

# Installation manual

## Résidencia 2



**1/ Presentation of the central Unit**

**2/ Presentation of radio components**

**3/ Recommendations**

**4/ Installation and commissioning procedure**

**5/ Programming in the factory**

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## Declaration of network compatibility:

This equipment is compatible with the networks in the following countries: Germany, Austria, Belgium, Denmark, Spain, Finland, France, Greece, Ireland, Iceland, Italy, Luxembourg, Norway, Holland, Portugal, the United Kingdom, Sweden and Switzerland.

Nevertheless, there may be problems of interoperability with the following networks: Greece, Portugal, Switzerland.

Greece, Portugal: Pulse dialling is not supported in the basic version. It may nevertheless be added as an option. Please contact the manufacturer's after-sales department.

Switzerland: We recommend adding a filter for metering pulses (12 KHz) between the unit and the network connection.)

In the event of a problem, please contact your dealer first.

## Warranty

▲ The equipment is guaranteed for 2 years against faulty manufacture or raw material defects.

▲ This Warranty shall not apply if the user has not complied with the recommendations given, if the unit has been put into service at a voltage other than that shown on the rating plate or if the unit has been connected to the wrong type of

telephone line or, if the user has caused faults due to negligence or by inexperience.

This manual should not be thrown away but should be retained throughout the life of the product.



# 1/ Presentation of Alarm Unit

The unit combines the functions of an **Alarm Unit** and **Telephone Modem**.

## Equipment

The alarm unit is equipped with:

- ❑ A keypad including three LEDs and set of keys for controlling the system
- ❑ An **analog telephone modem** connected to the fixed telephone network (Z interface)
- ❑ a **built-in 100 dB siren** with four operating modes programmed in the factory for each function or detector:
  - Alarm transmitted without siren
  - Alarm transmitted, then siren activated
  - Siren activated if transmission is unsuccessful or if the telephone line is cut
  - Simultaneous transmission and siren.
- ❑ A **radio receiver** for communication with the wireless components: motion detectors, door and window detectors, remote controls and keypads for arming the system, etc.
- ❑ An **alarm unit tamper protection loop** monitoring the alarm unit door and wall tamper switches
- ❑ An **integrated intercom module** for carrying out audio and intercom confirmation (use depending on country)
- ❑ A **memory containing the log of the last 500 events**. The log can be viewed locally on the installer's laptop or remotely by upload.
- ❑ A **Chime module**. When a door or window switch or motion detector is triggered, the alarm unit outputs a chime type audio signal. Radio channels 1 and 12 are preset to this mode.

## Wireless Components

The alarm unit manages **32** wireless channels: 22 channels are allocated to the detectors, 5 to the remote controls or keypads and 5 are used for the SOS function.

The wireless components are stored by teach-in. Each wireless component has a unique factory-set code out of 16 million possible combinations.

**Battery level:** Each detector monitors its built-in battery and informs the alarm unit if the battery is low.

**Supervision:** Once every hour, each detector sends a test message to the alarm unit.

The alarm unit triggers an alert when it receives a battery low message or the detector has not sent a test message for four hours.

This alert may generate a call to the Remote Supervisor identifying the origin of the alert and may also activate the siren.

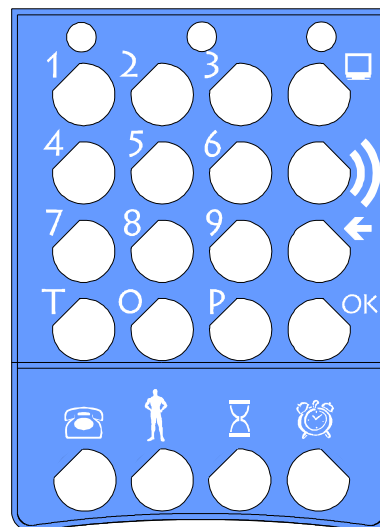
## Programming Using the Installer Overlay

The **installer overlay** of the alarm unit allows simplified programming without requiring a programming tool.

In this case, the installer carries out installation based on the default factory settings (see appendix), then completes or changes the settings using the **installer overlay**.

The **installer overlay** provides the following functions:

- ❑ Store wireless components, detectors, remote controls, keypads
- ❑ Program the customer's subscriber number
- ❑ Program the call center numbers
- ❑ Set the time delays on entry and exit
- ❑ Set the time of the alarm unit. Setting the time allows the event log to be time stamped and cyclic tests to be run.



Part number : 10D3008

## Programming from a PC Using the Configurator

Programming from a laptop requires the use of the configuration pack.

This pack includes a special connecting cable and the configurator program used to modify and customize the alarm unit and transmission protocol parameters.

## Event Log

This log contains the last 500 events. For each event, the alarm unit stores:

- The date and time of occurrence
- Alarm unit arming and disarming and code used
- Alarm events: Triggering of a detector or tamper switch, detector battery level
- Calling sequence to be executed
- Completion or not of the calling sequence.

The log can be viewed locally on the installer's laptop or remotely by the remote setting function.

## Remote Setting

The remote parameter setting function is used to view and set the alarm unit parameters, i.e.:

- Viewing and setting of the alarm unit and transmitter parameters
- Viewing of the events stored.
- Setting of the alarm unit time
- Reconfiguring of an alarm unit (restoring of the factory setting)
- Updating of the software version.

Remote setting is activated from the front panel of the alarm unit.

## Technical Data

The alarm unit performs a self-test when controlling and transmitting a line power failure and return, the battery level and by cyclically sending status messages (cycle in hours or days).

The time at which the test is run can be programmed from a PC or is delayed 12 hours after setting the time.

## Specifications

- ▲ Unit dimensions (WxHxD): 188 x 230 x 68 mm
- ▲ Weight: 850 grams
- ▲ Material: ABS VO case
- ▲ Location of use: Indoors away from humidity
- ▲ Temperature range: 0°C to 40°C
- ▲ Door tamper switch
- ▲ Protection class IP30 (NF standard = NF EN 60529) IK07 (NF EN 50102).
- ▲ Protection against electric shocks: Class 2 (NF standard = EN 60950)
- ▲ Frequency: 433 MHz - UHF receiver.

## Power Supply

- ▲ Primary: Line power 230 VAC  $\pm$  10%, 50 Hz, 3.2 VA
- ▲ Backup by 600 mA NIMH storage battery or equivalent.
- ▲ Battery monitoring: Message sent if battery level falls below 4.3 volts.
- ▲ Line power supervision: Message sent after a line power failure lasting 1 continuous hour (detection limit = 100 VAC)
- ▲ Alarm unit operating time: 24 hours.

# 2/ Presentation of Wireless Components

## **General**

During a radio transmission, each peripheral device sends several outputs:

- Alarm contact state
- State of the device tamper switch
- State of the device battery

In addition, once every hour, a message indicates that the device is operating correctly.



# 1/ Infrared movement detectors

## Series 1:

### A/ Standard infrared 10D9310

B/ Animal infrared 10D9320: The "Animal" detector is used for the surveillance of premises whilst ignoring an animal of less than 18 Kg and less than 50 cm.



- ▲ Operating temperature: -10° C to 50° C.
- ▲ Weight: 120 g; Colour: white.
- ▲ Power supply by 4 batteries - 1.5 V – AAA; life: 50 transmissions per day = 3 years; transmission of low battery signal.
- ▲ Stabilisation time (15 seconds to 2 minutes) after the installation of the batteries. During the stabilisation time, the indicator flickers quickly.
- ▲ Impulse counter to avoid unwanted triggers (1 / 3 / 5 pulses).
- ▲ Dimensions: 102h X 65L X 45P mm.
- ▲ In the "normal" position, **the detector is tripped if it remains for 2 minutes with no detection** ;
- ▲ The "test" mode is started automatically whenever the self-protection is closed and used to perform 10 triggers over a period of not more than 30 minutes, with immediate acknowledgement. The « test » mode is closed automatically.

▲ When the detector is saved, the unit saves the characteristics of the detector and its serial number. This serial number may be consulted by remote parameterisation.

### ▲ Standard infrared 10D9310 :

Field of vision: 90°; cover: 9 m X 9 m.

Installation of the detector at a 1,80 2,1 or 2,4 m height and adjustment of the PC board position.

- Installation at 1,8m = the PC board is set to +2
- Installation at 2,1m = the PC board is set to 0
- Installation at 2,4m = the PC board is set to -2

### ▲ Animal infrared 10D9320 :

Field of vision: 76°; cover: 9 m X 9 m.

**Installation between 2 and 2,1m and and adjustment of the PC board on -2.**

## Position of the jumper

### Cavalier 1 :

**Rst** : position of the detector in learning mode

**ON** : normal mode with indicator lamp lit

**OFF** : normal position with indicator lamp out

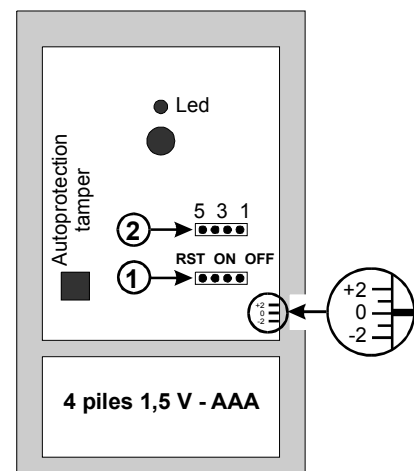
**Note: on completion of the installation, the jumper should be set to OFF**

### Cavalier 2 :

**Position 1** : Instantaneous detection

**Position 3** : Excellent protection against unwanted trips

**Position 5** : Maximum protection against unwanted trips



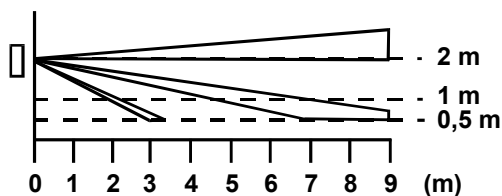
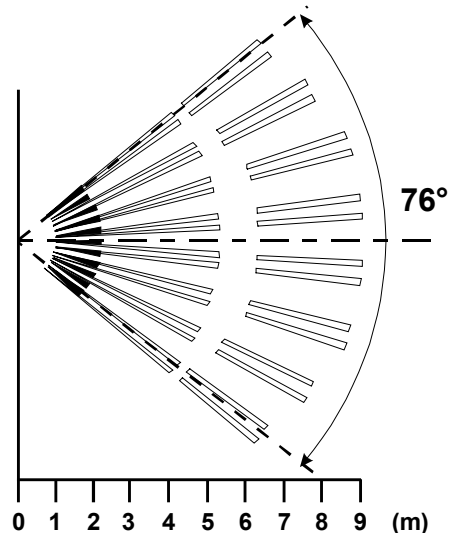


## Recommendations concerning the installation of "animal" detectors

◆ We advise you to set the jumper of the pulse counter to position 5, which corresponds to a maximum protection against unwanted trips. According to place and installation conditions, the jumper can be set to position 3 (good immunity) or to position 1 (instantaneous detection).

◆ The detector has to be installed at a height between 2m and 2,1m and the PC board has to be set to position -2.

◆ The detector has to be mounted flat against the wall and not inclined. Do not use any ball-joint or socket.



### B/ Series 2: Standard infrared 10D3002

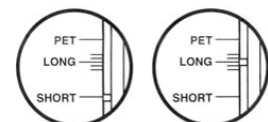


- ▲ Operating temperature : 0° C to 55° C,
- ▲ Weight : 100 g ; Colour : white,
- ▲ Power supply by Lithium battery 3 V model CR 123A,
- ▲ Life of the battery = 3 years in mode "Normal",
- ▲ Field of vision: 90°; cover: 3 to 16 metres,
- ▲ Impulse counter to avoid unwanted triggers (1 / 2 / 3 pulses),
- ▲ In the "normal" position, **tripped 2.5 minutes after the last detection**; in the "passage test" position tripped after each passage,
- ▲ Dimensions : 127.6 h X 64.2 L X 40,9 P mm,
- ▲ Indicator lamp flashing: battery low.

#### **Setting the detector to "long range" or "short":**

- "LONG" position: detection 6 to 16 metres
- "SHORT" position: detection 3 to 6 metres

The setting is made after loosening the circuit locking screw.



#### **Passage test:**

- Set the jumper to "FULL SIGN",
- Position the "Led" jumper,
- Reinstall the front panel and carry out the passage tests,
- At the end of the test set the jumper to "Normal".**

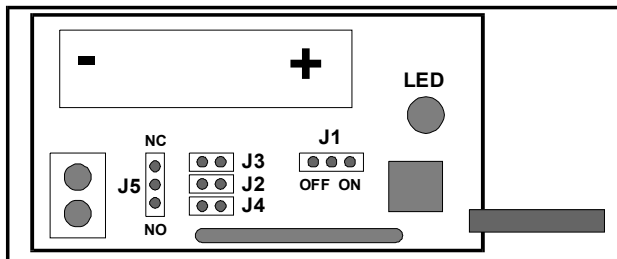
Note: The position "FAST MON" is used for supervision for 12 minutes instead of 65 minutes.

**To prolong battery life, the LED jumper should be removed on completion of the installation.**

## 2/ Opening detectors or technical transmitters

### A/ Series 1: 10D9330

- ▲ Operating temperature: 0° C to 50° C.
- ▲ Weight: 50 g with battery - Magnet: 15 g; Colour: white.
- ▲ Power supply by Lithium 3 V – CR123A battery; life: 50 transmissions per day = 3 years; transmission of low battery signal.
- ▲ Dimensions: 85h X 34L X 27 mm.
- ▲ The contact has a terminal strip designed to be fitted with a wire loop (contact dry), in addition, which is connected in series with the ILS contact (maximum length of the cable : 5 meters, maximum impedance of the loop : 47 kOhms)
- ▲ During memorisation of the detector, the unit saves the characteristics of the detector and its serial number. This serial number may be consulted by remote parameterisation.
- ▲ In order to compensate height differences between the detector and the magnet, you have the possibility to put, on the detector or on the magnet, 4-cm especially designed wedges (30 special wedges, reference 90D9330)



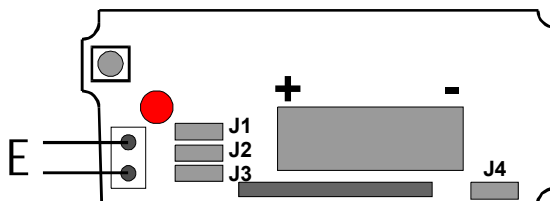
- J1** : ON : indicator lamp lit  
OFF : indicator lamp off
- J2** : ON : transmission with each opening  
OFF: **tripped if the detector does not detect for 2 minutes.**
- J3** : Always in the OFF position
- J4** : ON: bimetal strip used (magnet)  
OFF: bimetal strip not used (use in technical transmitter).
- J5** : NC: connection of a normally closed loop  
NO: connection of a normally open loop

#### On completion of the installation, to prolong the life of the detector battery :

- ▲ the jumpers J1 should be OFF position.
- ▲ the jumpers J2 should be removed.

### B/ Series 2: 10D3003

- ▲ Operating temperature : 0° C to 50° C
- ▲ Weight : 75 g with battery -; Colour : white,
- ▲ Power supply by Lithium 3 V model CR 123A battery; life = 3 years in normal mode : "HOLD ON "
- ▲ Dimensions : 35 h X 81 L X 33 P mm
- ▲ Transmission on alarm and end of alarm.
- ▲ The contact has a terminal strip designed to be fitted with an additional wire loop.
- ▲ Indicator lamp: When the battery is low, the indicator lamp flashes 3 times on each transmission.



#### **Programming of the 4 jumpers:**

- J1**: in the "HOLD ON" position: **the alarm is tripped 2.5 minutes after the last detection** and the end of alarm is transmitted immediately,
- J1** in the "HOLD OFF" position: the alarm is tripped immediately.

- J2**: in "FAST" position: connection of impact contacts,  
**J2**: in "SLOW" position: connection of magnetic contacts.
  - J3** : in "NO" position: connection of the external sensor in NO (**input E**)  
**J3**: in "NC" position: connection of the external sensor in NC (**input E**)
  - J4**: in "OFF" position: use of the bimetal strip with the magnet,  
**J4**: in "ON" position: bimetal strip not used.
- At the end of the test, jumper 1 should be in the "HOLD ON" position.**



## 3/ Remote controls, call SOS and Rounds

### A/ Series 1

- ❑ 2 On/Off keys: 10D9230
- ❑ 4 On/Partial On/Off/ SOS keys: 10D9250
- ❑ 1 SOS key: 10D9220
- ❑ 1 Round key: 10D9210



- ▲ Operating temperature: 0° C to 50° C.
- ▲ Weight: 50g, Colour: dark grey.
- ▲ Dimensions: 60h X 40L X 11P mm.
- ▲ Frequency: 433.92 Mhz.
- ▲ Power supply by a CR2032 battery
- ▲ Life : 10 transmissions per day = 3 years,
- ▲ Low battery: an alarm is transmitted to the unit and the indicator lamp flashes.

▲ During memorisation of the remote controls, the unit saves their characteristics and serial numbers. This serial number may be consulted by remote parameterisation.

### B/ Series 2

- ❑ 2 On/Off keys : 10Z9230
- ❑ 4 On/Partial On/Off/ SOS keys : 10Z9250
- ❑ 1 Round key: 10Z9210



- Violet key:** Total surveillance
- Green key:** Total off and memorisation of the remote control during installation
- Grey key:** Surveillance of zone 1
- Red key:** SOS

- ▲ Operating temperature: 0° C to 50° C.
- ▲ Weight: 50g, Colour: dark brown.
- ▲ Dimensions: 104h X 44L X 24P mm.
- ▲ Frequency: 433.92 Mhz.
- ▲ Power supply by Lithium 3.6 V - 1.2 Ah battery; life: 50 transmissions per day = 3 years; transmission of low battery signal.

### C/ Series 3:

2 On/Off keys / SOS: 10D3005



**Red key:** Total surveillance,  
**Green key:** Off : hors surveillance,  
**Pressing both keys at the same time:** SOS, duress call.

- ▲ Operating temperature : 0° C to 50° C
- ▲ Colour : black
- ▲ Power supply by Lithium battery.
- ▲ Battery model CR2032; 3 Volts.
- ▲ Life : battery life 3 years
- ▲ Dimensions : 70 h X 35 L X 12 P mm



## 4/ Smoke Detector 10D9350

Wireless smoke detector P/N 10D9350 is designed to be installed inside the protected premises. It must be installed on the ceiling in the center of the room.

When smoke is detected, the system generates a series of three audio signals and triggers a radio transmission to the alarm unit. The series of audio signals is repeated every three seconds until smoke is no longer detected.

The smoke detector includes two parts: the smoke detector head and the base unit containing the radio transmitter.

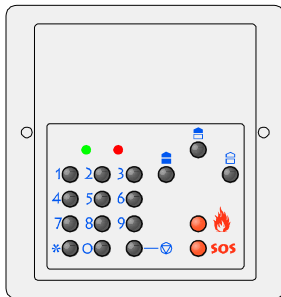
**The radio transmitter continuously monitors its power supply level. When it detects a low power supply level, it sends a special message to the alarm unit and it generates an audio signal**



- ▲ Dimensions: diameter 142 mm; height 45 mm
- ▲ Radio link frequency: 433.92 MHz
- ▲ Power supply:
  - Detector head: one 9V alkaline battery
  - Radio transmitter: three 1.5V alkaline batteries type AAA with battery low detection when the voltage drops to 3.15V.
- ▲ Detector head operating time: three years with a triggering test performed once a month
- ▲ Radio transmitter operating time: three years with use of **ULTRA** alkaline batteries
- ▲ Operating temperature range: -0°C to +50°C
- ▲ Use: Indoors away from humidity

## 5/ Wireless Keypad

### Specifications



- ▲ Operating temperature range: 0°C to 55°C
- ▲ Power supply by one 3.6 V, 1 Ah lithium thionyl chloride battery
- ▲ Battery model SAFT LS 14250 (L = 24.8 mm / dia 14.4 mm)
- ▲ Operating time: 2 years
- ▲ Frequency: 433.92 MHz
- ▲ Dimensions (LxWxH): 120 x 114 x 32 mm

The wireless keypad is used to activate total supervision or partial supervision, deactivate supervision, make SOS or fire alarm calls and read the alarm unit status.



**Caution:** The alarm unit devices such as keypad, remote control, break-in detectors, etc. are generally equipped with lithium batteries, giving them a very long operating time. If these batteries remain in storage for one or two months, they may enter a passivation phase. Lithium batteries contain liquids which solidify on the terminals during an extended storage period. If this happens, even if the voltage measured across the terminals is correct, no current can flow through the battery. To make the battery operational again, connect a 30-ohm resistor across the terminals until the voltage (current?) returns to nominal level.

# Recommendations

## Some useful tips before starting the installation

You are about to install and put into service an alarm unit. We suggest you comply with the following recommendations:

1. **Read this manual carefully and, in particular, the chapter concerning the installation recommendations.**
2. **Follow the instructions set out in the installation procedure to the letter.**
3. Find the best location for your unit, in accordance with its installation conditions.
4. **Before connecting the telephone line, check the installation with your customer and whether he has an answering machine, fax or Internet connection (see connection chapter).**
5. Unpack and prepare the various radio peripherals **but do not install them** (intrusion detectors, keypads, etc.). We recommend programming them close to the unit and securing them only after checking their radio range from the location required.
6. Programme the various radio peripherals (self-learning).
7. From the required location of each radio peripheral, check, their radio link with the unit, in "test" mode.
8. Once their final location has been determined and their range checked, install and secure the radio peripherals.
9. Test the installation in full.

### Environment and location of the unit

The unit is a wireless alarm system which communicates with its peripherals using radio transmissions.

The propagation of radio frequencies differs depending on the place of installation, location and height of components, and on the construction materials found.

**The position of the unit on the site to be protected is therefore strategic.** This position should take into account the following table and indications:

Materials found	Radio frequency penetration rate
Wood and plaster	90 to 100 % of radio transmissions
Brick	75 to 90 % of radio transmissions
Reinforced concrete	0 to 50 % of radio transmissions
Metal structures	0 to 10 % of radio transmissions

Since the ground is an obstacle to the propagation of transmissions, system components should not be installed at ground level,

No component should be installed on a metal partition or structure.

In all cases, we recommend installing the unit in the centre of the premises to be protected, at an average height of 1.50 metres, whilst taking into account the location of the telephone line and incoming feeder of the 230 volt mains power supply.

### Environment and location of peripherals

***The peripherals should not be installed before being programmed.***

Once programmed, their final location shall only be chosen and confirmed after checking radio ranges and interference from this location.

#### Opening detectors:

If an opening detector has to be installed on a metal door or frame, the installer should insert an insulating shim between the opening detector and the metal part so that the action of the magnet on the opening contact is not disrupted by the metal mass and that this metal mass does not interfere with radio transmissions.

#### Movement detectors:

Movement detectors are infrared detectors. They are therefore sensitive to changes in temperature and should not be installed close to a source of heat (convector, chimney), in a draft or in direct sunlight.

**To avoid saturation of radio transmissions, the peripherals should not be installed in the direct vicinity of the unit, or at a distance of less than 3 metres.**

The installation, upkeep and maintenance of this equipment may only be carried out qualified, authorised personnel.

### Installation conditions, environment

- ▲ Wherever possible, the unit and keypads should not be installed in a room with a static floor covering (carpet, etc.), close to high power distribution cubicles, switches generating high over voltages and in the immediate vicinity of a source of heat (radiator, electric convector heater, etc.).
- ▲ Provide, around the unit casing, sufficient clearance for good ventilation through the openings provided.
- ▲ The equipment is designed to operate at an ambient temperature of between 0° C and 40° C.
- ▲ The equipment should not be installed in a location where it may be sprayed with water.

### Protection of the Installer and Repair technician

- ▲ To ensure safe conditions during installation and maintenance operations, an **easily accessible** 230 Volt disconnection switch must be installed uplink of the unit.  
This device should disconnect both poles at the same time and the distance between the contacts should be at least 3 mm.
  - ▲ The installation should include a differential protection device
- Any work on the system should be carried out only after opening the disconnecting switch and after checking the status of the mains power supply indicator lamp on the unit.**

### Protection of Users

- ▲ This equipment is manufactured in accordance with international standards, which ensure its suitability and safety.
- ▲ The various cubicles and components used are self-extinguishing, in accordance with the standards in force.

### ⚡ Protection against lightning ⚡

- ⚡ The telephone line and mains power supply of the equipment are fitted with protection against over voltages and electrostatic discharges. This protection is also used against the secondary effects of lightning.
- ⚡ Protection against direct lightning strikes cannot be provided and when the equipment is installed in a zone at risk, an additional lightning arrester should be installed on the telephone line and the mains power supply.
- ⚡ These systems are only effective if the lightning arrester is connected to an earth connection, in accordance with the specifications. In general, such systems should be replaced after a lightning strike.  
This type of equipment should not be installed in the terminals since any protection becomes ineffective when lightning enters the equipment.

## Connection of the 230 Volt electrical network

- ▲ The equipment is designed to operate at a single phase voltage of 230 volts, 50 Hz. Before making the electrical connection, check that the parameters of the electrical network (voltage, power, frequency, etc.) correspond to the operating parameters shown on product rating plate and in the manual.
- ▲ The equipment is designated **class 2**, that is it does not include an earth connection.
- ▲ The installation should be fixed (with no sockets).
- ▲ The connection of the unit to the 230 Volt distribution network should comply with trade practises in accordance with standards NFC-15100.

**Do not switch on the unit when a fault has been detected.**

### WARNING

*To avoid the risk of electrical shock:*

- Connect the mains power supply after completing the wiring,
- Cut off the mains power supply and the telephone line before starting work,
- The "dangerous voltage" and "TRT" (telecommunication network voltage) danger zones should only be fitted with the connections designed for them.

### Batteries

- ✘ The batteries of the system peripherals are Lithium batteries. Never use standard batteries.
- ✘ All the batteries of an installation should be replaced at the same time.
- ✘ The batteries should not be short-circuited, modified, removed or subject to impact.
- ✘ Spent batteries should not be discarded or burnt. They should either be deposited in a collection centre or returned to the supplier.



**Caution:** Certain alarm unit peripherals, such as control keypads, portable remote controls, intrusion detectors, etc. are fitted with Lithium batteries, which gives them very long battery life.

If these batteries are stored for 1 to 2 months, they may go into "Passivation" phase.

Lithium batteries contain liquid components and in the event of prolonged storage, this liquid solidifies on the output terminals. In this case, the voltage measured across the terminals is correct but the battery is not operational since it does not generate any current.

To make it operation, discharge it into a 30 ohm resistor until it reaches its rated voltage again.

### Batteries

- ✘ Batteries should only be replaced by models of the recommended type or the equivalent.
- ✘ Spent batteries should not be discarded or burnt. They should be deposited in a collection centre.

# Installation and commissioning procedure

To ensure that installation is carried out under optimal conditions, it is necessary to perform the steps below in the order given.

## 1 With the alarm unit user

**1/ Establish an installation plan based on the default factory programming. This plan is used to determine:**

- ❑ The approximate locations of the detectors. The final detector locations are confirmed after making radio range tests.
- ❑ The alarm unit location. The alarm unit must be located in the centre of the site to be monitored. On a site with several levels, it is recommended to place it on the median level. If possible, avoid basement corners and install away from electric meters, television sets, computers, microwaves, etc. The location should be near a telephone line and 230 VAC line power and where applicable, allow the use of a remote control unit used outside the site to be protected.
- ❑ The access path to the alarm unit and therefore detectors which should be delayed and the time delays on entry and exit to be used for each detector.
- ❑ The detectors active for total supervision and partial supervision.

**2/ Review the telephone system and check whether it includes an answering machine or a fax and whether the user has an Interconnect connection by modem, RNIS or ADSL** (the different cases of connection are described in item 5: Connecting the telephone line).

## 2 Opening, positioning and attaching the alarm unit

The alarm unit must be installed in compliance with the recommendations given in the sections **Installation Recommendations** and **Safety Recommendations**.

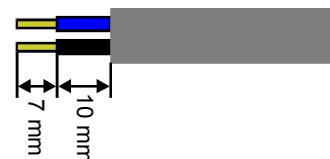
To open the alarm unit, remove the screw cap and unscrew and remove the attaching screw.

## 3 Connecting 230 VAC line power

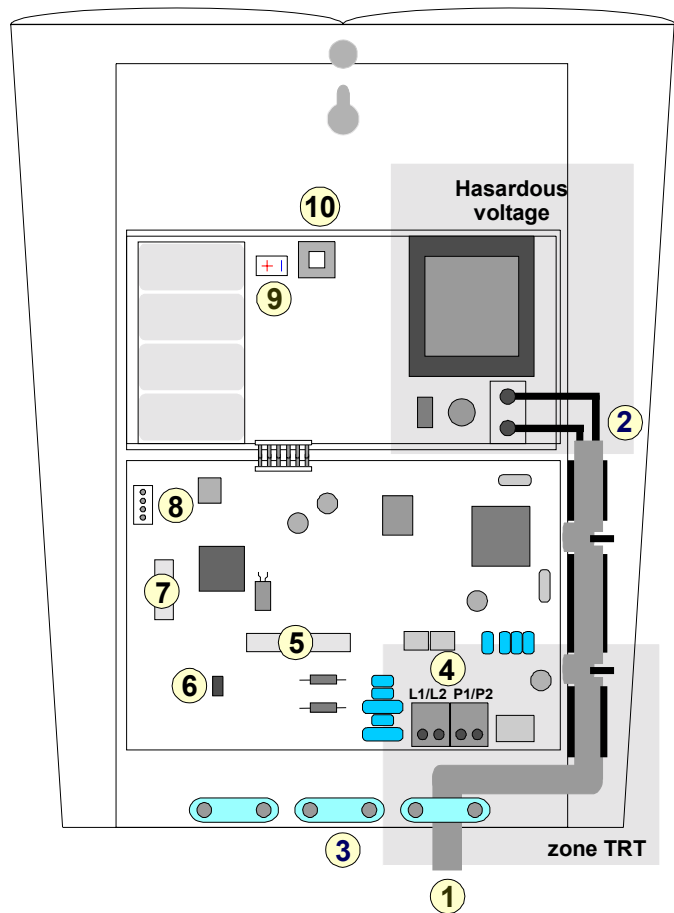
- ▲ The power cable must have a diameter of 8 mm and include two conductors with a cross-sectional area above  $0.75 \text{ mm}^2$  (maximum  $2.5 \text{ mm}^2$ ).
- ▲ You must use standard cables conforming to the IEC standard or the harmonized CENELEC standards.
- ▲ The cable must be inserted through the Line inlet **(1)** and be clamped in the anti-pulloff clamp **(2)**. The line power wires are connected to terminal **(2)**.

The unsheathed length of cable must not protrude by more than 10 mm from the line power terminal. The stripped length of cable must not exceed 7 mm.


Only one wire must be connected to each terminal of the line power terminal board. If using a multiconductor cable, the stripped part must not be tin-plated.





- 1 Inlet for 230 VAC connection
- 2 **230 VAC line power terminals**
- 3 Inlet for the telephone line
- 4 Terminals for analog **fixed telephone line** and system **telephone sets**
- 5 The ribbon cable interconnecting the front panel card and main card is installed in the unit supplied. If it comes loose, be careful not to reverse the terminals when reconnecting it.
- 6 Jumper used for factory testing. **This jumper must remain in place.**
- 7 Connector used for factory testing: **do not connect anything to this connector.**
- 8 **Laptop connector for setting up the alarm unit.** The laptop is connected using the configuration pack.
- 9 **Connector for backup battery pack.**
- 10 **Door tamper switch**



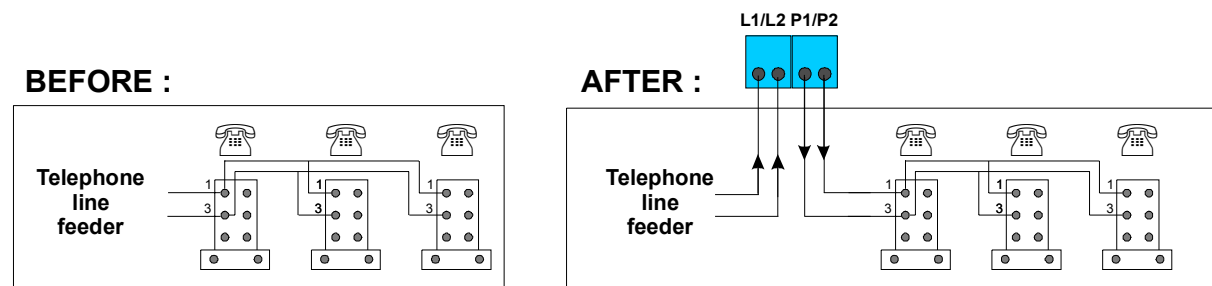
## 4 Connecting the telephone line

 The cable must be inserted through the Telephone line inlet (3) and be clamped in the anti-pulloff clamp.

 The unit is connected to an analog fixed line or a TRT3 type connection (TRT3: System whose nominal operating voltages exceed 42.4 V peak or 60 V continuous and on which voltage spikes from the telecom network are possible; conventional analog system, Z interface).

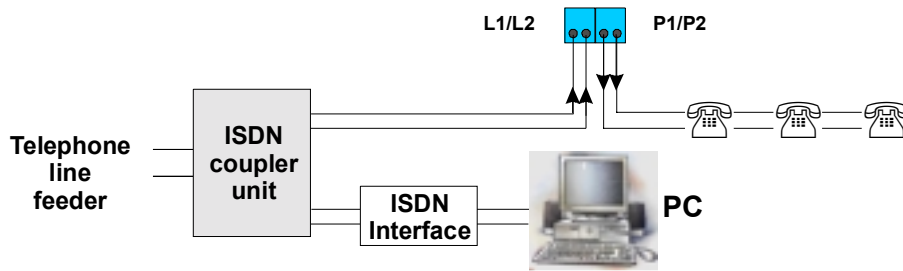
 The terminal must be connected as shown below:

### 1/ Standard system with one or more telephone sets

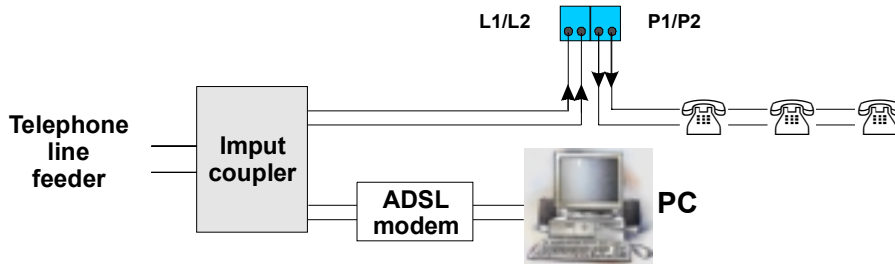




## 2/ ISDN system with one or more telephone sets and an Internet link



## 3/ System with one or more telephone sets and an Internet link by ADSL



**Restricted line:** Make sure your customer does not have a restricted line and does not activate a restricted line by a code when leaving the premises.



**The equipment cannot be connected directly to an ISDN line.**



5

### Power on



Before proceeding to connect the unit to 230 VAC line power, check the line power input to make sure the parameters (voltage, power, frequency, etc.) correspond to the operational parameters indicated on the unit nameplate and in the guide.



Before proceeding to connect the alarm unit to 230 VAC line power, remove the foam cushion glued to the transformer, used to hold the power supply card in place during shipping.

#### ☉ Connect the 230 VAC input to the line power isolating switch:

The green LED flashes.

#### ☉ Install the battery pack:

Place the battery in the compartment and attach it with the tie strap supplied with the equipment.

To make your security system fully operational as rapidly as possible, the backup battery was charged in the factory and packaged for delivery. Check that the installation date indicated on the battery has not expired.

#### ☉ Connect the battery pack:

- The green LED comes on.
- The backup battery is fully operational after an additional 16-hour charge period.





The alarm unit does not boot unless 230 VAC line power is connected and present. **The 3 LEDs on the front panel come on if the battery is connected but line power is absent.**

- Disconnect the 230 VAC via the isolating switch and make sure the green LED flashes, confirming absence of 230 VAC.
- Reconnect line power: The green LED comes on steady.
- The alarm unit opens the **Administrator menu**. The red LED must be lit to indicate that the alarm unit is in **Test** mode.
- To access the **Installer setup** menu, enter the installer code (factory setting 2222) and press the **T** key. The **Mode** LED flashes twice per second.

installer code + **T**

## 6 Programming

The **installer overlay** of the alarm unit allows simplified programming without requiring a programming tool. This programming is based on the factory settings (see appendix for the chart of factory settings).



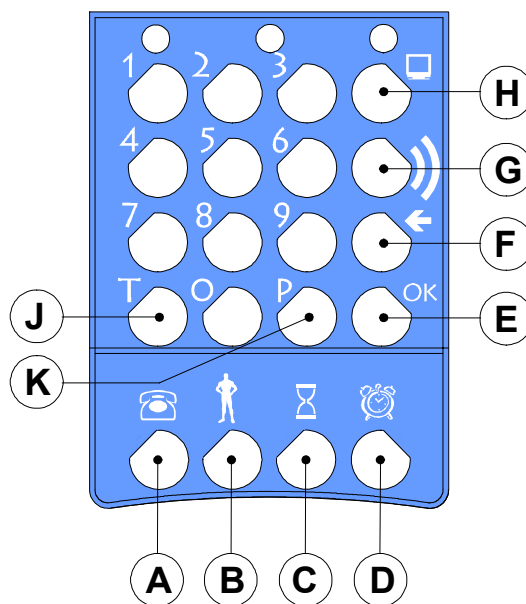
**Programming is not possible unless line power is connected and present.**

The installer overlay provides the following functions:

- ❑ Store wireless components: detectors, remote controls, keypads, etc.
- ❑ Program the customer's subscriber number
- ❑ Program the call center numbers
- ❑ Determine the time delays on entry and exit
- ❑ Set the time of the alarm unit. Setting the time allows the event log to be time stamped and cyclic tests to be run.
- ❑ Activate remote viewing of the alarm unit status from the technical center.

The other settings are accessible by the remote setting function or from a laptop.

<b>(A)</b>	<b>Telephone numbers</b>
<b>(B)</b>	<b>Customer subscriber number</b>
<b>(C)</b>	<b>Time delay on entry and exit</b>
<b>(D)</b>	<b>Setting the time</b>
<b>(E)</b>	<b>Confirm</b>
<b>(F)</b>	<b>Delete</b>
<b>(G)</b>	<b>Store detectors</b>
<b>(H)</b>	<b>Download data</b>
<b>(J)</b>	<b>Wait for dial tone</b>
<b>(K)</b>	<b>Access the Installer menu or Pause</b>



## 1. Accessing Installer Setup Mode from Off Mode

---

Entry in setup mode is protected by an access code. Follow the procedure below to access setup mode:

administrator code + **P** + installer code + **T**

(factory-set administrator code: 1111; factory-set installer code: 2222).


If the codes entered are correct, the alarm unit goes into **Installer Setup** mode. The Mode LED flashes twice per second.


When you press , the alarm unit exits from Installer setup mode and goes into Detector test mode. The Mode LED comes on.

## 2. Programming the Subscriber Number

---


Proceed as follows to program the subscriber number:

- Press key . The Mode LED flashes
- Enter the subscriber number on 8 digits.
- Press **OK** to confirm.
- The Mode LED flashes twice per second.

 + 8-digit subscriber no. + **OK**

The alarm unit acknowledges data entry by generating an acceptance signal if accepted or a refusal signal if the 8 digits or the sequence is entered incorrectly.

The alarm unit returns to **Installer setup** mode.


When programming the subscriber number, you can press  to return to the start of **Installer setup** mode.

## 3. Programming the Telephone Numbers

---

The alarm unit supports three telephone numbers (preset in the factory).

Proceed as follows to program a telephone number:


- Select the number to be programmed (1, 2 or 3)
- Press key : The Mode LED flashes
- Enter the telephone number on the numerical keypad. Enter **T** before the number to program a wait for the dial tone or **P** for a pause.
- Press **OK** to confirm.
- The Mode LED flashes twice per second.

Example of programming sequence to set the first telephone number as 01 55 23 25 25:

1 +  + **T** + 0155232525 + **OK**

The alarm unit acknowledges data entry by generating an acceptance signal if accepted or a refusal signal if the number or the sequence is entered incorrectly.

The alarm unit returns to **Installer setup** mode.

When programming the telephone number, you can press  to return to the start of **Installer setup** mode.




If the alarm unit is connected to a PABX, it is necessary to dial 0 to access the outside line. Enter the following sequence: **T 0 T 0155232525**.

If the tone output by the PABX is not conformant and not recognized by the alarm unit, replace the **Ts** by **Ps**. In this case, the alarm unit waits 4 seconds before starting to dial.

## 4. Setting the Time Delays on Entry and Exit for Each Detector

Proceed as follows to set the time delays on entry and exit:

- Enter the detector number on 2 digits
- Press key . The Mode LED flashes
- Program the time delay on entry in seconds on three digits
- Press **OK** to confirm.
- Program the time delay on exit in seconds on three digits
- Press **OK** to confirm.
- The Mode LED flashes twice per second.

Example: For detector 2, set a time delay on entry of 30 seconds and a time delay on exit of 45 seconds.



The alarm unit acknowledges entry of each item by generating an acceptance signal if accepted or a refusal signal if the sequence was not correctly entered, then returns to **Installer setup** mode..

When programming the time delays, you can press  to return to the start of **Installer setup** mode.

## 5. Storing the Detectors, Remote Controls and Keypads

Each system component - detector, keypad, remote control unit, siren - has a unique factory-set code out of several million possible combinations.

To be recognized, each component must be stored in the alarm unit. Storage is by teach-in.

- Channels 1 to 22 are reserved for the detectors**
- Channels 23 to 27 are reserved for the remote controls or keypads**
- Channels 28 to 32 are reserved for the SOS functions triggered by a particular transmitter or remote control.**

The installer uses the factory settings to assign the detectors to the wireless channels (see appendix for factory settings).



The factory parameter settings can be changed to customize the system. The new settings can be made from a PC equipped with the Configurator software and connected to the alarm unit via the special adapter cable or by download.




### Rules to be followed:

The detectors and other devices must be set on a desktop near the alarm unit for storage before they are installed. To avoid any risk of error or confusion between detectors or between wireless devices, it is recommended to proceed in the following order:

- ▲ Do not connect any batteries to the wireless devices
- ▲ Enter the channel number to be stored
- ▲ Press key **)**): The Mode LED flashes
  - If the channel is already programmed, the alarm LED comes on steady
  - If the channel is free, the alarm LED flashes and the alarm unit goes on wait for reception of a radio transmission
- ▲ Connect the battery to the detector or device to be stored on the channel selected
- ▲ Perform the teach-in procedure specific to each device (**refer to Storage Procedure in the next section**)
- ▲ On reception of the radio transmission, the alarm unit outputs:
  - A rejection audio signal (4 beeps) if the wireless device is not recognized by the alarm unit or if it is already stored on another channel, or
  - An acceptance audio signal (long beep)
- ▲ Press **OK** to confirm device storage.
- ▲ The Mode LED flashes twice per second.
- ▲ Remove the battery from the device
- ▲ Repeat the procedure for each device to be stored, installing the battery in only one device at a time.

Example for storage of a detector on channel 1:

1 + **)**) radio message 🎵 + **OK**

When programming the detectors, you can press  to return to the start of **Installer setup** mode.

If you make a mistake during the storage procedure, it is recommended to remove the battery and start over from the beginning

# Memorisation procedures

## A/ "Infrared" detectors

### Series 1: standard infrared 10D9310 and Animal infrared 10D9320



- ▲ Open the detector and set the jumper 1 to the "RST" position,
- ▲ Select a channel from 01 to 22,
- ▲ Press key )): The Mode LED flashes
- ▲ Insert the batteries in their housing respecting their polarities,
- ▲ Wait for the stabilisation time (15 seconds to 2 minutes). During the stabilisation time, the indicator flickers quickly.
- ▲ Perform a detection or a self-protection operation,
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key,
- ▲ Reset the jumper 1 to the "**OFF**" position.

**Before closing the detector, make sure that the antenna is straight and in standing position.**

### Series 2: standard infrared 10D3002



- ▲ Open the detector,
- ▲ Select a channel from 01 to 22,
- ▲ Press key )): The Mode LED flashes
- ▲ Insert the battery in its housing respecting their polarities,
- ▲ Press the self-protection strip pendant 3 seconds then release,
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

## B/ Opening detectors

### Series 1: opening detector 10D9330



- ▲ Open the detector and set the jumpers according to the use of the detector (see page 10),
- ▲ Select a channel from 01 to 22,
- ▲ Press key )): The Mode LED flashes
- ▲ Insert the batteries in their housing respecting their polarities,
- ▲ Close the self-protection: the indicator lamp comes on during transmission,
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

**Before closing the detector, make sure that the antenna is straight and in lying position.**



**During the detector memorization :**

- 1/ The magnet should not be used (keep the magnet away from the detector to avoid any false triggering)**
- 2/ If you use the terminal strip, the jumper has to be in NC position and nothing should be wired to this strip.**

### Series 2: opening detector 10D3003



- ▲ Open the detector and set the jumpers according to the use of the detector (see page 9),
- ▲ Select a channel from 01 to 22,
- ▲ Press key )): The Mode LED flashes
- ▲ Insert the batteries in their housing respecting their polarities,
- ▲ Press the self-protection strip for 3 seconds then release.
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

## C/ SOS transmitters

### Series 1: SOS transmitter 10D9220



- ▲ Select a channel from 28 to 32.
- ▲ Press key **))**: The Mode LED flashes
- ▲ Press the button for at least 10 seconds: the indicator lamp comes on once after 2 seconds then comes back on 10 seconds.
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

Note : As the self-learning radio message is broadcasted only after 10 seconds, do not take refusal signals broadcasted by the alarm unit during these 10 seconds into account.

### Series 2: SOS transmitter 10Q4200 AND 10Q4210



- ▲ Select a channel from 28 to 32.
- ▲ Press key **))**: The Mode LED flashes
- ▲ Press the red button: the indicator lamp comes on during transmission,
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

## D/ Remote controls:

### Series 1:

- 2 On/Off keys: 10D9230
- 4 keys On/Off/Zone 1/SOS : 10D9250



- ▲ Select a channel from 23 to 27.
- ▲ Press key **))**: The Mode LED flashes
- ▲ Press one of the remote control keys for at least 10 seconds: the indicator lamp comes on once then comes back on 10 seconds.
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

Note : As the self-learning radio message is broadcasted only after 10 seconds, do not take refusal signals broadcasted by the alarm unit during these 10 seconds into account.

### Series 2:

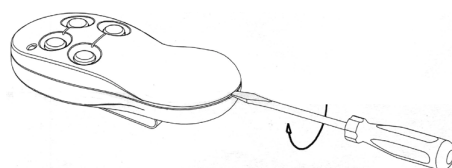
- 2 On/Off keys: 10Z9230
- 4 keys On/Off/Zone 1/SOS: 10Z9250



- ▲ Remove the screws behind the remote control,
- ▲ Separate the cover from the back and remove the printed circuit board,
- ▲ Select a channel from 23 to 27.
- ▲ Press key **))**: The Mode LED flashes
- ▲ Insert the battery in its housing respecting their polarities,
- ▲ Press the **"green"** key: the indicator lamp comes on during transmission,
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

### On all models:

- Mini-switch 1 : OFF
- Mini-switch 2 : OFF





### Series 3: 2 On/Off/SOS keys: 10D3005

The remote control should be memorised on 2 channels: the "remote control" channel for placing under and off surveillance and the "SOS" channel for duress calls.



#### Memorisation of the remote control:

- ▲ Select a channel from 23 to 27.
- ▲ Press key **))**: The Mode LED flashes
- ▲ Press one of the remote control keys: the indicator lamp comes on during transmission,
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

#### Memorisation of the function SOS :

- ▲ Select a channel from 28 to 32.
- ▲ Press key **))**: The Mode LED flashes
- ▲ Press 5 seconds on both remote control keys: the indicator lamp comes on during transmission,
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Confirm the recording using the **OK** key.

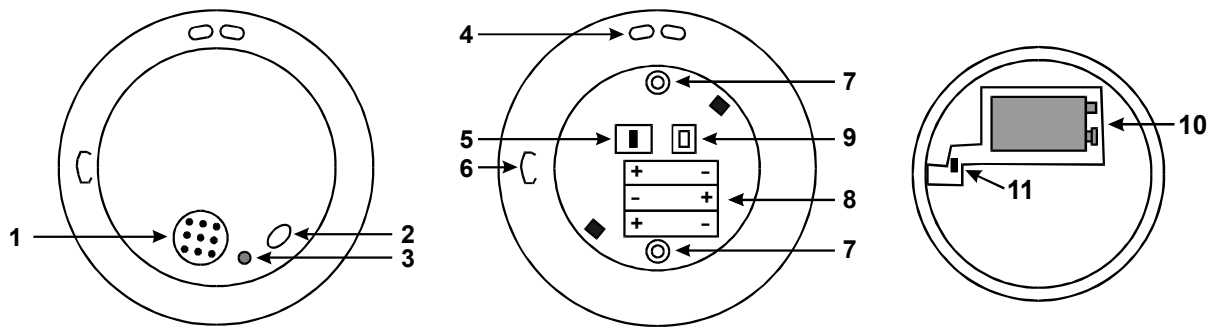
### E/ Smoke Detector 10D9350:

Smoke detectors have to be memorized on round-the-clock active channels. A channel is active round-the-clock, when it belongs neither to a group of detectors nor to a supervision area.

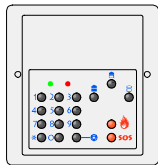


- ▲ Open the detector by turning the detector head counterclockwise
- ▲ Set jumper (5) to Buzzer on or Buzzer off
- ▲ Set the alarm unit to **Teach-in** mode on an available radio channel dedicated to a smoke detector application
- ▲ Press key **))**: The Mode LED flashes
- ▲ Install the three AAA batteries in the base and the 9V battery in the detector head
- ▲ Press **Reset** button (6) located on the detector base
- ▲ Press **Test** button (2) located on the detector head
- ▲ The detector sends a radio message
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ On the alarm unit, press **OK** to confirm device storage
- ▲ The detector is stored in the alarm unit.

- 1 Audio signal generator (buzzer)
- 2 Detector test button simulating smoke detection
- 3 LED: Smoke detection
- 4 LED: Radio transmission to the alarm unit
- 5 Jumper for activating buzzer by low battery detection: ON: Buzzer on - OFF: Buzzer off
- 6 Reset button
- 7 Detector attachment
- 8 Compartment for 3x1.5 V AAA batteries supplying the radio transmitter
- 9 Connecting cable to detector head
- 10 Compartment for 9V battery supplying the detector head
- 11 Lever preventing closing of the detector if the detector head battery is not installed

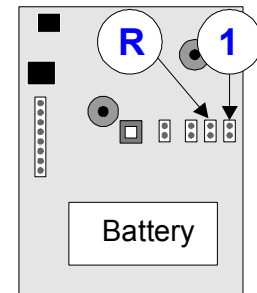
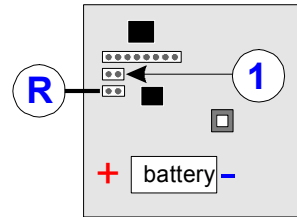


## F/ Wireless Keypad



- ▲ Select a channel between 23 and 27
- ▲ Press key **))**: The Mode LED flashes
- ▲ Insert the battery in its housing being careful not to reverse the poles or remove the insulating tape
- ▲ When the battery is installed, the two LEDs come on and the keypad generates two beeps for one second
- ▲ Reset the keypad (momentarily shunt **R**)
- ▲ Close the tamper switch: The keypad makes a radio transmission and the LEDs come on for 5 seconds
- ▲ Check that the alarm unit broadcasts the acceptance audio signal
- ▲ Press **OK** to confirm device storage.

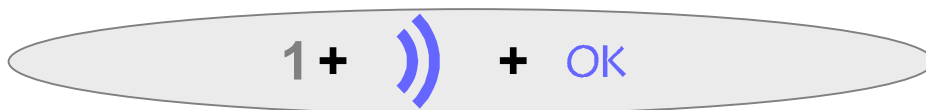
Note: The tamper switch is active 30 seconds after the end of the teach-in phase.



## 6. Deleting a detector

To delete a detector, enter:

- ❑ The number of the channel from which the detector is to be deleted (1 or 2 digits)
- ❑ key **))**
- ❑ the **OK** key: the channel is now free.



The alarm unit returns to **Installer setup** mode.


## 7. Setting the Alarm Unit Time and Starting the Cyclic Test

The alarm unit logs all events: activation and deactivation of supervision with the number of the code used, passage of the installer, cyclic test, line power failure, etc.

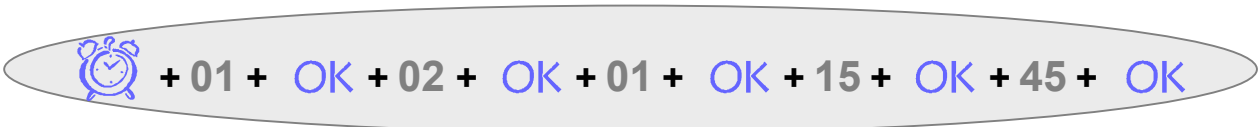
Setting the time allows the event log to be time stamped and cyclic tests to be run. The first test is transmitted 12 hours after setting the time.

**Caution: After a complete power failure (line power + battery), the time must be reset to synchronize the cyclic test.**

Proceed as follows to set the time:


- ❑ Press key : The Mode LED flashes
- ❑ Enter the date on 2 digits and press **OK** to confirm
- ❑ Enter the month on 2 digits and press **OK** to confirm
- ❑ Enter the year on 2 digits and press **OK** to confirm
- ❑ Enter the hour on 2 digits and press **OK** to confirm
- ❑ Enter the minute on 2 digits and press **OK** to confirm
- ❑ The Mode LED flashes twice per second.

Example: February 1, 2001 at 3:45 pm:



The alarm unit acknowledges data entry by generating an acceptance signal if accepted or a refusal signal if the data or the sequence is entered incorrectly.

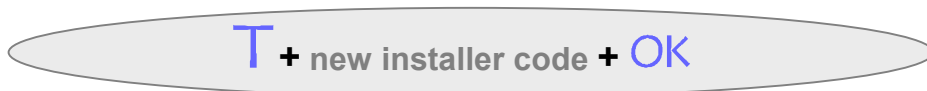
The alarm unit returns to **Installer setup** mode.

When setting the time, you can press  to return to the start of **Installer setup** mode.

## **8. Modifying the Installer Code**

To modify the installer code, press **T**: The Mode LED flashes

- ❑ Enter the new installer code
- ❑ Press **OK** to confirm.
- ❑ The Mode LED flashes twice per second.



The alarm unit confirms data entry by generating an acceptance signal.

## **9. Exiting from Installer Setup Mode and Accessing Test Mode**

When you press , the alarm unit exits from **Installer setup** mode and goes into Test mode. The Mode LED is lit steady.

### **7 Installation Test**

#### **▲ Proceed to test all the detectors and functions:**

The siren generates an audio signal whenever a detector is triggered, in case of a power failure or on occurrence of an event.

#### **▲ Test the range of the wireless keypad:**

With the alarm unit in **Test** mode, the installer can test the keypad range by actuating the tamper switch:

**Tamper switch activated:** The keypad generates three beeps, the green LED flashes three times and the alarm unit must generate a siren echo.

**Tamper switch deactivated:** The keypad generates one beep, the green LED flashes twice and the alarm unit must generate a siren echo.

**Note: Wait five seconds before each activation and deactivation of the tamper switch.**

▲ **Operational and Range Testing of the Smoke Detectors**

To perform an operational and range test of the smoke detectors, hold the test button on the detector head depressed.

▲ **Perform an operational test of the alarm unit tamper switches**

▲ **At the end of the tests, press**  **to exit from Test mode.**



Caution: The detectors generate test calls at regular intervals. The siren generates an audio signal if a detector makes its call during the test phase.

During normal operation, the infrared motion detectors must be left deactivated for at least two minutes, i.e. two minutes without detection, before being able to be retriggered.

During the tests, the installer may use a cover so as not to have to evict people from the premises.

**8**

**Testing the Connection with the Call Reception Centre**



On exit the Installer menu, a 15-minute timeout is triggered. During this timeout, the alarm unit loudspeaker is activated to be able to monitor routing of the test calls made and detect any transmission errors: line busy, network congested, line restricted, etc.

Description of a telephone transmission:

1. Reception and analysis of the tone sent by the switching office (2 seconds)
2. DTMF dialling
3. Call routing: During this phase, the alarm unit generates short beeps on the line once every second
4. 2 rings
5. The call reception centre answers the call
6. The call reception centre sends a clear to send message (carrier for 2 seconds)
7. The alarm unit sends the data
8. The data are processed and checked by the call reception centre (1 or 2 seconds)
9. Switch to listening/intercom or acknowledgment of the call for other calls.



During the 15-minute timeout, to facilitate system testing, the 230 VAC line power failure message, normally transmitted after one hour, is sent immediately.



During the 15-minute timeout, the installer can adjust the intercom volume by means of the SOS and Fire keys. . This adjustment must be made with the loudspeaker on.

## 9

## Testing the Range of Stored or Unstored Detectors

**This test is operational on all the detectors recognized by the alarm unit, even those which have not been stored.**

Proceed as follows to enter the **Detector range test** mode:

- ▲ The alarm unit power supply must be cut off: 230 VAC cut off and battery disconnected
- ▲ Press key **T**
- ▲ Connect 230 VAC line power. The three LEDs flash.
- ▲ Connect the battery: The green LED is lit steady.
- ▲ The alarm unit goes into **Detector range test** mode:
- ▲ The siren generates an audio signal whenever it receives a radio message sent by a detector, whether or nor the detector is stored
- ▲ Position each detector as close as possible to the location where it is to be installed, then test the detector. During the test, the infrared motion detectors are set to Passage test or immediate triggering.
- ▲ **If the test is satisfactory, it can be planned to install the detector in that location.**

To exit from test mode, cut off the 230 VAC power supply and disconnect the battery.

## Servicing

Because of incoming inspections of the components and factory testing of the unit, no special servicing is required on the alarm unit.

**Before attempting any maintenance inside the Terminal, the User must cut off the 230 VAC line power on the isolating switch.**

During the inspections provided for by the maintenance contract, the installer performs the following preventive checks:

- ▲ Check of the wiring and security of attachment of all the terminals on the alarm unit card.
- ▲ Check that the link connectors are correctly plugged in.
- ▲ Battery: The 600 mAh storage batteries used in the unit do not require any special maintenance under normal conditions of use.  
Simply make sure they are replaced when the service life reaches five years.
- ▲ Detectors and Sirens: Use the test procedure to run an operational test on the detectors, keypads, sirens, etc.
- ▲ The alarm unit enclosure can be cleaned with a damp cloth. Do not use detergent.

<u>Appendix:</u> <u>Factory Settings</u>	Partial	Calling sequence	Siren activation	Transmission	E: Listening I: Intercom	SURTEC alarm	SURTEC standby	ID contact	Notes
Channel 1	X	1	X	X	I	32		(130)	Chime + time delay
Channel 2	X	1	X	X	I	33		(130)	Conditioned (1)
Channel 3	X	1	X	X	I	34		(130)	Conditioned (1)
Channel 4	X	1	X	X	I	35		(130)	Conditioned (1)
Channel 5	X	1	X	X	I	36		(130)	Conditioned (1)
Channel 6	X	1	X	X	I	61		(130)	
Channel 7	X	1	X	X	I	62		(130)	
Channel 8	X	1	X	X	I	63		(130)	
Channel 9	X	1	X	X	I	64		(130)	
Channel 10	X	1	X	X	I	65		(130)	
Channel 11	X	1	X	X	I	66		(130)	
Channel 12		1	X	X	I	67		(130)	Chime
Channel 13		1	X	X	I	68		(130)	
Channel 14		1	X	X	I	69		(130)	
Channel 15		1	X	X	I	70		(130)	
Channel 16		1	X	X	I	71		(130)	
Channel 17		1	X	X	I	72		(130)	
Channel 18		1	X	X	I	73		(130)	
Channel 19		1	X	X	I	74		(130)	
Channel 20		1	X	X	I	75		(130)	
Channel 21		1	X	X	I	76		(130)	
Channel 22		1	X	X	I	77		(130)	
Channel 28 - SOS		1		X	I	01		(150)	
Channel 29 - SOS		1		X	I	02		(150)	
Channel 30 - SOS		1		X	I	03		(150)	
Channel 31 - SOS		1		X	I	04		(150)	
Channel 32 - SOS		1		X	I	04		(150)	

<b>Arm/Disarm</b>						94	95	401	Audio acknowledgment
<b>Partial supervision on</b>						77	95	456	Audio acknowledgment
<b>3 code errors</b>		1		X		29		461	
<b>Cyclic test</b>		2		X		92		602	
<b>Disarm under duress</b>		1		X	E	30	09	121	
<b>Battery fault</b>		2		X		91	90	302	30-minute time delay
<b>Line power failure</b>		2		X		21	22	301	1-hour time delay
<b>Tamper switches</b>		1	X	X	I	16	09	137	
<b>Device selfprot</b>		1	X	X	I	05	09	383	
<b>Device battery failure</b>		2		X		06	09	384	
<b>Supervision</b>						47	09	381	
<b>SOS (alarm unit, keypads)</b>		1		X	E	11		120	
<b>Fire</b>		1	X	X	I	46		110	

<b>Telephone numbers</b>	Telephone number 1: Alarms Telephone number 2: Technical Telephone number 3: Remote setting
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<b>Calling sequence</b>	<b>Sequence 1 - Alarms: 10 attempts to number 1</b> <b>Sequence 2 - Technical: 10 attempts to number 2</b> <b>Sequence 3 - Remote setting: 4 attempts to number 3</b>
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<b>Cyclic test</b>	Once a day. The first test is run 12 hours after setting the time.
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<b>Channel 1 time delays</b>	Entry: 30 seconds Exit: 30 seconds
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<b>(1) Conditioned channels</b>	Channels triggered immediately, but time delayed if the time delay on entry was activated by a time-delayed channel.
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