HILTRON security

POWER8E/POWER8S

Antintrusion central unit 8 with GSM integrated

INSTALLATION AND USE MANUAL

1 Introduction

1.1 Functional characteristics

- Anti-theft central unit 2 delayed zones+ 6 zone immediates + 24 line + tear-resistant tamper and anti-opening.
- 8 input zones and 24h line programmables individually logic, balanced or radio.
- Output for activation external devices on connection/disconnection of the central unit.
- Adaptor/charger integrated with presence control network.
- Charger pulses for durability of the battery.
- Two partialization modality installation configurable.
- Use the reader for proximity keys DX100 and DX300 with choice partialization modality partialization installation.
- Connection line RS485 with protocol “DX bus”.
- Telephonic dialer GSM Quad Band with voice messages pre-recorded and initial message customizable.
- Sent SMS with reporting status installation, idetified of alarmed zone and power supply status.
- Responder with voice guide for question and command of the central unit.
- Telephonic notice and SMS for longer absence of electrical network.
- Referral SMS received to the first number of phone book.
- Inaction through referral SMS of phone credit.
- Phone book with 16 numbers.

1.2 Technical Characteristics

Immediates protection zones	6
Delayed protection zones	2
Anti sabotage protection zones "24h”	1 + Tamper
Telephonic integrated module	GSM Quad Band 850/900/1800/1900 MHz
SIM card	microSIM 3v/1,8v
Power supply	230V +/- 5% 50 Hz
Maximum Absorption	120 mA@230V
Number of reader linked	4
Output 12V for external power supply	1,5 A. Total
Output 12V activation external devices	Max 100 mA
Alarm during programmable	from180 to 600 seconds
Time of input programmable	from 0 to 60 seconds
Time of output programmable	from 0 to 60 seconds
Telephonic number in the phone book	16
External box	prepainted sheet galvanized
Security degree	1
Environmental class	2
Operating temperature	from +5° to + 40°
Compliyng with norms	CEI EN 50131-1

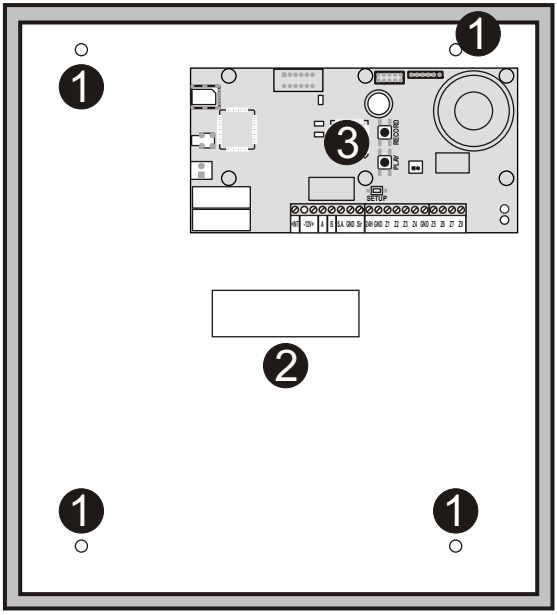
2 Installation

2.1 General warnings

- To installthe centralin closed place not exposed to the extreme temperatures and intemperie.
- To a fixing solide and sure it's necessary to ensure that the mounting surface it's plain.
- To position the central unit in a point that operates in the interior of the box easily.
- To prefer to insert the cables connection to the external devices in the box of the central unit and through the hole placed on the bottom of the box, preparing a root canal under track. In alternative it's possible to use one of the holes premarked è possibile utilizzare uno dei fori premarcati at the top and bottom of the box itself , completing the drilling with a chisel.
- Connections are executed in the respect of norms existing and in particular of the normative CEI 79-3-2012 "Particular Norms for antieffractions,antintrusion and antiaggression installations".

2.2 Fixing of the box

- To position the fund of the box on the mounting surface and to mark with a pencithe position of the four fixing holes and of the hole for the tamper.
- To make four holes of 8 mm. In the points marked and one hole of 6 mm. to correspondence of tamper and to intoduce the dowel in the holes.
- To screw the fund of the box to the surface and to position the screw for the closure of the tamper in the way that protrude of same millimeter in the box itself.



1 Fixing hole of container

2 Hole cables passage

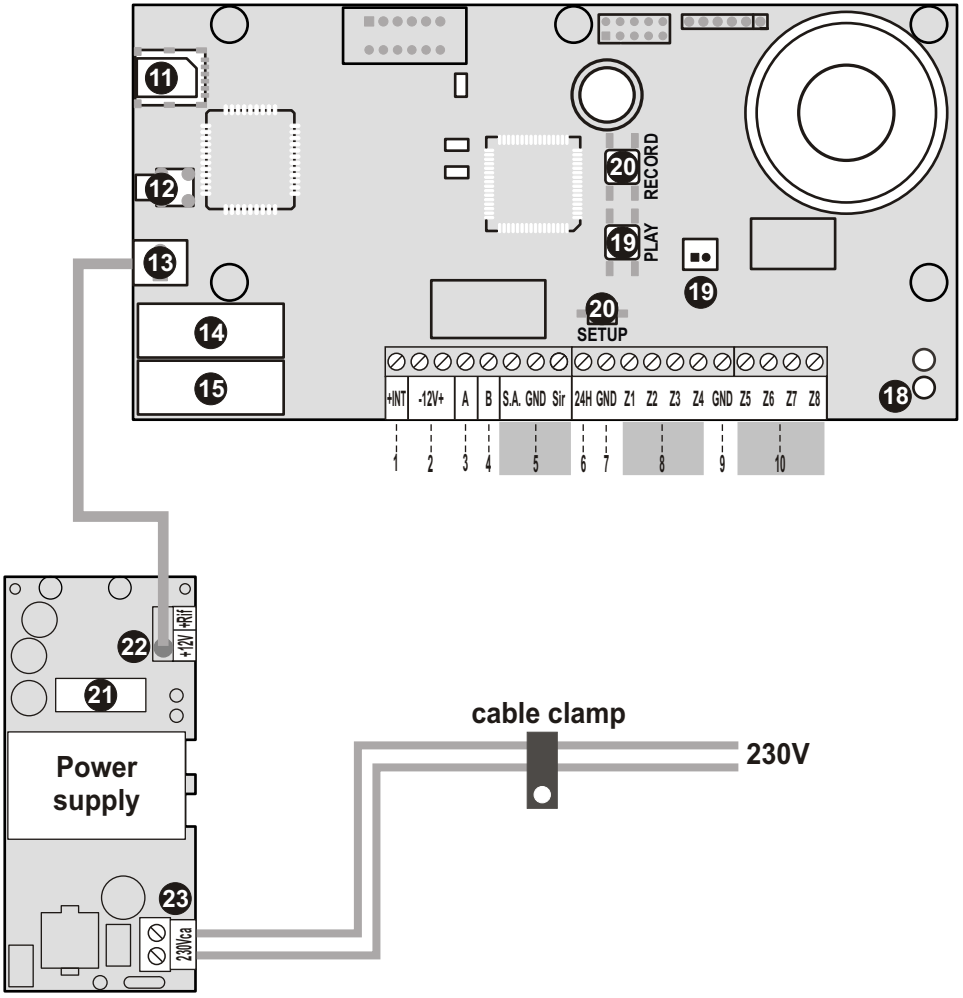
3 Central card POWER8

2.3 Cables of power supply

- To insert the cable (red and black) derived fromthe power supply on the box.
- To crimp the conductor grounding on the eyelet supplied and to insert the eyelet in the closing screw of cable clamp.
- To close the cables of power supply and grounding in the cable clamp by placing it in correspondence of two holes near between the input of the cables and the terminal block with fuse and to fix them in the fond with the closing screw on is placed the eyelet grounding.

ATTENTION

For respect of current regulations current, network tension must be connected to the transceiver to the transformer via two 1.5 mm ² double insulated conductors from a disconnector (for example a magnetothermic switch) usedexclusively for the control unit and the system earthing must be ensured.

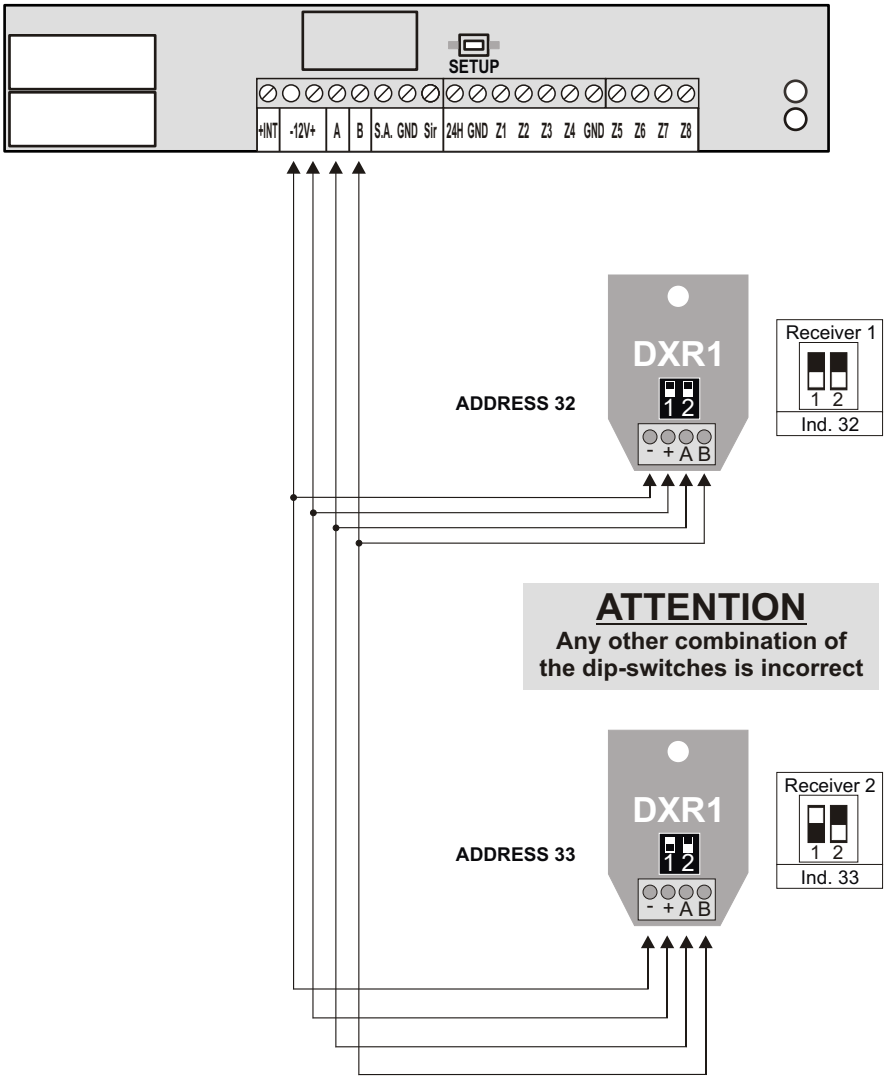


2.4 Description of the connections

1	**+ INT**	output present with the system inserted, to be used for the activation of the telephone dialer.
2	**-12V+**	12V auxiliary output protected by fuse.
3.	**A**	RS485 OUTPUT A
4.	**B**	RS485 OUTPUT B
5.	**S.A./GND/Sir**	10A exchange relay output to be used for activating external sirens. In programming it is possible to assign this output to other functions.
6.	**24H**	24H input
7.	**GND**	Common negative GND.
8.	**Z1/Z2/Z3/Z4**	Default inputs programmed as Immediate Zones.
9.	**GND**	Common negative GND.
10.	**Z5/Z6/Z7/Z8**	zone inputs
11.	**SIM module**	SIM card insertion module
12.	**Antenna connector**	to connect GSM antenna
13.	**Power connector**	to connect to the power supply
14.	**Fuse**	F1A250V fuse in series at the + 12AUX output
15.	**Fuse**	F1A250V fuse in series at the + 12EXT output
16.	**Battery connector**	da connector to connect to the battery
17.	**PLAY button**	button to listen to the message
18.	**RECORD button**	button for recording message
19.	**TAMPER connector**	connector connector to be connected to the tamper
20.	**SETUP button**	must be pressed for about 90 seconds; during the reset do not disconnect the power supply
21.	**Power supply fuse**	2,5A
22.	**Power supply connection cable**	to be inserted in terminal "13" on the control unit
23.	**230V input**	230V input

2.5 DXR1 radio receiver module connection

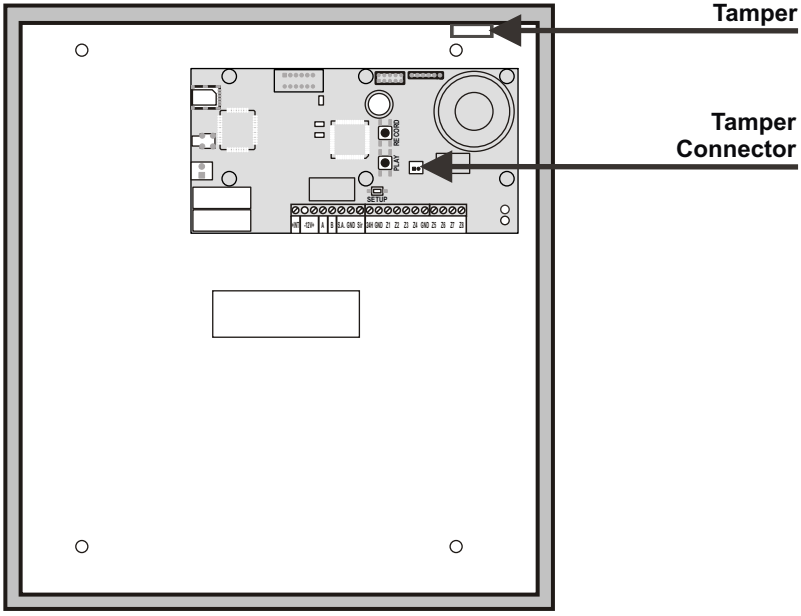
The POWER8 control panel requires a DXR1 radio transceiver module to use the XR200-XR152-XR300 wireless sensors and sirens.



2.6 DXR1 radio receiver module connection

Position the tamper card so that the tooth on one of the short sides of the circuit is inserted inside the slot on the bottom of the container and match the hole on the other side with the hole on the edge of the container.

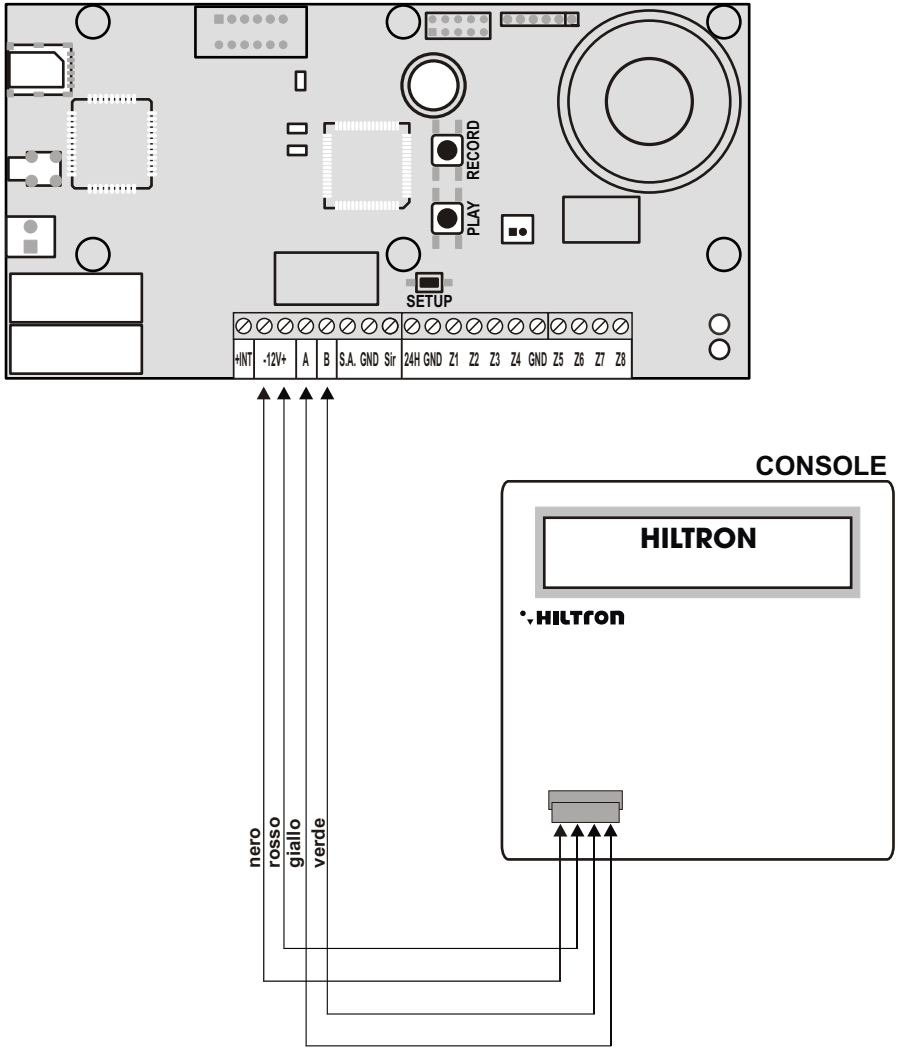
- Make sure that the microswitch at the bottom of the tamper board is closed by the head of the screw protruding from the bottom of the container, otherwise adjust the protrusion of the screw by screwing or unscrewing it.
- Secure the tamper circuit and make sure the top microswitch closes when the container lid is placed.
- Use the cable with connector supplied by inserting it into the connector on the tamper board and on the control unit board.



2.7 Console connection

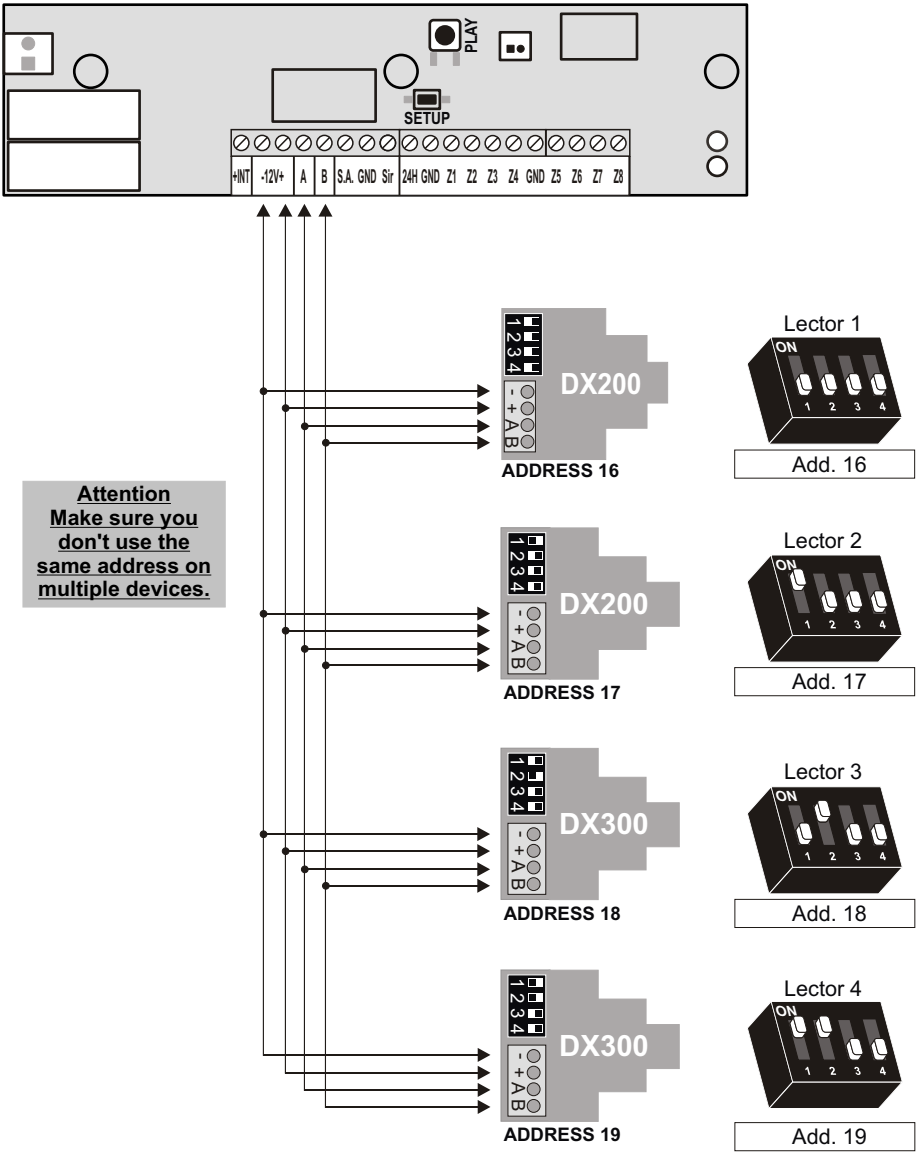
The POWER8 control unit requires a console for programming and its operation.

Below is a connection diagram for DXTOUCH / DX22 console.

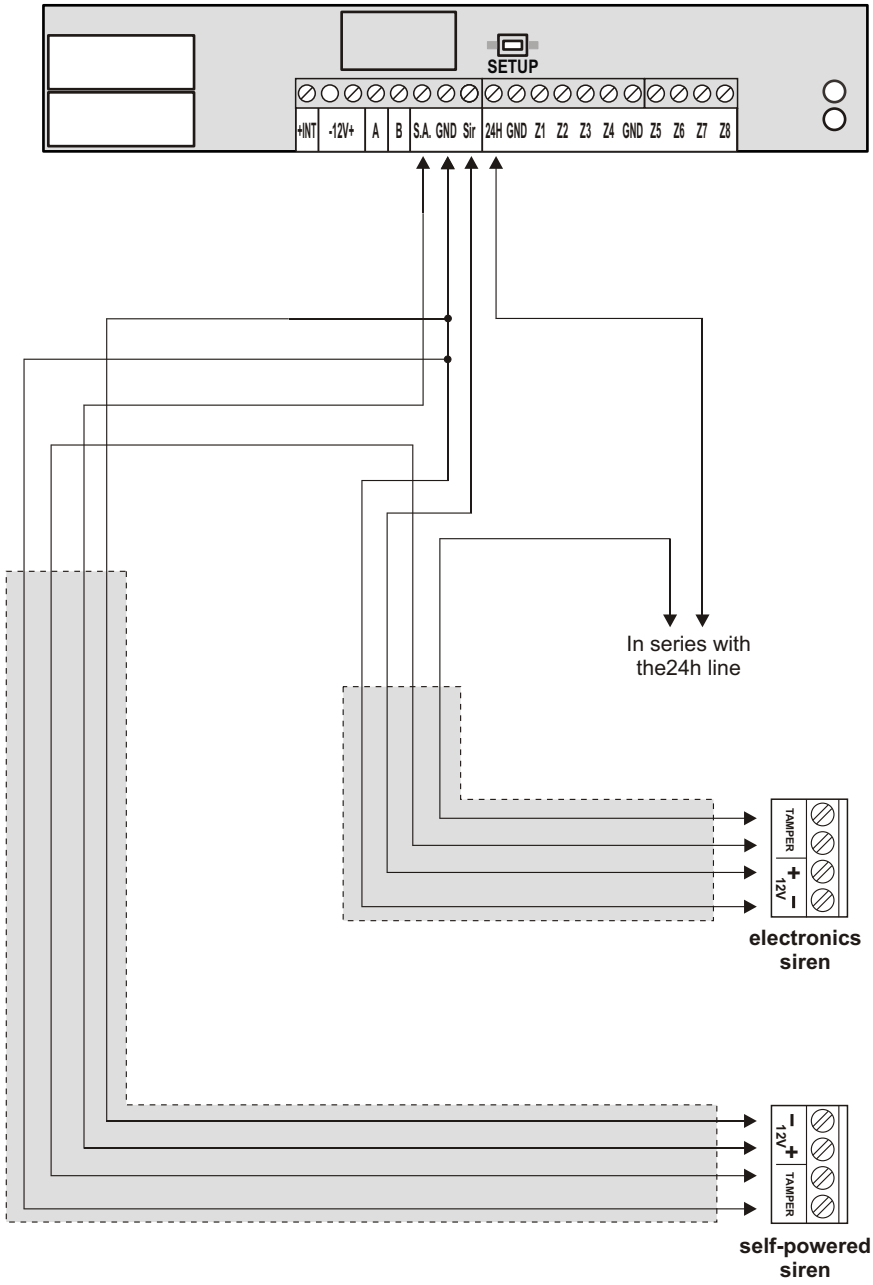


2.8 Connection of DX200 / DX300 RFID key readers

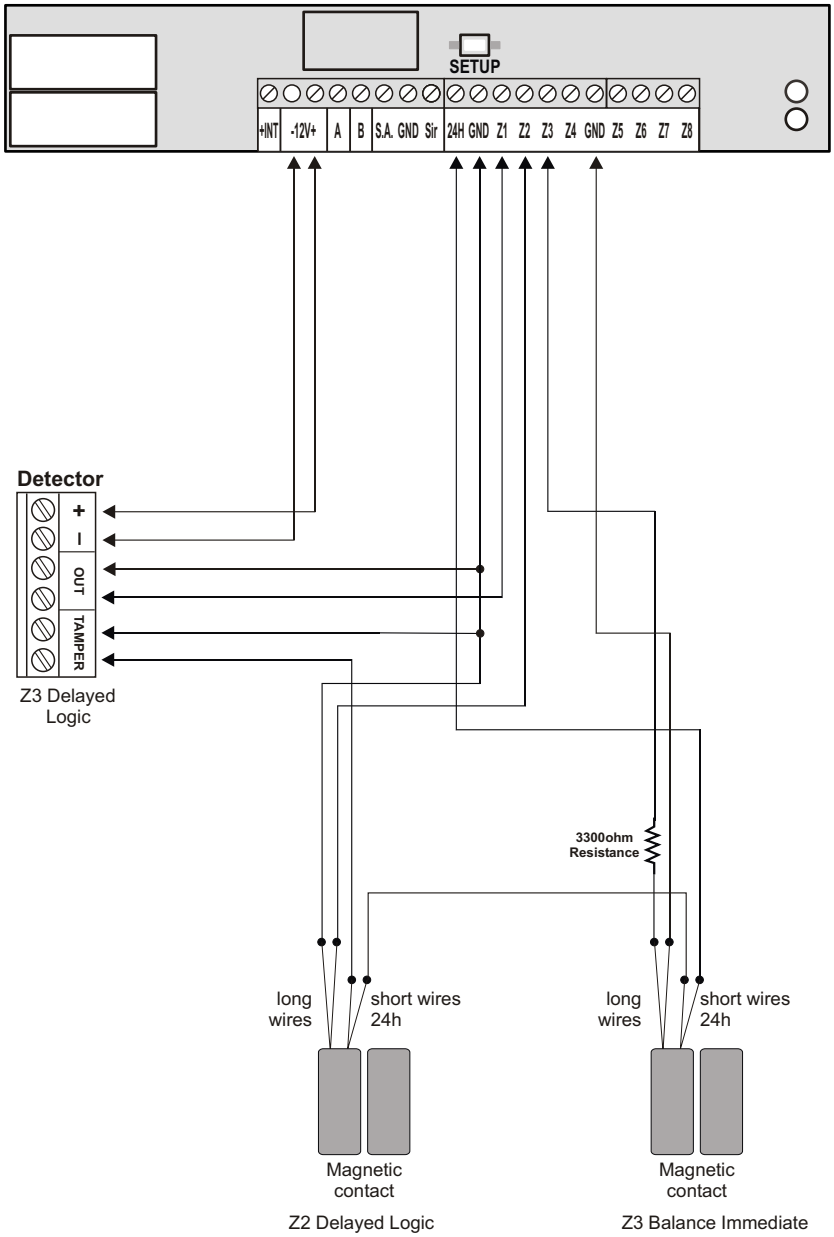
The POWER8 control panel accepts 4 readers with: **ID 16** for the first and **ID 17** for the second, **ID18** for the third and **ID19** for the fourth.



2.9 Wired sirens connection

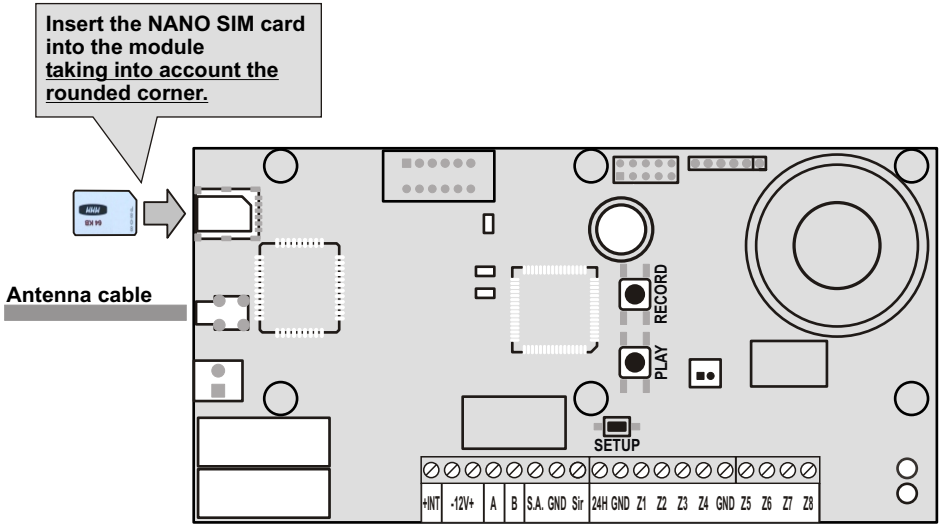


2.10 Connection of magnetic sensors and detectors



2.11 Telephone card and GSM antenna

With the power off and the battery disconnected, a nano-SIM phone card must be inserted into the SIM holder, respecting the direction as shown in the figure, taking care to disable any PIN and PUK codes with a mobile phone.
Insert the antenna plug into the connector on the control panel board, pushing it all the way down until the locking mechanism clicks. Position the antenna in order to obtain the best possible signal in relation to the operator used by placing the magnetic base on a metal surface or using the double-sided adhesive sticker supplied.



2.12 Recording of the initial message

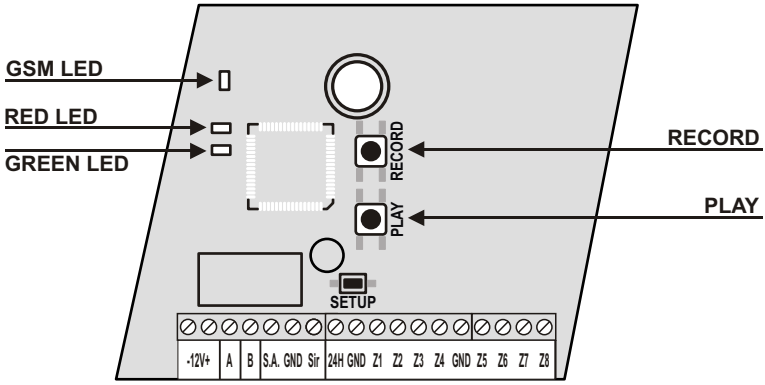
Connect the battery and power up the control unit by activating the disconnector previously set up.The console indicates that the 24H is not activated and no alarm cycle has started. (After a reset, the 24H protection is activated only after the control unit recognizes the closure of the 24H line and the tampers of the control unit and console).
On the control panel board the green LED flashes slowly to indicate that the system is disconnected.(with the system switched on, the RED LED flashes).

Enter the default code for access to programming on the console (5 6 7 8)

followed by # 7 to activate the recording and playback of the opening message.

When accessing the programming menus of the control unit, the two red and green LEDs on the POWER8 board begin to flash in fast mode.

Press and hold down the button on the control unit **"RECORD"** and record a short message (About 10 seconds) which will be repeated at each alarm call.
During registration, only the red LED on the control panel board flashes.Press the **"PLAY"** button to listen to the message again.
During playback, only the green LED flashes on the control unit board. If necessary, it is possible to repeat the recording, canceling the previous one, by pressing the **"RECORD"** button again.
If you do not use the **"RECORD"** and **"PLAY"** buttons for about one minute, message recording / playback is disabled.



2.13 Closing the container

Place the lid of the container, taking care to check that the microswitch of the tamper closes when the lid is closed and screw it in at the four corners.

3 Programmation

Before making the control unit operational, it is advisable to set some operating parameters and enter the telephone numbers of the users who will receive the alarm calls.

These operations can be done using the console to access the Programming menu.

The POWER8 control unit has two access codes, the first to access programming:

<SETUP code> (default 5 6 7 8)

and the other <USER code> (default 1 2 3 4) to access the control functions of the control unit.

3.1 Access to the Programming menu 5 6 7 8

With the control unit disconnected, on the system console, enter the SETUP code (default 5 6 7 8) followed # or ↵.

The following items are available in the programming menu:

1 - Phonebook	**To enter, modify or delete 16 telephone numbers.**
2 - Setup	**For managing keys and access codes, entry and exit times, alarm duration, limitation of the number of alarm cycles, configuration of logical / balanced / radio zones, system partitioning, by entering from remote control, silencing and privacy.readers, radio code, enabling devices on the RS485 bus and 24h alarm management on link absence, output activation mode + INT, forwarding of received SMS and switching on of the GSM module.**
3 - Info	**With the indications on the firmware release, the IMEI of the GSM module and the indication on the presence of the electrical network.**
4 - System Reset	**To restart the control unit and the GSM module.**
5 - Delete Setup	**To delete all the configurations of the control unit and restore it to factory settings.**
6 - Call Test	**To check the GSM network**
7 - Initial Msg	**For recording and replaying the personalized message**

Select the desired item with the keys ▼/▲ and confirm the selection with ↵, or #, or , type the option number to access the chosen option.

To exit the programming menu, type ESC or *.

NOTE:

- If you try to enter an incorrect code (after 24 keys are pressed), the keyboard locks for about 15 sec. during which it does not accept further attempts.
- If the keypad is not used for about one minute, the control unit automatically closes the programming menu and returns to normal operation.

With the control unit armed, it is not possible to access the Programming menu.

- If the SETUP code is forgotten, it is possible to access the programming menu and thus modify the access codes, by holding down the SETUP button located on the electronic board of the control unit. Access to the card, however, requires the opening of the control unit container with consequent start of a 24h alarm cycle.

3.2 Telephone book

5 6 7 8 # 1

3.2.1 Entering Telephone Numbers in the Address Book

In the programming menu, use the keys ▼/▲ to select

```
31Y GSM OPERATOR
1-Telephone Book
```

and confirm with ↵ or # , or enter the SETUP code followed by # 1 .

The display indicates:

```
 TELEPHONE BOOK
  Enter number
```

Press ↵ or # to display:

```
Number  01
Not programmed
```

Use the keys ▼/▲ to select one of the 16 memory locations of the phonebook

and confirm with ↵ or #

```
Number 01
_
```

Enter the number of the user who is to receive the alarm alerts and confirm with ↵ or # .

The display shows:

```
Send SMS all?
7=YES       9=NO
```

Press the buttons 7 or 9 respectively to indicate to the control unit whether or not to send the alarm SMS to the set number. The display indicates the next option:

```
Warning no net?
7=YES       9=NO
```

Press the or buttons 7 or 9 whether or not you wish to notify the user when the power supply has failed for more than 30 minutes. Similarly to the next request:

```
SMS no network?
7=YES       9=NO
```

type 7 if you want to send an SMS in the event of a prolonged power failure or otherwise 9

Use the keys ▼/▲ to select the next position in the directory and enter the new telephone number.

At the end, type ESC or ✱ to return to the previous menu.

3.2.2 Deleting telephone numbers from the Address Book

Open the directory menu again and use the keys ▼/▲ to select:

```
TELEPHONE BOOK
Delete Numbers
```

Confirm your choice and use the keys ▼/▲ to select the position in the directory and the number to be deleted.

```
Number   03
1234567890
```

Press ↵ or # and at the next request:

```
     DELETE?
7=YES       9=NO
```

type 7 to delete the number from the directory or otherwise 9 to cancel the operation.

In case of cancellation, the confirmation appears:

```
    CANCELLED
```

followed by :

```
Number  03
Not programmed
```

At the end, type ESC or ✱ to return to the previous menu.

3.3 Setup

5 6 7 8 # 2

To activate the Setup menu, in the programming menu, use the and keys ▼/▲ to select:

```
31Y GSM OPERATOR
2-Setup
```

and confirm with ↵ or #, or enter the SETUP code followed by # and 2

With the keys ▼/▲ it is possible to select one of the options of this menu:

Write key	**- Write the code stored in the control panel on a key.**
Read Key	**- Read the code from a key and store it in the control panel.**
New Key Code	**- Memorize a new code in the control unit.**
SETUP code	**- Modify the programming access SETUP code.**
USER code	**- Change the USER code to access the commands.**
Entry time	**- Change the entry time.**
Exit time	**- Change the exit timing.**
Alarm duration	**- Change the duration of the siren alarm.**
Max 5 cicli all.	**- Limit the maximum number of alarm cycles for each arming.**
Zone Log/Bil/RF	**- Configure zone lines with logic or balanced input.**
Partial setting A	**- Which zones to control with partial type A arming.**
Partial Set B	**- Which zones to control with partial type B arming.**
Arming by remote c.	**- The type of insertion will be carried out by the remote controls.**
Buzzer on alarm	**- Adjust the loudness of the beep of the DX300 connectors.**
Privacy Inser.	**- Hide information on the status of the control panel on the DX300 readers.**
Beep All Inser.	**- Play acoustic alarm on DX300 readers.**
Radio Code	**- 18-digit binary code that must be set in all devicesradio that you want to connect to the control panel**
485 devices	**- Enable the connectors on the RS485 bus.**
24h Disp 485	**- Activate 24h alarm on lack of device link on RS485 bus.**
Function OUT + INT	**- Operating mode of the + INT output.**
SMS forwarding	**- Sending received SMS to the first number in the phonebook.**
GSM module	**- Switch on the GSM module.**

To exit the Setup menu and return to the Programming menu, type ESC or ✚.

3.3.1 Write key

NOTE: before writing the keys, enable the DX200 / DX300 readers (par.3.3.13)
Select this option from the Setup menu:

```
Writing Key
```

to write the code stored on the control unit inside an RFID key

Type (↵) or (#) .

The display shows:

```
WAITING WRITING
```

On the connectors, the LEDs signal the waiting for a key to be written by making the LEDs flash quickly.Approach a key.
The control unit code is written in the key and on the console appears for a few moments the indication:

```
WRITING KEY
```

To end the wait and return to the Setup menu without writing any key, press (ESC) or (*) .
If no key is recognized, after about one minute the control unit interrupts the programming phase.

3.3.2 Read key

To select:

```
Read Key
```

po read the code entered in the key and memorize it inside the control unit.

Type (↵)or(#) .

The display shows:

```
Waiting
for Reading
```

Bring the key to be read close to an inserter. The display confirms the reading of the key:

```
READING KEY
```

To end the wait and return to the Setup menu without reading any key, press (ESC) or(*) .

After a minute of waiting without recognizing any key, the control unit closes the programming phase.

3.3.3 New key code

This option replaces the key code stored in the control panel with a new one

```
New Key Code
```

Confirm the choice with (↵) or (#) and the display will briefly show:

```
GENERATED CODE
```

The new code is stored in the control panel and must be written in all the keys that must work on the control panel.
NOTE: Once a new code has been generated on the control panel, the keys must be rewritten.

3.3.4 SETUP code and USER code

The SETUP code is the one used on the console to access the control unit Setup menus and to configure its operation.
The USER code, on the other hand, gives access to the commands menu both from the console and from the telephone connection and is used to send commands to the control unit.

Select the item in the Setup menu:

```
SETUP Code
```

or

```
USER Code
```

Enter the new 4-digit code.
At the end, the control unit confirms the code change with:

```
VALID CODE
```

If the same code used as USER code is entered as the SETUP code or in reverse, the following appears on the console display:

```
ERROR CODE
```

and is not memorized by the control panel.

3.3.5 Entry Time and Exit Time

The entry time is the time available to the user to access the protected areas and disarm the system before the alarm signals are activated.
During this time, any detection of the sensors placed on the delayed protection zones (zone 1 and 2) will not cause alarms and will not activate the alarm memory.
The exit time is the time available to the user to leave the protected environments after having given the command to arm the system.
During this time, any activation of the sensors placed on the delayed zones will not cause alarms.
By default these timings last 15 sec.

Select in the setup menu:

```
Entrance timing
015
```

or:

```
Exit timing
015
```

and type ↵ or # to change the set value.

```
Add value
>---<
```

Enter the new value between 000 and 060 seconds (you must always enter 3 digits followed by ↵ or #

```
Entrance timing
040
```

If the value is greater than the maximum limit set, the following appears briefly on the display:

```
INCORRECT VALUE
MIN=000  MAX=060
```

3.3.6 Alarm duration

The duration of the acoustic signals both on the sirens and on the DX300 readers (if enabled) can be set between 180 and 600 seconds (from 3 to 10 minutes).
The duration of the 24h alarm signal with the system disarmed is instead fixed at 180 seconds.

In the Setup menu select:

```
Alarm Duration
180
```

and press ↵ or # to change the duration:

```
Add Value
>---<
```

Enter the new value between 180 and 600 seconds.

(You must always enter 3 digits followed by ↵ or #.

The new value is stored:

```
Alarm Duration
250
```

If the value is not included in the allowed range, the indication appears briefly on the display:

```
INCORRECT VALUE
MIN=180  MAX=600
```

3.3.7 Limitation of alarm cycles

It is possible to limit to 5 the maximum number of alarm cycles that the control unit performs during a single system arming period.
By disabling this option, the control unit always carries out a signaling cycle at each new alarm.

Select the option

```
Max 5 cycles al.
Connected
```

With the keys ↵ or # it is possible to disable or re-enable this function:

```
Max 5 cycles al.
Disconnected
```

3.3.8 Logic / Balanced / Radio zones

This option allows you to change the operation of the zone inputs and to signal the radio zones.

Select this option from the SETUP menu with the ▼/▲ keys

```
Zone Log/Bal/Rf
>LLLLLLLL<24H:L
```

To change the setting of the zones, type the number corresponding to the zone to be modified once to switch from logic to balanced, then from balanced to radio and finally to return from radio to logic.

```
Zone Log/Bal/Rf
>LBBLLBLRR<24H:B
```

(with the button 9 you can change the 24H line, only Logic or Balanced)

A balanced zone requires the line to be closed through a 3.3 Kohm resistor.
The control panel will recognize the alarm on the zone both when the impedance of the line increases (opening of the line or cutting of the conductors), and when it decreases (short circuit of the line). A logic zone, on the other hand, does not need resistors and will be considered not in alarm when the line is closed.
The balanced line provides a greater degree of safety against possible tampering.
For example, if an attacker shorts the two conductors of a logic line arriving at a sensor, the same will be perpetually not alarmed and will not generate any alarm from the control panel, or with a balanced line instead it will be the same attempt to short the line that will trigger the alarm signals on the control unit.
To make the line protection more effective, the balancing resistor that is inserted in series on the line must be placed as close as possible to the end of the line, near or inside the sensor itself, and away from the control unit.

A zone configured as a radio zone will accept the signals of the XR Series sensors on which, in addition to the radio code of the control unit, also the code of the zone according to the table is set:

000 = zone1	001 = zone5
100 = zone2	101 = zone6
010 = zone3	011 = zone7
110 = zone4	111 = zone8

NOTE: When a zone is defined as "Radio" the relative input in the terminal board is not used.o.

3.3.9 Partial plant A and B

This option allows you to set the zones to be included / excluded from surveillance when the control panel is partially armed.

Using the keys ▼/▲, to scroll the SETUP menu up to the item:

```
Imp. Partial A
>12------<
```

or:

```
Imp. Partial B
>------78<
```

On the second line of the display, only the numbers of the zones that will be monitored with the system armed as indicated appear. Enter the number of zones to be modified.

3.3.10 Arming from remote control

This option is used to select which type of arming will be performed by the two button remote controls (DXR20/XR20)

Total arming

```
Ins. rem. control
Total armed
```

Use the key (#) to switch from one type of entry to the other.

Partial implant A

```
Ins. rem. control
Imp. Partial A
```

Partial implant B

```
Ins. rem. control
Imp. Partial B
```

With the DXR4 remote control (with 4 keys) the top left key inserts AWAY mode, while the two bottom keys enter **PARTIAL A** and **PARTIAL B** mode, regardless of the setting of this parameter.

3.3.11 Volume of the Beep Inserter DX300

The acoustic volume of the buzzer on the DX300 readers can be adjusted on two levels:

High and **low.**

Select the option in the Setup menu:

```
Beep Inserter
>HH<
```

Enter (1) to modify the acoustic level of the first reader (the one with ID 16) from **H (= High - high)**

to **L (= Low low)** or type (2) to modify that of the second (with ID 17).

```
Beep Inserter
>LL<
```

This setting has no effect on the alarms optionally signaled on the readers which are always reproduced at maximum volume.

3.3.12 Privacy mode on DX300 readers

On the DX300 readers it is possible to display or hide information on the status of the control panel and the zones, and show them only when a key with a code recognized by the control panel is approached. In N (Hide) mode, only a flashing dot appears on the inserter.

Select the option in the setup menu:

```
Privacy Insert.
>VV<
```

Press (1) to change the option from **V (View) to N (Hide)** and at reverse on the inserter (2)

(with ID = 16) and 2 for the other inserter. (with ID = 17)

On a DX 300 with hidden signals, it is necessary to approach a key with a valid code for about 10 seconds to show the information on the status of the control unit for about 10 seconds and a second time to carry out the usual arming / disarming operations and querying the partitioning mode.The only signals that are not hidden are those of control unit in alarm and entry and exit timing.

3.3.13 Activation on alarm of the DX300 key reader buzzer (buzzer in alarm)

On DX300 readers it is possible to enable the buzzer to signal the control panel alarm. In the Setup menu select:

```
alarm buzzer
>NN<
```

Press (1) to change the setting on the first reader (with ID16) from N (= No) to S (= Yes) or in reverse mode

and (2) for the second inserter (with ID 17).

```
alarm buzzer
>SS<
```

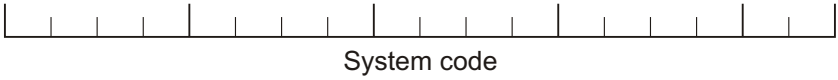
The alarm on the connectors is signaled with a buzzer at maximum acoustic intensity regardless of the **H** or **L** setting of the beep.

3.3.14 RADIO code

The 18-digit binary code (a sequence of "0" and "1") that can be programmed and displayed in this section is the one used by the POWER8 and that must be set in all the radio devices that you want to connect to the control panel.
Devices with a different code will not be managed by the control panel.

Below is a diagram of 18 boxes in which to transcribe the code used by the control panel:

ATTENTION: the System Code cannot be composed of all "0" or all "1".



Use the keys ▼ / ▲ to select the SETUP menu item:

```
Radio Code
```

and confirm with ↵ or # to view the current code.

```
001100110
011001100
```

Enter a new code, using the 0 and 1 keys.

```
-10101010
101010101
```

After entering the 18th value, the display shows the message:

```
VALID CODE
```

3.3.15 Devices on RS485 bus

In addition to the console, two connectors and a communication module can be connected to the RS485 “DX bus”.
The console cannot be disabled and must always be present, while the two connectors and the Link Module must be enabled / disabled to be managed correctly by the control unit.

Select the item in the Setup menu:

```
Devices 485
```

and type ↵ or # .

The name of the device, its ID address and the connection status appear on the console display:

```
Console      8
Link OK
```

With the keys ▼/▲ it is possible to view the other devices:

```
Connector 1  16
NOT Active
```

Type ↵ or # to activate the device.

If the device is connected and functioning correctly, the following appears on the display:

```
Connector 1   16
Link OK
```

otherwise, when the device is not recognized:

```
Connector 1  16
Link BAD
```

Again with the keys ▼/▲ it is possible to scroll through the other devices:

```
Connector 2  17
NOT Active
```

and below:

```
Module LINK 1
NOT Active
```

using (↵) or (#) to change its status.

All the devices connected on the DX bus signal both the lack of enabling and the communication error with a particular flashing of the LEDs.

Always check that the device ID is set correctly and do not use multiple devices with the same ID.

To return to the Setup menu, type (ESC) or (✱).

3.3.16 24h alarm on 485 device link error

If you want to activate a 24h alarm cycle in the event of an error on the DX bus due to loss of connection with an enabled device, select the option in the Setup menu:

```
24H Disp. 485
Disabled
```

and change the setting by typing (↵) or (#).

```
24H Disp. 485
Enable
```

3.3.17 Operation of output + INT

The POWER8 control unit has a + INT output on the terminal board which can be used to control external equipment.
This output is managed by the control unit and has +12 V. (maximum 100mA) with the system connected or no voltage with the system disconnected.
Alternatively, it is possible to activate this output with a direct command given by a user either from the console or remotely during a telephone communication
To configure the operation of this output, select the option in the Setup menu:

```
Func. OUT +INT
ON  enabled
```

Type (↵) or (#) to change the setting:

```
Func. OUT +INT
Command ON/OFF
```

3.3.18 SMS forwarding

The POWER8 control unit has the possibility to send the SMS received to the number registered in the first position of the telephone book.
To enable this function, select the item in the Setup menu:

```
Forwarding SMS
Disabled
```

Type (#) or (↵) to change the setting:

```
Forwarding SMS
Enabled
```

Typing again (↵) or (#) SMS forwarding is disabled again.te.

All the SMS received are not stored either in the telephone module or in the SIM card.

3.3.19 GSM module ignition

To turn off the telephone module, select in the Setup menu

```
GSM Module
On
```

Type ↵ or # to change the setting:

```
GSM Module
Off
```

Type ↵ or # to turn the module back on.

With the GSM module off, all incoming and outgoing telephone communications are interrupted.
The GSM activity LED on the control panel card is off and it is possible to insert or remove the telephone card from the SIM port without the danger of damaging it.

The GSM module is switched off on the console display:

```
GSM OFF
Imp. Disabled
```

3.4 Central info

5 6 7 8 # 3

To activate the Info menu, select in the programming menu with the keys ▼/▲:

```
31Y GSM Operator
3-Info
```

and confirm with ↵ or #, or enter the SETUP code followed by # and 3.

With the keys ▼/▲ it is possible to scroll the information available in this menu.

Central unit model:

```
    HILTRON
   8 zone GSM
```

Firmware release:

```
 Rel. Firmware
170GSW-3.30.09
```

IMEI number of the telephone module (appears only with the module registered on the telephone network):

```
IMEI
123456789012345
```

IMEI number of the telephone module (mains power supply status:

Or:

```
Network OK
```

At the end, key (ESC) or (*) to return to the Programming menu.

```
NO Network
```

3.5 System reset (5)(6)(7)(8)(#)(4)

It closes the telephone communications, forcing the restart of the GSM module and the control panel.

Select with the keys (▼)/(▲) in the Programming menu:

```
28Y GSM Operator
4-System RESET
```

and confirm with (↵) or (#) or immediately after the SETUP code (5)(6)(7)(8) enter (#)(4).

The following appears briefly on the console display:

```
8 zones GSM
```

Then the GSM module restarts and registration on the telephone network.

3.6 Setup delete

5 6 7 8 # 5

This command is used to restore the factory configuration.

Select with the keys ▼ / ▲ in the Programming menu:

```
31Y GSM Operator
5-Cancella Setup
```

and type ↵ or # or after the SETUP 5 6 7 8 code type # 5.

The request to confirm the deletion appears on the console display:

```
Conf Resetting?
7=YES        9=NO
```

Then type 7 to proceed with the cancellation or 9 to cancel the operation.

The control panel configuration options are restored to the factory settings with the exclusion of the initial recorded message, and the display briefly shows:

```
    DEFAULT OK
```

Then the control panel is reset and the GSM module restarts.

3.7 Telephone call test

5 6 7 8 # 6

This feature is useful for checking the telephone line.
Select in the Programming menu with the direction keys ▼/▲ :

```
31 Y GSM Operator
6-Test Chiamata
```

and confirm with ↵ or # or immediately after the SETUP 5 6 7 8 code enter # 6 .

The following appears briefly on the console display:

```
  Insert number
```

Enter a telephone number to contact and start the connection with ↵ or #.
The console display shows:

```
31Y Call...
34812345678
```

followed by:

```
28Y Connected...
34812345678
```

It' s possible to hear (from the loudspeaker on the control panel board) the voice of the called user.It is not possible to speak to the other user, but it is only possible to send the DTMF codes using the console keypad.
To end the communication, type ESC.

The following appears briefly on the console display:

```
30Y END Call
34812345678
```

3.8 Initial message

5 6 7 8 # 7

The initial message is a short audio message (about 10 seconds) recorded by the user which can be used to recognize which system an alarm call is coming from.
To record or listen to the message again, access the control panel card and then open the container.
To avoid starting an alarm cycle when the control unit container is opened, it may be useful to exclude the 24H zone.

In the programming menu, use the arrow keys ▼/▲ to select the item:

```
30Y GSM Operator
7-Msg. Initial
```

and confirm with ↵ or # or immediately after the SETUP 5 6 7 8 code enter # 7 .

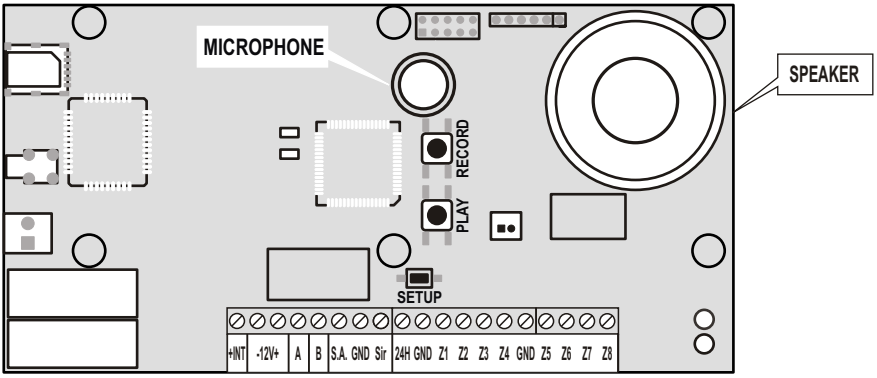
The following appears briefly on the console display:

```
Msg. Initial
Play        Rec
```

During the activation of the programming menu, the two LEDs on the control unit board flash.
To record a message it is necessary within one minute to press and hold down the RECORD button on the control unit electronic board and record the message using the microphone on the control unit.
While the message is being recorded, only the red LED flashes on the card.
After 10 seconds, the recording is stopped.If you want to record a message of shorter duration, just release the RECORD button before the maximum time expires.
To listen to the stored message again, press the PLAY button on the card; The message is played by the speaker of the POWER8.
During playback, only the green LED on the board flashes.Each new registration cancels the previous one.

To end the recording, press on the console ESC to return to the programming menu.

ESC



4 Commands

4.1 Access to the commands menu

1 2 3 4 #

With the system armed or disarmed, enter the USER code (default 1 2 3 4)

followed by ↵ or # to access the commands menu.

The first menu option that appears depends on the status of the control unit.With the system disconnected, the following appears on the display:

```
31Y GSM Operator
7-Total Entry
```

With the keys ▼/▲ it is possible to select the menu options and then confirm them with ↵ or # .

Alternatively, key in the USER code followed by ↵ or # and key in the number of the desired option.

The menu items available are:

1-Stop CYCLE	Arresta un eventuale ciclo di allarme e di chiamate telefoniche.
2-USER code	Consente di modificare il codice UTENTE.
3-Excluded. Zones	Esclude o re-include le Zone da sorvegliare.
6-Activation OUT	Enables or disables the + INT output (only with command + INT output configuration).
7-Ins. Total	Enters the system in total mode.
8-Ins. Part. A	Inserts the implant with the insertion scheme A.
9-Ins. Part. B	Inserts the implant with the insertion scheme B.
0-Disarming	Disarms the system.

It is possible to carry out these same operations remotely via telephone connection using the voice-guided menu or for arming / disarming operations using the RFID keys on the connectors connected to the DX bus line.

4.2 Stop cycle

1 2 3 4 # 1

Stops the alarm cycle of the sirens and the telephone module and closes any calls in progress.Select on the second line of the console display:

```
28Y Call…
1-Stop CYcle
```

and confirm with ↵ or # or enter the USER code followed by ↵ or # and 1

The display shows:

```
COMMAND EXECUTED
```

The control panel silences the sirens and closes any telephone call by resetting the list of subsequent calls to be made. The implant remains inserted and it is therefore not necessary to repeat the implant insertion.
Alternatively, it is possible to use the disarming command which has the same effect but also disarms the system.
It should be noted that by disarming and then arming the system again, the alarm memory is reset, while with the stop cycle command the system remains armed, and the memory of the alarmed zones and the count of the number of alarms from the alarm are not reset. " last arming of the control panel (see paragraph 3.3.7 Limitation of alarm cycles).

4.3 USER code change

1 2 3 4 # 2

Allows the user to change their four-digit code.
In the commands menu it is not possible to change the SETUP code.

Use the arrow keys ▼/▲ to select the option:

```
31Y GSM Operator
2-USER Code
```

Confirm your choice with ↵ or # as usual, enter the USER code followed by # 2.

Is shown on the console display

```
User Code
----
```

Enter the four digits of the new code. The new code is stored and the display briefly shows:

```
VALID CODE
```

Then it goes back to showing the command menu options:

```
31Y GSM Operator
2-USER Code
```

If the entered code cannot be accepted (same as the SETUP code), the display shows:

```
    WRONG CODE
```

4.4 Zone exclusion

1 2 3 4 # 3

On the POWER8 control unit it is possible to exclude one or more zones from surveillance.
An excluded zone does not generate an alarm on an armed system, even if it activates the zone memory unlike those not included in the partitioning scheme.

Select the item in the commands menu:

```
31Y GSM Operator
3-Exclus. Zones
```

And confirm with ↵ or # or follow the USER code ↵ or # and 3 .

```
Exclusion ZONES:
>--------< 24H:-
```

The numbers of the bypassed zones appear on the second line.

Enter a number from 1 to 8 to change the status of a zone or 9 to change the exclusion of the 24 hour zone.

For example by typing 3 6 and 9 :

```
Exclude the ZONE:
>--3--6--< 24H:S
```

At the end, type ESC or * to return to the commands menu.
When there are zones excluded, the warning appears cyclically on the console display:

```
Excluses Zone
>--3--6--< 24H:S
```

With the control unit disarmed with zones excluded, the green LED on the console flashes.The presence of excluded zones is signaled not only on the console but also on the DX100 / DX30o readers.

4.5 Activation of output + INT

1 2 3 4 # 6

On the POWER8 control unit there is a terminal board output (+ INT) which can be used to turn on external electronic equipment such as heating boilers, telephone communicators, light or acoustic signals.The presence of the control voltage (12v 100mA max) can be controlled automatically by the control unit with the presence of the voltage upon insertion of the system or upon direct command of the user both from the console and remotely via GSM telephone connection.
If during the programming phase the configuration "ON on armed" was chosen for the "OUT + INT function", the command is not available in the menu and the output will show + 12V when the system is armed, while on the control unit when deactivated, the output will be floating (open collector).
With the function configured on "ON / OFF command" it will be necessary to give a specific command to activate the + INT output.Select the item in the commands menu:

```
28Y GSM Operator
6-Activat. OUT
```

and confirm with ↵ or #, or after the USER code enter ↵ or # followed by 6.

The console display shows:

```
OUT: Disconnected
7=ON      9=OFF
```

The indication of the current output status appears on the first line.

Type 7 to activate it or 9 to deactivate it.

Press ESC to return to the commands menu.

4.6 Total armed

1 2 3 4 # 7

With the system disarmed, in the commands menu select the command with the direction keys ▼/▲:

```
28Y GSM Operator
Total Inserted
```

and confirm the choice with ↵ or # or enter the USER 1 2 3 4 + # code

or ↵ followed by 7

If the command is accepted by the control unit (the 24-hour zone and all immediate zones that are not excluded are closed) the console display shows the Exit time:

```
28Y GSM Operator
Output...    Tot
```

The LEDs on the console flash for the entire exit time and at the end the system is armed and the LEDs turn off:

```
29Y GSM Operator
Imp. Total Ins.
```

With the system disarmed, during a 24H alarm cycle an arming command (total or partial) does not arm the system, but stops the 24H alarm cycle.
The arming of the system is not allowed if there are immediate open zones that are not excluded or the 24h zone is open and not excluded, while it is possible with open delayed zones (zones 1 and 2). If at the end of the exit phase the delayed zones are still open, the control unit starts the entry timing and at the end generates an alarm cycle.
When the system is armed, the arming command has no effect and does not change the arming mode from partial to total.

With the system disconnected, when the USER code is entered, the commands menu opens with this option

selected, and you do not need to use the keys ▼/▲ if you want to use this command.

4.7 Partial Arming A and B

1 2 3 4 # 8 / 9

The POWER8 control unit allows two partial arming modes according to diagrams A and B set during the configuration phase.
The zones excluded from arming due to partitioning are not monitored by the control panel and do not generate any alarms.

With the control unit disconnected, in the commands menu select:

```
29Y GSM Operator
8-Ins. Part. A
```

or:

```
29Y GSM Operator
9-Ins. Part. B
```

and confirm your choice with ↵ or # , or alternatively enter the user code with ↵ or #

followed by 8 or 9 .

If there are no immediate open zones included in the partitioning scheme and not excluded, the command is accepted and the output timing starts at the end of which the activation confirmation appears:

```
31Y GSM Operator
Imp Inser. P-A
```

or with partialization B:

```
31Y voda IT
Imp Inser. P-B
```

Also in this case the arming command with the control unit already armed has no effect and does not change the arming mode from total to partial A or B.

4.8 System disconnection

1 2 3 4 # / 0

This command disarms the system and cancels any alarm cycles in progress..

Enter the USER code followed by ↵ or #.

Select the command with the ▼/▲ keys:

```
29Y GSM Operator
0-Disabled
```

and key ↵ or # to confirm disarming, or after the USER code key ↵ or #

and 0.

The system is disconnected, any alarm cycles are stopped and the ongoing telephone communication is closed.

When the control unit is armed or when the control unit is disconnected with a 24h alarm in progress, when the USER code is entered, the commands menu is activated with the selected disarming command.

4.9 Indications on the console LEDs

The green and blue LEDs on the service console give some indications on the status of the control unit and the zones.

In particular, the green LED on indicates that the control unit is disarmed, flashing indicates that there are zones excluded with the system disarmed, while when it is off it indicates that the system is armed.

On the other hand, the blue LED on indicates that there are immediate open zones, flashing that there are delayed zones open or that the alarm memory is active and off that the zones are closed.

Furthermore, during the exit time and during an alarm, the two LEDs flash simultaneously.

5 SMS, alarm calls and remote control

During an alarm cycle, the control unit sends an alarm SMS and calls the first number entered in the directory.
When answered, it plays the initial recorded message, useful for the contacted user to identify from which system the call is coming, followed by information on the alarm status and on the power supply status of the control panel.
Then the voice guide asks you to access the remote control by typing the USER code and, if necessary, activates the remote control with a guide voice that first repeats the status of the control panel, then lists the possible commands to be sent by telephone using the DTMF tones. At the end of the call, repeat the procedure with the second number in the phone book, until the end.

It is possible to access the remote control by calling the telephone number of the card inserted in the control unit directly. In this case, the control unit answers the telephone and the voice requests the code to be entered without providing any other information.

5.1 Alarm SMS

Each alarm SMS reports the alarm status of the control panel, the status of the power supply network and the zones stored in the alarm memory.

Each SMS is therefore composed:

System in alarm	Or if sent after the end of the audible alarm cycle: **System disconnected.** With the system disconnected. **Implant inserted.** With the implant inserted.
Network OK	Oppure : N**o network.**
24H alarm	Only if the alarm was generated by the 24H zone.
Zone x, y, z alarm memory	Zone x, y, z alarm memory. With x, y, z number of memorized zones.

The following message appears on the console display while the SMS is being sent:

```
30Y Send SMS
Total Inserted
```

SMS are sent only once for each alarm cycle.

5.2 SMS for network absence

After about 30 minutes of power failure, the control unit sends a warning message to the selected users

5.3 Alarm calls

For each alarm cycle, the control unit contacts the users in the directory starting with the one entered as the first number.If the user does not answer or does not activate the remote control (thus confirming that it has received the notification) the control unit ends the attempt and continues with the second number in the directory and so on.
At the end, the control unit restarts the tour and resumes calling the users who did not answer at the first attempt.
In total, the control panel makes a maximum of three attempts for each number in the directory.

At each call, the control panel reproduces the message recorded by the user usually used to recognize the origin of the call, followed by the status of the control panel and an invitation to type the code to access the remote control repeated several times.If remote management is not accessed at this stage, the phone call ends after approximately one minute.

The message recorded during the programming phase has a maximum duration of about 10 seconds..

5.4 Remote access (with GSM communication)

Remote access can take place either by calling the control panel number directly or, during aalarm cycle, when the control unit calls a number from the directory.
During an alarm cycle, when the call starts from the control panel, before requesting the codeaccess, the control unit starts playing the initial message recorded by the user.

Then the guiding voice sends the request:

< ENTER CODE>

Send the USER code with DTMF signals from the telephone.

If the code is correct

The following appears on the control unit display:

```
30Y Connected
REMOTE CONNECT
```

Once the voice menu has been accessed, the guide voice provides indications on the status of the control unit:

<System in alarm>, or **<24 hour alarm>** if the control panel is in alarm

<System disarmed> or **<System fully armed>** or **<System partially armed A>** or **<System partially armed B>**

<Network OK> or **<No Network>**

The voice guide then lists the available options:

<Press 0 to disarm> (only with control panel armed)
<Press 1 for STOP cycle>
<Press 2 for alarm memory>
<Press 3 for zone bypass>
<Press 4 for open zones>
<Press 6 to activate output> (only with output + INT programmed for operation on command)
<Press 7 for full arming
8 for partial A or 9 for partial B>, (only with control unit disarmed).

Press one of the keys indicated to access the relevant function.

If no commands are sent from the console or remote telephone for over a minute, the menu closes andthe voice prompts end.

5.4.1 Voice menu commands

0 - DISARM
This command is listed only when the control panel is armed and is used to disarm the control panel.After executing the command, the voice guide indicates the new status of the control unit.

<System disarmed> and resumes listing the options of the voice menu.

1 - STOP CYCLE
The Stop cycle command ends any alarm cycle in progress, turns off the sirens and makes no further alarm calls.

Once the command has been carried out, the voice guide continues to indicate the available options.

2 - ALARM MEMORY
It informs the user which zones have been memorized for having generated an alarm duringthe last arming of the control panel.
The message looks like this:

<<There are no zones in alarm> when the memory is empty

or:

<The zones in alarm are: zone 1, zone 4 .... 24 hour zone>

with a list of all the zones entered in the alarm memory.

At the end, the voice guide resumes indicating the available options.

3 - ZONE EXCLUSION
Press (3) to access the zone exclusion menu: the guide item signals:

<There are no excluded zones> or <The excluded zones are: zone 2, zone 5,… 24 hour zone> with a list of the excluded zones;

<<Enter zone number, press 9 for 24 hours or press asterisk for previous menu>.

Press the number of a zone to be modified (for example (4)) and the voice guide continues with:

<<zone 4> or **<zone 4 included>** if the zone was excluded.

The voice guide then resumes with the repetition of the status of the excluded zones and waits for you to type (*) to return to the main menu.

4 - OPEN ZONES
Press (4) to listen to the list of zones that are open.

<There are no open zones> or **<The open zones are: zone 4, 24 hour zone>** with the list of open zones.

At the end the voice guide resumes the indication of the main menu options.

6 - OUTPUT ACTIVATION
This command is available only if the + INT output is programmed to operate on an ON / OFF command.

Typing (6) the voice guide indicates:

<Output not active, press (7) to activate or press asterisk to return to the menu previous. >

or

<Output active, press (9) to deactivate or press asterisk to return to the menuprevious>.

Activating the output, a voltage of 12V appears. on the + INT terminal of the control unit.

At the end, the voice guide resumes signaling the status of the control unit and lists the options available in the voice menu.

7 - TOTAL ARMING
This command is available only when the control unit is disconnected.

By typing (7) the control unit tries to execute the command and the voice guide resumes with the voice

menu that indicate

<System completely armed> if the control unit accepts the command or **<System disconnected>**in case of non-execution of the command due to an immediate open area or notexcluded that prevents insertion of the implant.

8- PARTIAL ARMING A
This command is also available only when the control unit is disconnected.

By typing (8) , the control unit is commanded to arm the system according to the partitioning scheme A.

The voice guide returns to indicate the status of the control unit with

<Partial armed system A> if the command is accepted otherwise with
<System disconnected> if the command is not carried out.

If the command fails, check that the immediate zones included in the partitioning schemeare not open, thus preventing insertion of the implant.

9 - PARTIAL ARMING B
This command, similar to the previous one, is available only when the control unit is disconnected.

Digit (9) to command partial arming to the control panel B.

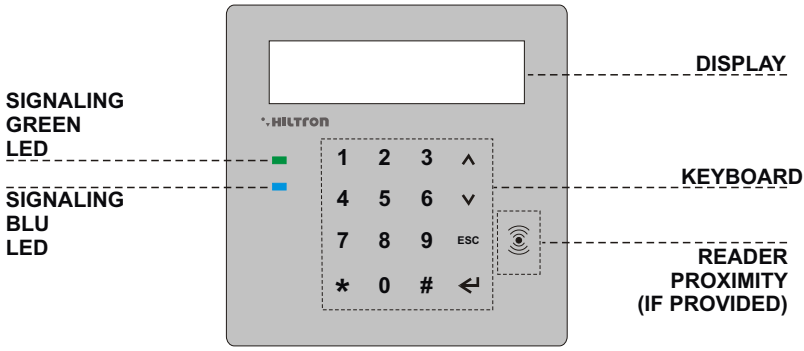
If the command is followed, the voice guide indicates the new status of the control unit:

<Partial armed system B>.

6 Use of the control panel

To program and use the control unit, it is necessary to be equipped with a console.

Below is the figure and description of the DXTOUCHB console:



6.1 CONSOLE SIGNALING LED

LED VERDE:	
Off	- System armed.
On	- System disconnected.
1 quick flash every second	- System disarmed with zones excluded

BLUE LED:	
Off	- Zones closed with system disarmed.
On	- Immediate open zones with system disarmed.
On with short shutdown every second	- System disarmed with zones excluded.

GREEN and BLUE LEDS TOGETHER:	
Flashing	- Exit time or Alarm in progress

6.2 Signals on the display

During normal operation the POWER8 provides some information on the panel display eof the console regarding the status of the system, and of the GSM module.
GSM module.
The information relating to the GSM connection appears on the first line of the display and is of the type:

```
25¥ GSM Operator
```

The number next to the flashing antenna symbol represents the signal strength from **0** (min) to **31**(max), followed by the indication of the telephone company to which you are connected.
Other indications relating to the GSM module can be:

GSM OFF	- The module is off (See paragraph 3.3.19).
Init GSM	- When the module is starting up.
Registration	- Waiting for confirm of the SIM registration from the telephone company.
Reg. Denied	- The service provider rejects the registration of the SIM card.
Send SMS	- When the module sends an SMS.
Call	- During a phone call attempt.
Connected	- A telephone connection is in progress.
Busy	- The called number is busy.
Ch. Failed	- The called number refused the connection.
End Call	- The telephone connection is closed.
INSERT SIM	- No SIM card.
SIM with Pin	- You need to remove the Pin code from the SIM card.
SIM with Puk	- The SIM card requires you to enter the PUK. Use a telephone
SIM ERROR	- Communication error with the SIM.
GST ERROR XX	- Error on the GSM module during initialization. Check the antenna, he SIM and the remaining credit. Restart the GSM module.
CME ERROR XX	- Error on the GSM network. If the problem persists, contact support technique.

SUPPLY

NO MAINS	- There is no mains voltage.
NO BATTERY	- The battery is missing.
BATTERY FAULT	- The battery needs to be replaced.
Low Battery	- If the problem persists the battery must be replaced.

SYSTEM STATUS

OPEN ZONES	- The second line of the display shows the zones that are open.
ZONE MEMORY	- At least one zone that generated an alarm has been memorized (the second line shows the numbers of the zones in memory and of the 24h).
EXCLUDED ZONES	- On the second line there are the numbers of the excluded zones.
24H NOT ACTIVATED	- The 24h line has never been closed since it was reset or when the control unit was powered. Close the 24h line, the control panel tampers econsole and 24h protection is restored.
Exit...	- Exit time in progress.
Entry...	- Entry time in progress. Opening of a delayed zone at the control unit inserted before an alarm cycle is generated.

ACTIVE output	- + 12v is present on the + INT terminal of the control unit due to the output activation command.
Total Inserted	- Total inserted system.
Imp Inserted P-A	- System inserted with partitioning scheme A.
Imp Inserted P-B	- System inserted with partitioning scheme B.
24h alarm	- 24h alarm cycle in progress.
Tot alarm	- Alarm with control panel fully armed.
Alarm P-A	- Alarm with system activated in partial mode A.
Alarm P-B	- Alarm with system activated in partial mode B

485 DEVICES AND RADIO.

BATT. RADIO ZONE	- Indicates that there are batteries on the radio devices to be replaced. The battery status appears on the second line of the display for each individual radio zone: **L** if unloaded **H** if loaded or if the zone is a wired type.
MEM 24H ZONE RF	- The second line shows which radio zones have activated the memory for container opening.
24H MEMORY SIRENES RF	- Indicates that the radio sirens have generated a 24H alarm due to opening container.
Reader 2 17 Link BAD	- The device with its address is indicated on the first line of the display **i**s not communicating correctly with the control panel.
REMOTE CONSOLE Tamper Open Mem	- Indicates that the remote console tamper is open and has generated a cycle alarm 24h.
REMOTE CONSOLE Tamper Close Mem	- Indicates that the remote console tamper is now closed, however generated a 24h alarm cycle. This memory is reset by arming the system.

The information shown is shown on the display of the control unit panel and of any additional console and is repeated cyclically with an automatic timing.

Using the keys ▼/▲ it is possible to scroll them in rapid succession.

6.3 Commands

6.3.1 - Implant insertion

From the console it is necessary to check that the immediate zones are not open and, if necessary, close doors and windows or leave the rooms monitored by the sensors that keep the zone alarmed.

The opening of the delayed zones does not prevent arming of the control panel, but it is necessary that at the end of the programmed exit time the closure of the delayed line is re-established.It is possible to exclude the zones individually from the exclusion menu. Refer to paragraph 4.4

When the control unit is controlled from the DD22 console, from DX300 connectors or from connectiontelephone, it is possible to choose a partial arming that provides for the exclusion of surveillanceof some areas, as programmed.

From the console: enter the USER code and select the menu:

```
25¥ GSM Operator
7-TOTAL Ins.
```

and key ↵ or # in immediately after the code

```
25¥ GSM Operator
EXIT        TOT
```

followed by the indication:

```
31¥ GSM Operator
TOT. INS.
```

The insertion can also take place partially, according to one of the two partitioning schemesset during the programming phase.

Then choose one of the options in the commands menu:

```
31¥ GSM Operator
8 Ins. Part. A
```

or

```
31¥ GSM Operator
9 Ins. Part. B
```

and key ↵ or #, or, as usual, key in the USER code followed by # 8 or 9

For remote control of the control unit via the telephone network, once the connection with thecenter, it is possible to follow the voice guide similarly to what happens from the console:

USER code, # 7 for total arming, or, # 8 por partial arming A, or # 9 for partial insertion B.

6.3.2 Disarming

From the console it is necessary to enter the USER code, select the menu:

```
IMP: ENABLED
0-DISABLED
```

press the or button ↵ or #

```
31¥ GSM OPERATOR
IMP  DISABLED
```

or enter USER code # 0

During this operation, the message **<<ENTER>>** indicates that the entry delay is in progress following the opening of a delayed zone and that if it is not disarmed within the maximum programmed time, an alarm cycle will be activated.

The "**ALARM MEMORY"** LED flashes if an alarm cycle has occurred during the time surveillance of the plant.

The disarming of the control panel is also possible remotely via telephone connection.

After entering the user code, enter 0 for disarming

6.3.3 Stop alarm

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

```
25¥ GSM OPERATOR
1-Stop CYCLE
```

Confirm with the button #

This command does not disarm the burglar alarm control unit.
The disarming command from both the CONSOLE and external devices (DX100 / DX300) stops the alarm cycle and disarms the control panel.

6.3.4 Output activation

When the output is programmed for "ON / OFF command" operation (see paragraph 3.3.17 èIt is possible to control the output both from the console and from the telephone.

Enter the control panel USER code followed by (#)(6)

the display shows:

```
OUT: Disactiv.
7 =ON        9=OFF
```

To change the output status type (7) and the display will show:

```
OUT: Active
7 =ON        9=OFF
```

In connection via telephone line after entering the command code to access the voice menu,

type (6) on the telephone keypad for “output activation” and follow the voice prompts.

NOTE: if you configure “Function OUT + INT to ON inserted” the output + INT indicates lostatus of armed / disarmed of the control panel and cannot be controlled autonomously.

6.4 Operation of the zones

The input zones can be of the wired type (logical or balanced).An input line set as logic is understood to be alarmed when it is not closed to GND or when the sensor placed on the line does not short-circuit the zone input terminal (Z3 for example) with one of the common GND terminals.

In the event of a zone programmed as balanced, it is not alarmed when the impedance existing between the input and GND terminals is approximately 3300 ohm or when the sensor placed on the line closes the circuit between the zone terminal and the GND terminal through a closing resistance of 3300 ohms.

Any variation in impedance either towards higher values ??(open line for example due to opening of the sensor contact) or towards lower values ??(shorted line for example due to tampering on the line itself) alarms the zone on the control unit. At the end of a balanced line (mostly in correspondence with the sensor furthest from the control unit) it is therefore necessary to mount a 3300 ohm resistor in series with the sensor output.

The 24h line can also be set as logical or balanced.

The radio zones are signaled in alarm only for a few seconds after the sensors signal.

With the control unit disarmed, the presence of open or unbalanced zones is signaled on the DX100 connectors and on the console with the red LED (blue for the console) on, or on with a short shutdown every second approximately for delayed zones and the presence of excluded zones , with a short flash of the green LED approximately every second.

6.4.1 Delayed zone 1 and 2

When the system is armed, the activation of zones 1 and 2 not excluded starts a timer set with the programmed entry time.
Closing the zone does not interrupt the timing, at the end of which the control unit starts the alarm signals (sirens, SMS messages and telephone calls).

It is advisable to use the delayed zones for the magnetic contacts placed on the entrance doors. The entry time allows you to access these inputs and reach the control unit or the control devices, to disconnect the system.

Using an electronic key type DX100 / DX300 with connector placed outside the protected zones, it is advisable to program the entry time to the minimum, because it is possible to disarm the system without alarming any zone.

6.4.2 Immediate areas

With the system armed, the activation of an immediate zone (from 3 to 8) immediately starts a cycle ofcentral alarm.

6.4.3 24h zone

With the system disarmed, the activation of the 24h zone both on the wired line and for the opening of the tamper of the control unit, of the console, triggers an alarm cycle lasting 3 minutes.

With the system switched on, the duration of the alarm is instead equal to the time set as the alarm duration.

If, when the system is switched on, the 24h zone is open (24h line and tamper of the control unit open), the 24h zone does not generate any alarm cycle on the control unit, but prevents the control unit from being armed.

The display shows:

```
24H
NOT ACTIVATED
```

Only after the first closure of the 24h line, of the control unit tamper and of the console. the control unit is ready to generate an alarm cycle on opening the 24h zone.

6.4.4 Alarm memory

The opening of the zones with the control unit armed and the opening of the 24h line and the tampering with the control unit armed or disarmed, in addition to generating an alarm cycle, activates the alarm memory, signaled by the flashing of the red LED on the connectors of the connectors and of the LED blue on the console.

The cyclical display of the ZONE MEMORY is activated on the display, with the indication of the number of memorized zones.

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

NOTE: The excluded zones that open when the control unit is armed activate the alarm memory, while the zones not armed do not activate it, due to the partitioning effect.

6.4.5 Bypass zones

It is possible to exclude one or more zones from the surveillance of the POWER8 control unit

With the control unit disconnected, access the Commands Menu:

typing the USER code followed by (#)(3)

and press the key corresponding to the zone to be excluded / re-included.

To change the status of the 24h zone use the key (9).

The exclusion of a zone can be controlled from a remote telephone connection.

Access the Voice Menu by typing the COMMANDS code and select the option 4 following the instructions of the voice guide 4h.

6.5 Operation of GSM communication

The indications on the status of the GSM dialer are shown on the first line of the control panel display

If the display shows:

```
INSERT SIM
Imp Disabled
```

It is necessary to insert a telephone SIM card, and remove any blocking codes (PIN or PUK) from the SIM using a common mobile phone.

Always disconnect the control unit power supply before inserting a SIM card, or turn off the GSM module with the option "GSM MODULE = OFF from the SETUP menu" to avoid damaging it.

When the control unit is connected to the GSM network, the display shows:

```
31¥ GSM Operator
Imp Disabled
```

with the indication of the telephone company and the strength of the signal received (max 31).

When the control unit goes into alarm, the GSM module sends an SMS to the first number in the directory of the type:

System in alarm
Network OK
24H alarm
Zone alarm memory 4,6,7.

The display of the control unit shows for an instant:

```
28¥ Send SMS
Imp TOTAL INSER.
```

Once the SMS has been sent, the control unit starts the voice call and the following indication appears on the display:

```
31¥ Call...
```

When the user replies, the control unit plays the initial message recorded previously, followed by the indication:

<System in alarm>, or **<24 hour alarm>** or **<System fully armed>** or **<System disarmed>Network OK (or No Network).**followed by **<Insert Code>**

During the connection, the display shows:

```
Connected....
```

and sending the USER code with DTMF tones:

```
Connected....
Remote Managem
```

6.5.1 Remote Control

During a phone connection,it's possible to command the central unit sending the tones DTMF from the phone pad.

The activtion of the remote control can occur or during a call alarm of the central unit or calling directly tne number of the SIM of the central unit.

To the demand of <Insert code> dial the USER code.

At this time or from the remote phone it's possible to listen the guide voice with the messages similar to those of voice menu, that is:

- < Press 0 to disconnect > (only with central unit connected)
- < Press 1 to STOP cycle >
- < Press 2 to alarm memory >
- < Press 3 to exclusion zones >
- < Press 4 to open zones >
- < Press 6 to exit activation >
  (only with + INT output programmed for operation on command)
- < Press 7 to total connection, 8 for A partial or 9 for B partial >, (only with central unit disconnected).

For the description of theese commands see the paragraph 5.3 Voice Guide vocale and following.

6.5.2 Sending messages SMS

Enabling the option <Forward SMS> (par.3.3.22) all the messages sms receivedon the SIM of the central are sent again to the mobile inserted in the address book to the NUMBER 1 : in this way it's possible to control possible messages received on the SIM introduced in the central with possibles comunications sent from the service provider.

6.5.3 Question residual credit

If you wish to question the telephone operator to know the residual credit (if planned by network operator) it's possible to send to the SIM of the central unit a message composed according with rules of the same telephone operator preceded from the text <SMS> and from the telephone number of the operator

In this way the message received from the central is sent to the telephone operator that will answer with a new message.

The first message received within 50 seconds, is sent again to the user who made the request.

6.6 ELECTRONIC KEY DX200

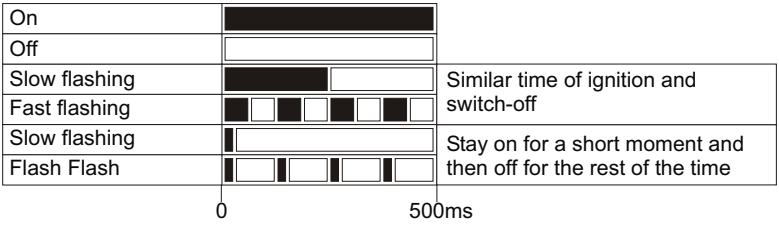
With the readers DX200 it's possible to read the PX keys and to execute following operations:

- To connect the installation into modality TOTAL, PARTIAL A and PARTIAL B.
- Disconnect the installation.
- To read or to write new keys.

Also through the two LED it's possible :
- To visualize the modality with to connect the installation.
- To visualize the status of the installation :
  - Disconnected /Connected and visualization connection type
  - Temporization action of EXIT during the connection.
  - Status alarm installation.
  - Status of the alarm memory installation
  - Presence open zones .
  - Presence of excluded zones.
  - Connection error or configuration

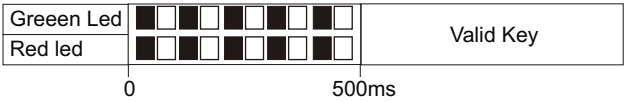
LED SIGNALISATION MODE TABLE

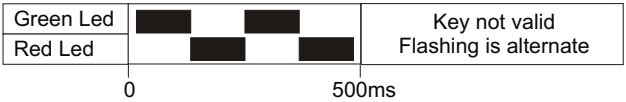
The black depth Indicates t time when the LED stay on.



6.6.1 KEY USE

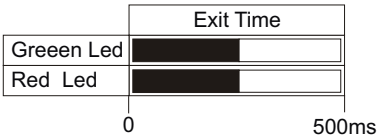
RECOGNITION KEY
The recognition visualized through the led:
To approach the PX key to the reader DX200 and to wait
- Valid key = Contemporary FAST flashing
- False Key = Alternate FAST flashing





TOTAL CONNECTION

1 - To approach the key to the reader
2 - When the led visualize the correct recognition (Valid Key) to get away the key to connect the installation. The Led will visualize the temporisation of EXIT.

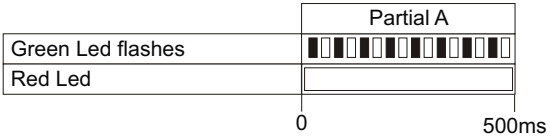


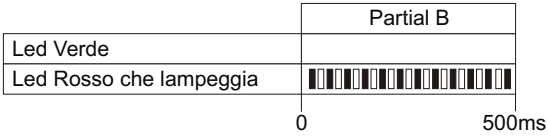
PARTIAL CONNECTION A / B

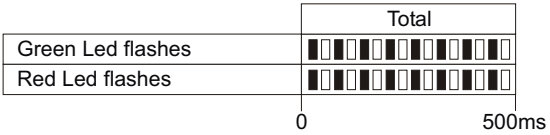
1 - Bring the key to the reader and wait the visualization pf correct recognition(double BEEP).

2 - Away the key
The LED will visualize in sequence the different connection moodes:

3-To reconnect the key when LED indicate the connection mode desired.

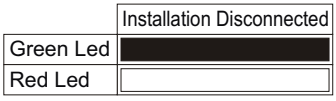






DISCONNECTION

1 - To approach the key to the reader
2 - When the led visualize the correct recognition (Valid Key) get away the key to disconnect the installation.

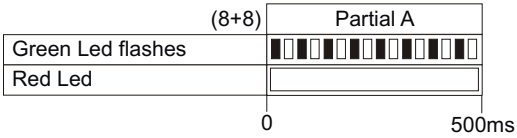


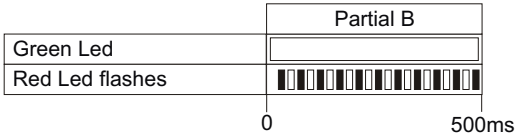
VISUALIZATION CONNECTION TYPE

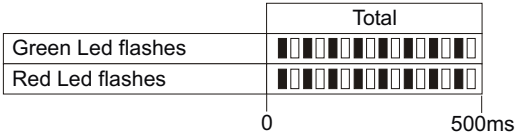
- When the installation is connected to approach the key to the reader and to wait before the recognition and then the visualization of the current modality of connection.
- The led will visualize the way to current connection:

NOTE. The visualization stay active for all the time of the presence of the key.

When gets away the key,the central unit isn't disconnected.







6.6.2 Others signalisations on the connector

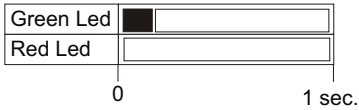
Alarm installation:

Alarm memory to the central unit disconnected:

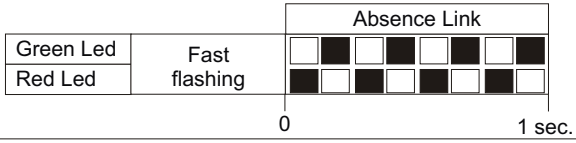
Immediate opened zones to the central unit disconnected:

Delayed opened zones to the central unit disconnected:

Excluded zones:



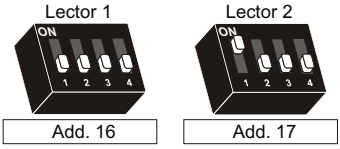
ERROR CONNECTIONS
Signalisation for error connection of the reader to the “DX bus”.



INDIRIZZO ERRATO
Segnalazione per errata configurazione dell’indirizzo del lettore sul “DX bus”.

NOTA La centrale gestisce fino a 3 lettori che devono essere configurati singolarmente mediante i dip-sw con uno dei seguenti indirizzi :

WARNING - Make ON sure not utilise the same addresse on more devices.



6.7 Proximity reader DX300

With the readers DX300 it's possible to read the keys "KEY" and to execute following operations:

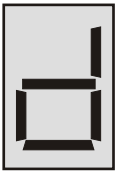
- Connect installation in the TOTAL, PARTIAL A and PARTIAL B mode.
- Diconnect installation.
- To read or to write new keys "KEY"

Also through the display of 7 segments it's possible:

- To visualize the modality with to connect the installation.
- To visualize the status of installation :
- Connected / Disconnected;
- Alarm;
- Temporisation of exit ;
- Presence of opened zones ;
- Presence of excluded zones;
- To visualize connection or configuration errors

6.7.1 Signalisations on display connector

On the connector Dx300 display is provided the status of the central unit:

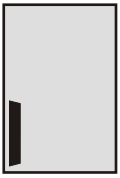


letter "d"
- Installation disconnected/ flashing in the presence of opened zones.

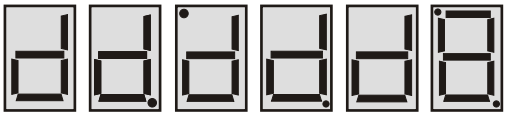
2 alternate points in addition to the lettre "d"
- Indicate that are registered in the alarm memory to the installation disconnected.

lettera "E"
- Impianto disinserito con zone escluse. / Lampeggiante in presenza di zone aperte.

2 points alternative in addition to the letter "E"
- Indicate that are registered zones in the alarm memory, with installation disconnected and excluded zones.



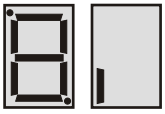
letter "i"
- Installation connected



"d" with 2 alternate points + "8".
Alarm 24H to the central unit disconnected.

"E" with 2 alternate points + "8".
- Alarm 24H to the central unit disconnected with excluded zones .

"segment that rotates"
- Temporisationof exit
Trembling and alternate to the letters "i":
- Temporisation of entry.



"8" (with two alternate points to "i)
- Alarm current to the central unit connected .

6.7.2 Use of key

Total mode connection
When the central unit is disconnected (<d> or <E> on display) to approach the key to the connector: the buzzer on the corrector emit a beep.

Remove the key from the connector: the buzzer of the connector emits three beeps and the connector sends the command to completely arm the system. If the command is executed, the display shows the exit time (rotating segments) and at the end it indicates the system armed (<i>).If the command is not executed, the display continues to show system disconnected (<d> or <E>).

Partial arming A or B

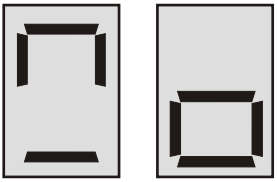
With the control unit disconnected **(<d> or <E>** on the display), bring the key to the connector until you hear a beep.Leave the key close to the inserter until you hear two more beeps after a few moments, then remove the key.
<a>, <b> and <F> alternate on the display. Approach the key when <F> appears on the display to arm the system in total mode, approach the key when <a> appears on the display to arm the system in partial mode A or bring the key near when <b> appears to arm the 'partialized system B.

The buzzer emits a further beep and the inserter sends the arming command to the control panel in the chosen mode.If the command is executed, the display of the inserter first signals the exit time (rotating segments) then <i> for the inserted system.

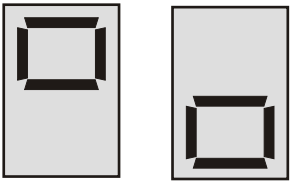
If the reader does not recognize the approach of any key, after 15 seconds it stops alternating the symbols of the three types of activation, emits two beeps and does not send any command to the control unit.
If the command is not executed, the display of the connector resumes showing <E> or <d> to indicate system disconnected with or without excluded zones.

6.7.3 Further indications on the DX300

Absence connection
If communication with the control unit is interrupted, the animation appears on the display of the connector:



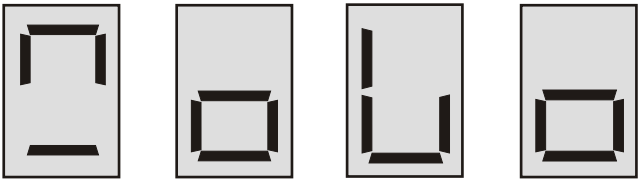
Waiting for connection
During the connection with the control unit, an animation appears for a few moments on the display:



Once the connection has been made, the status of the control unit is shown on the display.

Addressing error

If the control unit does not recognize the address set on the connector or on the control unit the connector itself among the 485 devices is not enabled, the display will show the animation:



Privacy mode

If you program on the control unit that the reader must hide the information (Setup-> Privacy Inserter = N), the display of the reader shows the flashing dot at the bottom and does not indicate open or excluded zones or system armed / disarmed.
Bring a key close to the inserter until you hear a beep then remove the key.
The connector resumes giving its signaling on the status of the control unit for about 10 seconds.During these it is possible to close the key again to operate in the usual way.
If you keep the key close to the reader after listening to the first beep, the reader does not execute any command and after 10 seconds it goes back to hiding its signals.
With the reader in privacy mode, the only signals that appear on the display are those of alarm and those of arming and disarming (for about 10 seconds).

Acoustic intensity of the beep

The DX300 readers have the possibility to adjust the acoustic intensity of the signals on two levels, it is possible to choose the acoustic level of the beeps individually for each inserter. (Setup-> Beep Inserter = High or Low).

Alarm beep

The DX 300 can be enabled on the control unit to activate the buzzer in the event of an alarm(Setup-> Inserter Alarm Beep = S)This acoustic signal always occurs at maximum intensity, even if the low level for the beeps has been programmed on the connector.