone Logiche/Bil
```

A balanced zone requires a resistance of 3.3Kohm at the end of the line so that the control unit can recognize the alarm zone both in the case of minor resistance (short-circuited line) and in the case of greater resistance (open line). A logical area, on the other hand, does not need resistances and will be considered not in alarm when the closed line is short-circuited. To carry out the desired programming press **#** / **↵** and the display will show:

```
Seleziona L/B
>LLLLLLL<
```

to change the zone settings, enter the number corresponding to the desired zone. (press button **7** to change line 24H).

```
Seleziona L/B
>LBBLLBL<
```

to exit this phase press **+** or **ESC**.

Insertion by key

It allows to set which type of insertion will be performed with a pulse on the "KEY" terminal.

```
Ins. da chiave
Impianto totale
```

Type press **#** or **↵** to change this parameter.

```
Ins. da chiave
Imp. parziale
```

3.1.3 Codes

The **CODICE MASTER** allows access to the programming menu.

The **COMMAND CODE** allows access to the control functions of the system.

Enter the CODICE MASTER, press / until the display shows:

25¥ ABCD
3-Codici

and confirm either by pushing / or by directly entering CODE MASTER .
The display will show:

SELEZ . CODICE
CODICE MASTER

To change this code, press or

CODICE MASTER

and enter a new code (4 digits).

Push / to select the new code.

SELEZ . CODICE
CODICE COMANDI

and press or to also change this code

CODICE COMANDI

Enter the new code (4 digits). At the end, press or to return to the programming menu.

3.1.4 Customizable Common Voice Message

5 6 7 8 # 4

The common message is a pre-recorded voice message, repeated during telephone communications, that can be used to identify the system from which the alarm calls originate.

In the programming menu, push / until you see:

```
25# ABCD
4-Msg. Comune
```

or press **4** and then press / **#**
A message will be shown on screen:

```
Msg. Comune
*Play #Rec
```

To record a message hold down **#**. If you release the button the record will stop.

NOTE: recording will stop automatically once the maximum message duration is reached (10 seconds).

To play the recorded message press

While the message is being played or recorded, an animation will appear on the second line of the display:

```
Msg. Comune
>>>>
```

```
Msg. Comune
>>>>>>>>
```

Press **ESC** to return to the programming menu

3.1.5 Delete SETUP

5 6 7 8 # 5

In the programming menu, press / until the following message appears:

```
25# ABCD
5-Cancella SETUP
```

and press **#** / , or type CODICE MASTER **#** **5**
to see:

```
Conf Ripristino?
7=SI 9=NO
```

confermando con il tasto **7** si visualizza per qualche istante :

```
Ripristino OK
```

This operation deletes all saved contacts and restores the factory settings of the control panel. By pressing the button **9** exits the menu without performing a reset.

3.1.6 Info

5 6 7 8 # 6

In the "Programming Menu" use **▼**/**▲** keys until you see:

```
25¥ ABCD
6-Info
```

and press **#**/**↵**, or digit CODICE MASTER **#****6**)

```
Serie PROTEC
6 zone GSM
```

use **▼**/**▲** keys to view the firmware release and the IMEI of the GSM module.

3.1.7 Reset

5 6 7 8 # 7

This function closes phone communications, forcing the restart of the GSM module and the control panel. In the "Programming Menu", press **▼**/**▲** until you see:

```
25¥ ABCD
7-Reset Impianto
```

and press **#**/**↵**, or digit (CODICE MASTER **#****7**).

3.1.8 Test

5 6 7 8 # 8

This function allows you to perform a test of GSM communication. During the test you can listen and send DTMF tones, but it is not possible to talk to the connected user. It can therefore be used, for example, to know the remaining credit of the SIM CARD.

In the programming menu, push **▼**/**▲** until the following message appears:

```
25¥ ABCD
8-Test
```

and press **↵****8**

or enter (CODICE MASTER **#****8**) the following message will appear:

```
Inserire Numero
```

Enter a phone number, then press **↵**:

```
25¥ Chiama.....
1234567890
```

answering the call :

```
25¥ Connesso...
1234567890
```

4 Commands

1 2 3 4 #

To operate on the control panel and carry out the activation / deactivation operations it is necessary to access the "Command Menu".

Type the Command code (by default 1-2-3-4) followed by **#** / **↵** and then dial the number of the desired voice or push **▼** / **▲** until you correctly select it. To confirm it press **#** / **↵**.

4.1 COMMAND menu

The options available in this menu are:

- 1 - Switching on / off
- 2 - COMMAND CODE CHANGING
- 3 - Zone Menu
- 4 - Alarm cycle stop
- 5 - Activation OUT
- 6 - Partial system

4.1.1 Switching on / off

1 2 3 4 # 1

Select:

```
25¥ ABCD
1-Insert./Disins.
```

and press **#** / **↵** :

```
Imp: DISINSERITO
7-INS 8-PR 9-DIS
```

press **7** to switch on the system and switch it off with **9**. The status of the control panel is indicated on the display from time to time:

```
Imp: INSERITO
7-INS 8-PR 9-DIS
```

The button **8** instead, inserts the system partially, according to the chosen partitioning scheme (see Partial installation menu).

Non-enabled zones are reported as excluded zones.

Type ***** or **ESC** to exit this option.

NOTE: If you do not use the keypad for more than 1 min at this time, the control panel will exit the COMMAND menu.

4.1.2 Change Code COMMANDS

1 2 3 4 # 2

To enter the desired option, while in the command menu use / keys and confirm by pressing / .

or directly type (CODICE COMANDI)

```
SELEZ . CODICE
CODICE COMANDI
```

press / .

```
CODICE COMANDI
-----
```

insert a four-digit code and immediately entering the last digit the code is accepted by returning to the display again:

```
SELEZ . CODICE
CODICE COMANDI
```

NOTE: In this menu it is not possible to modify the MASTER code.

4.1.3 Menù Zone

1 2 3 4 # 3

In the command menu, use / keys to select the following option:

```
25¥ ABCD
3-Menù ZONE
```

push / to access the ZONE Menu. The display shows the excluded zones that do not generate an alarm on the control unit.

```
Escludi ZONE
>-----<
```

Type the number of the zone that we intend to exclude for example 1,2,4 and 7:

```
Escludi ZONE
>12-4--7<
```

the numbers on the second line are those of the excluded zones (zone 7 represents the 24h zone). Keep the button pressed for about 2sec. so that all the zones can be included.

The LEDs of the excluded zones on the control panel flash.

At the end you can use  to view all the alarmed zones:

```
ZONE Aperte  
>---45--<
```

and again by pushing  you can see the zones in alarm memory:

```
Memoria Allarme  
>1---5--<
```

The alarm memory includes the zones that generated an alarm, those areas that were alarmed during the last insertion.

4.1.4 Stop Cycle (Stop Alarm)

Select the following option by pressing  /  :

```
25¥ ABCD  
4-Stop CICLO
```

press  /  to stop the siren alarm, the cycle of calls and SMS from being sent. The control panel continues to be inserted and ready for a subsequent alarm.

The excluded zones (including the 24 hours one) open when the control panel is in and even if they do not generate any alarm, they are added to the alarm memory list; this allows however the control of the regular operation of these zones.

The zones not inserted instead due to the partitioning are not memorized.

4.1.5 Output +INT activation

In the command menu select the following option by pushing  / 

```
25¥ ABCD  
5-Attivaz. OUT
```

and press  / .

If the + INT output has been programmed with operation on command (see page 12), the following message appears on the display:

```
OUT: Disattiva  
7=SI          9=NO
```

By pushing  the +INT output of the control panel will be activated. By pushing  the +INT output of the control panel will be deactivated.

On the other hand, if the output has been programmed to operate on the activation / deactivation of the control panel, the command is not allowed and this message will on the display for a few seconds:

```
NON PERMESSO
```


The voice guidance menu can also be accessed remotely, via a voice connection on the GSM network by sending the DTMF codes relating to the panel's panel keys (see also remote control).

In this case, on the control panel display appears the following message:

25* ABCD
Menù Vocale

To obtain information on the status of the control panel, enter the command code and then push **#** / **↵**

The indications of the status of the power plant are:

*<System in alarm> with alarmed control panel, and <Alarm 24h> if the alarm is generated by the 24h
<System switched off> or <System armed>;
<Network OK> or <Network Absence>;*

25 - Connesso
GESTIONE REMOTA

Below is the list of available commands:

*<Press 1 to activate output> (only if the + INT output is programmed as activated on command);
<Press 3 for open areas>;
<Press 4 for exclusion>;
<Press 5 for environmental listening> (only for remote access via a telephone connection); <Press 6
for alarm memory>;
<Press 7 to insert> (only when the control panel is off);
<Press 8 for partial activation> (only when the control panel is off); <Press 9 to disarm> (only when
the control unit is armed);
<Press 0 for cycle stop>;*

Et is possible to type one of the keys mentioned to access the function listed.

By pushing **1** the following voice message will be reproduced:

*<Exit not active, press 7 to activate or press asterisk to return to the previous menu> or <Output
active, press 9 to deactivate or press asterisk to return to the previous menu>.*

By pushing one of the indicated buttons executes the command.

This option is only available if the + INT output is programmed for operation on command.

By pushing the **3** the following voice message will be reproduced:

<There are no open areas> or <The open areas are: zone 2, zone 6, zone 24 hours>;

By pushing the **4** the following voice message will be reproduced:

<No zones excluded> or <The excluded zones are: zone 3, zone 4, zone 24 hours>.

When the control panel is on, the guide voice resumes indicating the main menu options, when the control panel is off, it continues with:

<Enter zone number, press 7 for 24 hours or press asterisk to go back to the previous menu>.

By typing the number of a zone, for example **3**, the guide item confirms the change with the message:
<zone 3 included> or <zone 3 excluded>

according to the status that the zone has assumed, followed by the repetition of the message with a list of the excluded zones.

By pressing **+** you will return to the main menu and the available options will be repeated.

By sending the DTMF tone of the **5** key you access the listening environment: you can hear what is picked up by the microphone placed on board the control unit.

When you want to exit this option, push **+** to replay the voice guidance to the available options. This option is only available when accessing the voice menu during a telephone connection and using the telephone to send DTMF tones.

By pressing **6** the control unit communicates:

*<There are no zones in alarm> or <The zones in alarm are: zone 4, zone 6>
with the listing of the zones that generated an alarm memory.*

By pressing **7** the alarm will be set on, if possible, and the immediate zone will be closed.

At the end the status message of the control unit is repeated with the possible change of the input status and the options of the voice menu. This command is only available when the alarm is off.

By pressing **8** the control unit in a partialised mode will be inserted along with the activation of the only areas foreseen in programming (see partialization). If the panel is already inserted, the following message will be played:

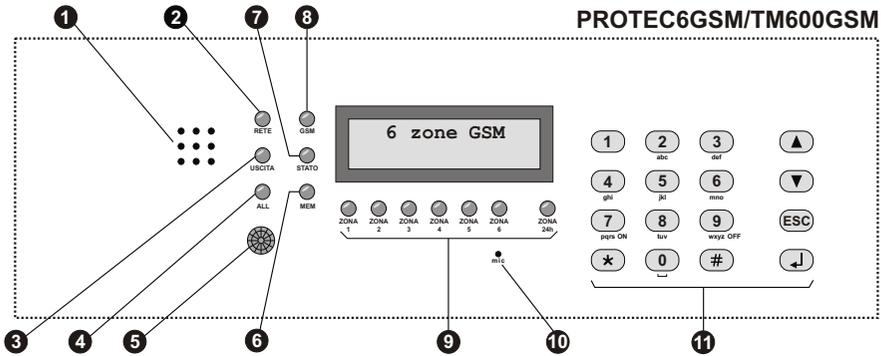
Press button **9** if you want to switch off the control panel. The option is only available when the control panel is armed. After executing this command, the status messages of the control panel and the options available in the voice menu are repeated.

By pressing **0** a cycle of alarm will be stopped.

If you do not access any options for over 1 minute or if you push **+** or **ESC**, the voice menu will be closed.

5 Operation

5.1 - Description of the panel



1 SPEAKER HOLES

For recording and listening to messages

2 "NETWORK" LED

On
Flashing
Off

*Line voltage presence
Line voltage absence
No Power*

3 "OUTPUT" LED

On
Flashing
Off

*Alarm off
Exit delay time running
Alarm on*

4 "ALARM" LED

On
Flashing

*System is in alarm
Entry time in progress after detection on delayed zone*

5 Passive infrared detector

When it detects a presence it switches on the backlight of the keyboard and the display and - if programmed - alarms zone 1.

6 "MEMORY" LED

Flashing

Alarm memory active

7 "STATE" LED

Long flashing
Slow flashing
Two short flashes + one pause

*ON
Dialler on wait
In GSM connection during the Remote Control alarm cycles*

Fast flashing

8 "GSM" LEDs"

One quick flash every second
One fast flash every 3 seconds

*Form not registered.
GSM module registered on the network*

9 Zone status and 24h control LEDs

ON
OF
A quick flash every second
On with a quick shut down every second
Flashing (during display, memory)

*Open zone
Closed zone
Excluded zone
Zone excluded and open
Alarm memory*

10 Microphone

For environmental listening

11 Command keypad

5.2 - Commands

5.2.1 Insertion

From the panel of the control panel it is necessary to check that the immediate zones are not open: check that the relative LEDs are not on and eventually close doors and windows or leave the rooms monitored by sensors that keep the zone alarmed. Opening the delayed zones does not prevent the control panel from being switched on, but the delayed line must be closed at the end of the programmed exit time. It is possible to individually exclude the zones to be monitored by pressing for a couple of seconds the number of the zone to be excluded (or to be re-included). When controlling the panel control unit or from the XM console, it is possible to use the partialized insertion which provides for the exclusion of some zones according to what has been programmed (default zones 1, 2 and 3 inserted and 4, 5 and 6 excluded).

From panel or console: enter the code COMMANDS and select the menu:

```
25# ABCD
1- Inser. / Disins.
```

and push (↵) :

```
IMP: DISINSERITO
7-INS 8-PR 9-DIS
```

Push (7) for a total entry or (8) for partitioning.

In the case of insertion from the console (both in normal and partial mode), if the exit time is greater than 0, executes the operation, and the following message appears:

```
"Uscita...."
```

for a few seconds and then exit the menu.

If the exit time is 0, executes the operation and exits directly out of the menu.

The "OUTPUT" LED flashes for the whole programmed output time and at the end it switches off.

When the command is executed, the indication appears on the display:

```
IMP: INSERITO
```

This operation can be performed from the panel using the voice menu guide.

In this case, push (#) to activate the guide and - following the instructions - enter the code and then enter (7) for the entry; the voice guide will confirm the execution of the command or not.

To insert the alarm with the electronic keys, check the LEDs on the inserter: the red LED on indicates that a non-excluded zone is open and the insertion will not be performed; the red LED that goes off for a moment every second indicates that a delayed zone is open and the insertion is allowed.

When the command is executed, the two LEDs flash simultaneously for the entire exit time, and at the end they turn off. If the command is not executed, the two LEDs will flash quickly for a couple of From panel or console it is necessary to enter the code COMMANDS, select the menu:

To control the remote control unit with GSM phone, once the connection to the control panel is activated, you can follow the voice of the voice menu, entering the code COMMANDS followed by the input command (7) (see voice interface).

NOTE: When the control panel is in alarm 24h, the activation command turns off the sirens and cancels the GSM call cycles, but does not insert the system; to insert the alarm it is therefore necessary to repeat the command.

5.2.2 Switch off

From panel or console it is necessary to enter the code COMMANDS, select the menu:

```
25¥ ABCD
1-Insert./Disins.
```

press  :

```
IMP:INSERITO
7-INS 8-PR 9-DIS
```

Digitare il pulsante  :

```
IMP:DISINSERITO
7-INS 8-PR 9-DIS
```

If during this operation the yellow "ALARM" LED flashes, the entry time is in progress or a delayed line has been opened and the control panel waits until the timing has elapsed before the alarms are triggered.

The "ALARM MEMORY" LED will flash if an alarm cycle has occurred during the monitoring time of the control panel.

The meaning of the LED of the inserter is summarized in the following table:

	ON	OFF	1 FLASH FOR SECOND	1 INVERTED FLASH FOR SECOND	FLASHING	QUICK FLASHING
GREEN LED	System off	System on	Excluded zones while the alarm is on			
RED LED	Immediate Zone open while the system is off	Closed Zone	Delayed zone open	24 h line open	Alarm memory while the system is off	
GREEN OR RED FLASH					Alarm in progress or exit delayed time	Entry command not executed

5.3 - Stop alarm

In the event of an alarm, it is possible to stop the acoustic signals and stop the telephone calls: from the panel of the control panel or from an XM console enter the code COMMANDS, select the menu:

```
25¥ ABCD
4-Stop CICLO
```

Type  . This command does not disarm the burglar alarm central unit.

The on / off commands from both the panel and external control devices (PX, SK, KB) also stop the alarm cycle and switch off the control panel. (In the event of a 24h alarm when the control panel is disarmed, the input command resets the signals, but does not insert the control panel.)

5.4 - Partialized insertion

Access the menu using the user code **1 2 3 4** , and press the button **↩** to scroll through the menu using the **▼** / **▲** buttons, until item 6 of the menu.

1 - Imp . Parziale

press the button **↩**. The following display will appear

Imp . parziale A
7=A 9=B

By pressing **7** or **9** , it is possible to select **partial system A** or **partial system B**. The upper display will indicate the currently selected partial system.

At the next partialized insertion, either from the command menu (CODE COMMANDS **# 1 8**) or from an electronic key (if programmed for the partialized insertion) the partialization scheme just chosen will be used.

Using another partitioning scheme by making a voice or remote menu entry, the partitioning scheme used for subsequent insertions will be modified.

Therefore it is advisable to always check in the command menu, which is the selected partial system

For example (to pass a system with total insertion to a system with partial insertion, it is necessary to:

- switch off the control panel (CODE COMMANDS **# 1 9**)
 - check or modify the partitioning scheme (CODE COMMANDS **# 6 + 7 / 9**)
 - enter according to the partitioning scheme (CODE COMMANDS **# 1 8**)

5.4.1 - Partialization by voice and remote menu

After entering the CODE COMMANDS in the voice guide menu: Remotely, type **8** , the control panel will ask:

🔊 "Press 7 to insert partial system A or press 9 to insert partial system B"

🔊 "Or press * to return to the previous menu".

Type **7** or **9** to insert the control panel with the preferred partitioning scheme.

If the system is already switched on it will not allow a new entry, and the control panel will reproduce the message:

🔊 "Unable to switch on"

5.5 - Operation of areas.

5.5.1 Zone 1 and 2 (delayed)

When the system is switched on, when the NC line is opened, an alarm cycle is activated after a delay set in programming (entry time).

If the input line is programmed as a balanced line, the control panel is activated to start an alarm cycle both in case of opening of the line and in case of a short-circuit of the line; the zone is balanced only if the impedance of the line is about 3300 ohms (you need to mount a 3300 ohm resistor to terminate the line).

We recommend using the delayed areas for the magnetic contacts on the entrance doors. The entry time allows access from these inputs and reaches the control unit to switch off the system. If an SK100 or PX100 electronic key is used with the inserter located outside the protected areas, it is advisable to program the entry time to a minimum.

5.5.2 Immediate zones

When the system is switched on, an alarm cycle immediately begins when the NC line opens. Also in this case if the line is programmed as a balanced line and the control unit is alarmed both with the opening of the line and with the short-circuit.

5.5.3 24h zone and tamper

When the system is switched off, activation of the 24h line (either logic or balanced) causes a 3-minute alarm cycle to start.

When the system is armed, the duration of the alarm is equal to that set in programming. The tamper opening mounted on the control unit generates a 24h alarm.

On the 24 h line, anti-opening tampers of devices connected to the central unit must be connected in series it intends to protect against break-ins by inserting a resistance of 3300 ohm at the end of the line if the line is to be used in balanced mode.

If the 24h line and / or the tamper are open when the system is switched on, the control unit will not carry out any alarm cycle (self-exclusion zone), and it will not be possible to insert the control unit. Only after the first closure of the 24h line and the tamper, the control unit resumes checking the opening of the zone to generate the relative alarms.

5.5.4 Alarm memory

The opening of the zones with the control panel inserted and the opening of the 24h and edel tamper line with the control panel on or off, in addition to generating an alarm cycle, also activates the alarm memory, signaled by the flashing of the mem. placed on the panel of the control panel, as well as by the flashing of the red LED on the electronic key inserts.

By holding  for more than two seconds, the LED of the zone that generated the alarm memory flashes together with the LED mem.

It is possible to know the zones that have generated an alarm, by accessing the zone menu from the command menu and displaying the "ALARM MEMORY" screen.

The alarm memory is erased each time the control panel is armed.

NOTE: The excluded zones that open when the control panel is armed activate the alarm memory, while the excluded zones are activated by the partialization.

5.6 - Operation of the GSM dialer.

The first line of the control panel display shows the status indications of the GSM dialer during the initialization of the GSM module:

```
Init GSM.....
Imp Disinserito
```

If the display shows:

```
Inserire SIM
Imp Disinserito
```

A telephone SIM card must be introduced.

Always disconnect the power supply to the control panel before inserting a SIM card to avoid damaging it and removing any lock codes (PINs) from the SIM using a common mobile phone.

```
Registrazione...
Imp Disinserito
```

during the connection to the GSM network:

```
31% ABCD
Imp Disinserito
```

with the indication of the telephone operator and the power of the received signal (max 31).

When the dialer is receiving a telephone call, the red "GSM" LED signals the operation of the GSM module with a short flash every 3 seconds, indicating that the GSM module is registered on the GSM network and ready to receive or make calls.

```
Ric. Chiamata
Imp Disinserito
```

During an alarm, the dialer sends all the SMS messages to the numbers enabled during the phone book programming phase and then starts to make the voice calls.

The SMS message is of the type:

<System in alarm (or System in / System off if the control panel is not in alarm).

Network OK (or Network Absence).

24h alarm (only in case of 24h alarm).

Zone alarm memory (followed by the numbers of the zones in alarm memory, eg zone 2, 4, 5.)>..

When the dialer starts the call cycle, the display shows:

```
31% Chiama.....
```

Answering the call, you can hear the message about the status of the control unit:

<System in alarm>

<System in>

<Network OK - Enter code>.

During connection the following message appears on the display:

Connesso

and sending the code with the DTMF tones of the telephone on the second line is signaled:

Connesso
Gestione Remota

5.6.1 Remote Control

During a GSM voice connection, the control panel can be controlled by sending DTMF tones from the telephone keypad. The remote control can be activated either during an alarm call of the control panel or by directly calling the control panel dialer.

When prompted for <Enter code>, enter the code COMMANDS.

At this point from the remote phone you can listen to the voice guide with messages similar to those of the voice menu (see), namely:

- <Press 1 to activate output> (only if output + INT can be activated on command)
- <Press 3 for open zones>
- <Press 4 for exclusion>
- <Press 5 for environmental listening> (only when the control unit is disarmed)
- <Press 6 for alarm memory> (only when the control unit is disarmed)
- <Press 7 to enter> (only with the control panel on)
- < Press 8 to turn on> (only with the control unit off)

For operations available at this stage, refer to paragraph 4.3 Voice interface.

5.6.2 Resending SMS messages

By enabling the <SMS forwarding> option, all sms messages received on the control panel SIM are sent to the mobile phone entered in the phone book at NUMBER 1: in this way it is possible to check any messages received on the SIM inserted in the control panel with possible communications sent by the 'telephone operator.

5.5.3 Requesting residual credit

If you want to query the telephone operator to know the telephone credit, you can send a message to the SIM of the control panel according to the rules of the telephone operator preceded by the text <SMS> and the telephone number of the operator.

Request table for telephone operator

In this way the message received from the control unit is turned over to the telephone operator who will reply with a new message.

The message with the requested data sent by the telephone operator is re-sent by the control panel directly to the user who made the request, which can thus know the remaining telephone credit.

NOTE: Consult your operator to find out how to request the remaining credit where available.

In this way the message received from the control unit is turned over to the telephone operator who will reply with a new message.

The first message indicating the credit sent by the telephone operator is re-sent by the control panel directly to the user who made the request within 50 seconds.

6 Maintenance

6.1 - Battery

It is advisable to periodically check the status of both the battery connected to the power supply and the battery installed inside the self-powered siren.

6.2 - Fuses

1A fuse for external power supply.	type F 1A - L250V
1A fuse for siren outputs	type F 1A - L250V