INTERVOX SYSTEMES

INSTALLATION MANUAL

RÉSIDENCIA 3

1/ PRESENTATION OF THE CENTRAL UNIT

2/ PRESENTATION OF RADIO COMPONENTS

3/ PRESENTATION OF HARDWIRED COMPONENTS

4/ RECOMMENDATIONS

5/ INSTALLATION AND COMMISSIONING PROCEDURE

6/ PROGRAMMING IN THE FACTORY

SurTec SIGNALLING PROTOCOL BY INTERVOX SYSTEMES

Résidencia 3 - Edition march 2006

SurTec

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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 problems of interoperation 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.

Presentation of Alarm Unit

1/ General Description

The alarm unit is equipped with:

- A **backlit display**
- A **backlit keypad** including a set of keys for controlling the system
- An **analog telephone modem** connected to the STN telephone system (Z interface):
  - communicating in digital mode with call reception centres that accept the SurTec and ID contact protocols,
  - communicating in voice mode transmitting customisable messages to standard or GSM telephone sets,
  - which allows data transfer to two different recipients whatever digital or voice protocol is used : « dual acknowledgement » function.
- An **integrated 100 dB siren**
- An **integrated intercom module** for carrying out audio and intercom confirmation
- a **Voice synthesiser** used to guide users.
- A digital recorder used for the **Voice message** function
- A **radio transceiver** controlling 32 radio channels for communication with the wireless components: detectors, remote control units or keypads, outdoor sirens, etc.
- An **alarm unit tamper protection loop** monitoring the alarm unit **door and wall tamper switches**
- A **memory containing the log of the last 500 events.** The log can be viewed locally, or remotely by upload.
- As an option, the alarm unit can be fitted with an **extension card for connection of hardwired add-ons.**

2/ Detailed Description

LCD Display

The backlit LCD display includes one line x 16 characters, displaying:

- The date and time
- The programming and setup menus
- The alarmed detectors in test mode or on activation
- Four information icons: power on, battery fault, alarm stored and use of the telephone line
- etc.

Keypad

The backlit keypad is used for controlling the alarm unit:

- Total Supervision on
- Partial supervision on
- Supervision off
- Duress call
- Fire alarm call
- Chime function enable/inhibit
- Voice message function
- Creation of user codes
- Alarm unit setup and programming

32 Radio Channels

- **20 supervised channels** are reserved for the **detectors :**
  - ▲ Infrared detector
  - ▲ Animal infrared
  - ▲ Opening detector
  - ▲ Smoke detecto
- **2 channels** are allocated to the **sirens :**
  - ▲ Internal siren
  - ▲ Outside Wireless Siren with Flasher
- **5 channels** are allocated to the **keypads or remote control units :**
  - ▲ Wireless Keypad
  - ▲ Remote control
- **5 channels** are preassigned to the **SOS transmitters**

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.

When a detector sends a battery low message or has not sent a test message for four hours, the alarm unit stores the event in the log.

Depending on how the system is programmed, this event may generate a call to the Monitoring Centre and/or trigger the siren.

Supervision of the unit: Every hour, the sirens receive a supervision call from the unit.

If after 4 hours, the unit has not sent its supervision messages, the sirens are activated for 2 minutes 30 seconds.

Hardwired Add-on Extension Card

The extension card is placed inside the alarm unit and allows connection of:

- A **balanced hardwired input** allowing connection of a hardwired detector and its tamper switch to a wire pair. The detector must be provided with its own power supply if required.
- An **auxiliary tamper switch input** inserted in the tamper circuit of the alarm unit
- An **output for connection of a signal:** siren, alarm light, etc. (NC contact, max. current rating 100 mA)

Event Log

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

- The date and time of occurrence
- Activations and deactivations with the code used
- Alarm events: Triggering of a detector or tamper switch, detector battery level
- Completion or not of the call sequence and number of attempts.

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 delayed 12 hours after setting the time.

Voice Message

The alarm unit is equipped with a digital recorder allowing one of the users to record a voice message lasting 15 seconds at most.

When the alarm unit is deactivated, a visual and audio signal alerts the other users that a message is present and prompts them to consult the message.

Rounds Management

When a break-in alarm is triggered, the alarm unit goes on wait for two hours for a radio message sent by a roundsman's remote control unit.

The siren(s) output(s) an audio signal and the information is sent to the call reception centre. The intervention squads that go to the customer's place must be equipped with roundsman type remote control units.

Remote Parameter Setting

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

- Viewing and setting of the alarm unit and transmitter parameters
- Viewing of the events stored.

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

Call-me Function

The remote operator makes a call to the telephone line, to which the alarm unit is connected, and hangs up after one or two rings. Then, in the 30 following seconds, he has to make a second call to the same number. Once again, he hangs up after one or two rings : if none of the installation phone sets is picked up, the unit automatically calls the number programmed as "Service server".

Programming on the Alarm Unit

The front panel 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.

Use this procedure to:

- Store wireless components: detectors, remote control units, keypads, sirens
- Program the subscriber number
- Program the call centre numbers
- to program the park code (SurTec protocol),
- Program the access codes
- Modify the installer access code
- Determine the time delays on entry and exit for each detector.

Programming from a PC Using the Configurator

Programming from a PC requires use of the setup pack containing a special connecting cable and the Configurator setup software.

The Configurator is used to:

- Program the parameters of the transmitter modem:
  - Subscriber number
  - Park code (SurTec protocol),
  - Siren operating time
  - Cyclic test frequency in days or hours, with test run time
- Program the telephone numbers of the call centres
- Classify these numbers by creating call sequences used for calling the centres depending on the type of alarm: break-in, cyclic test, technical calls, etc.
- to program the « dual acknowledgement » function, that is to say two call sequences for each function.
- Assign to each detector:
  - A label in natural language making it easier to locate
  - A call sequence
  - A siren operating mode
  - With listening or intercom
  - Time delays on entry and exit
  - State or pulse mode
  - Transmission codes
  - With or without supervision
  - With our without audio signal on triggering of the detector
  - With our without audio signal on acceptance of the call
- Program the characteristics of the hardwired input
- Isolate a detector
- Program the detectors for partial supervision or total supervision
- To deactivate outdoor sirens in partial or off surveillance modes,
- Assign each alarm unit user a personal ID code and possibly restrict certain accesses.

Specifications

▲ Dimensions (in mm): L 240 x W 160 x D 55

▲ Weight: 1000 grams

▲ Material: ABS VO case

▲ Location of use: Indoors away from humidity

▲ Temperature range: 0°C to 40°C

▲ Tamper switches on door and wall

▲ Protection class IP 30 (NF standard = NF EN 60529) IK 07 (NF EN 50102).

▲ Protection against electric shocks: Class 2 (NF standard = EN 60950)

▲ Frequency :

- ☐ **reference 12TR3R401 : 433,92 Mhz,**
- ☐ **reference 12TR3R801 : 868,35 Mhz.**

Power Supply

▲ Primary: Line power 230 VAC ± 10%, 50 Hz, 4,5 VA

▲ Backup by 600 mAh NIMH storage battery supplied with the alarm unit.

▲ 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) (value modifiable by PC)

▲ Alarm unit operating time: 24 hours

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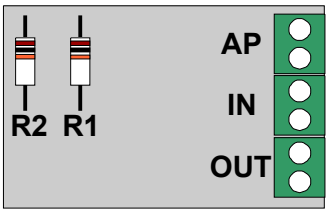
Hardwired Add-on Extension Card



The extension card is placed inside the alarm unit and provides:

- A **balanced hardwired input** for connection of a hardwired detector and its tamper switch to a wire pair.
- An **auxiliary tamper switch input** inserted in the tamper circuit of the alarm unit
- An **output for connection of a signal:** siren, alarm light, etc. (NC contact, max. current rating 100 mA)

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.

Useful hints for installing units and radio components

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 in 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 lighting 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.

<u>Caution:</u> 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 is 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 Components supplied with the alarm unit

- User guide
- Servicing return sheet.

3 Opening, positioning and attaching the alarm unit

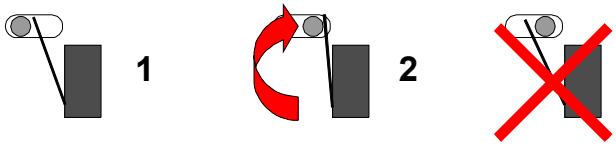
The alarm unit must be installed in compliance with the recommendations given in the sections **Installation Recommendations** and **Safety Recommendations**.

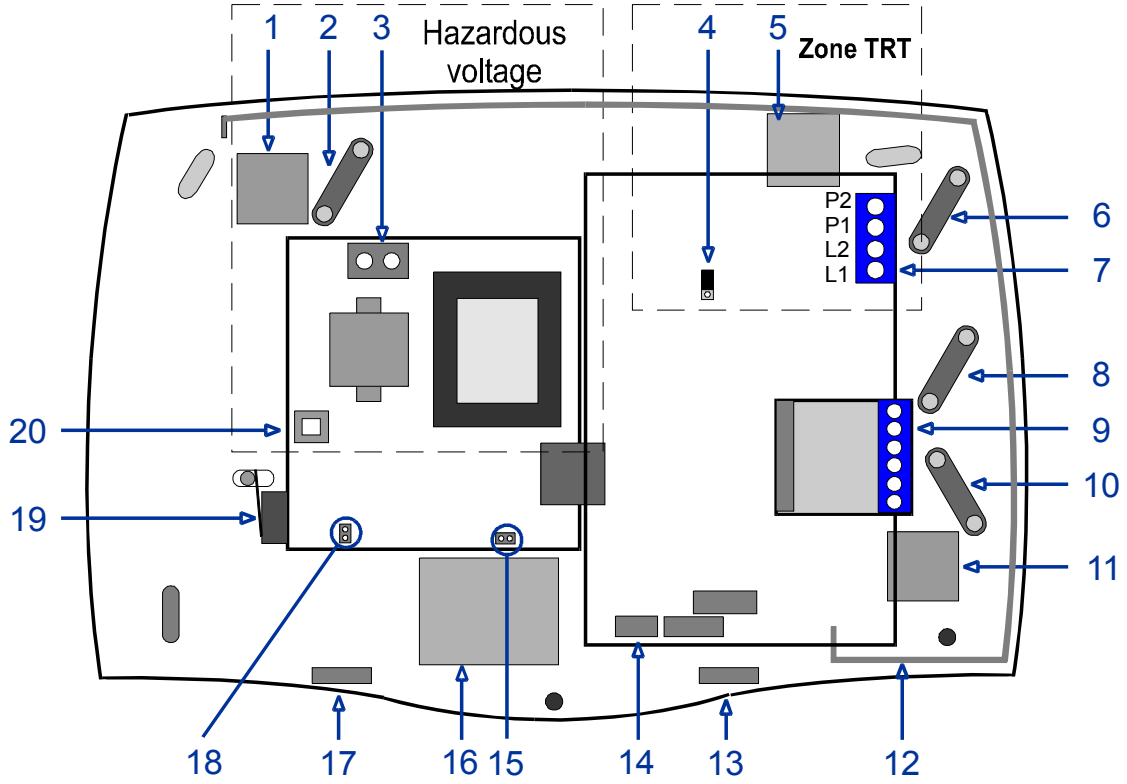
To open the alarm unit, remove the screw cap and unscrew and remove the attaching screw.

During installation, the alarm unit front panel is placed on hooks **(13)** and **(17)** so as not to damage the connecting cable between the case and front panel.

Attach the alarm unit with the four screws provided.

Before applying the alarm unit against the wall, remove the adhesive tape securing the wall tamper switch. Before tightening the bottom screws, secure the tamper switch lever as shown below.





1 Punch-out hole for 230 VAC connection
2 Line power cable clamp
3 230 VAC line power terminal
4 Reserved for factory tests (jumper raised)
5 Punch-out hole for the telephone line
6 Telephone line cable clamp
7 Telephone line terminal
8 Hardwired component cable clamp
9 Hardwired components extension card
10 Hardwired component cable clamp
11 Punch-out hole for hardwired connections
12 Antenna
13 Hook for placing the front panel during installation
14 Connector for PC connecting cable for programming by Configurator
15 Battery connector
16 4.8 V – 600 mAh battery
17 Hook for placing the front panel during installation
18 Jumper for disabling the wall tamper switch
19 Wall tamper switch
20 Door tamper switch

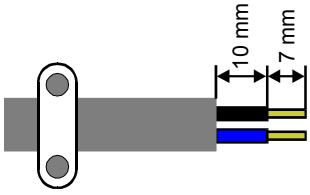
4 Connecting 230 VAC line power

▲ The power cable must have a diameter of 8 mm and include two conductors with a cross-sectional area above 0.75 mm^2 (maximum 2.5 mm^2).

▲ You must use standard cables conforming to the IEC standard or the harmonized CENELEC standards.

▲ The cable must be inserted through the punch-out hole **(1)** and be clamped in the anti-pulloff clamp **(2)**. The line power wires are connected to terminal **(3)**. The installer must use the designated cable entries and make sure that the punch-out holes are correctly opened and deburred so as not to damage the cables.

▲ The stripped part of the cable must not protrude by more than 10 mm from the line power terminal. 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.



5 Connecting the telephone line

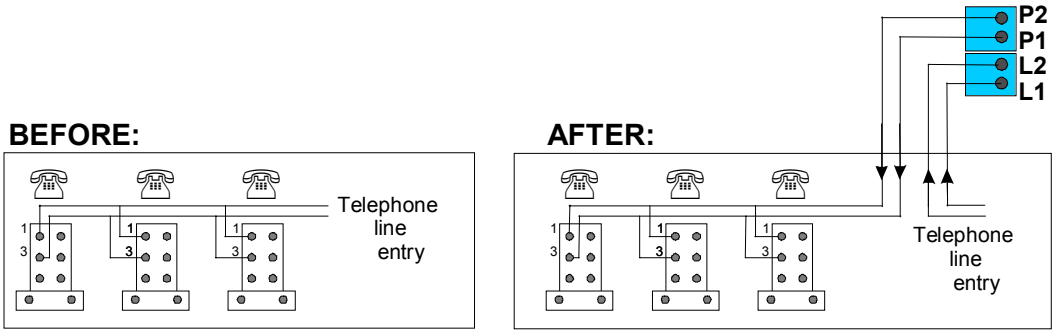
☎ The cable must be inserted through the punch-out hole **(5)** and be clamped in the anti-pulloff clamp **(6)**.

☎ The unit is connected to an analog PSTN 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.

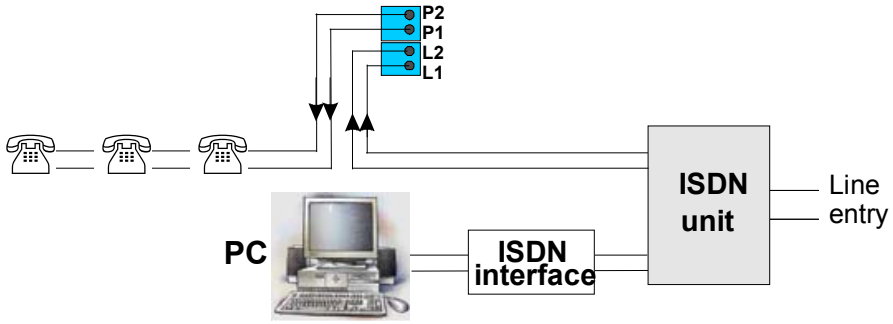
☎ The terminal must be connected as shown below:

The equipment cannot be connected directly to an ISDN line.

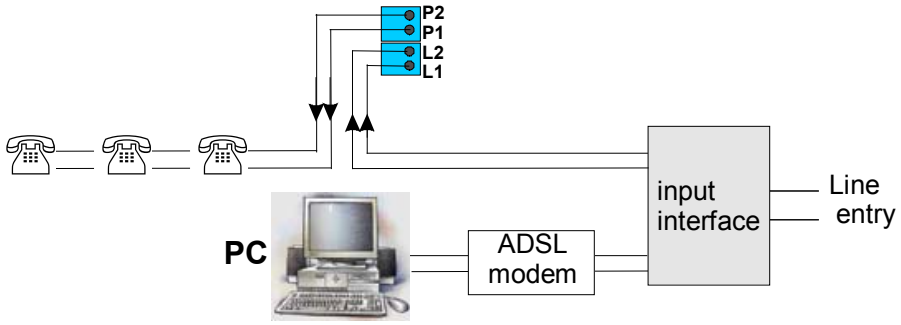
1/ Standard system with one or more telephone sets



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

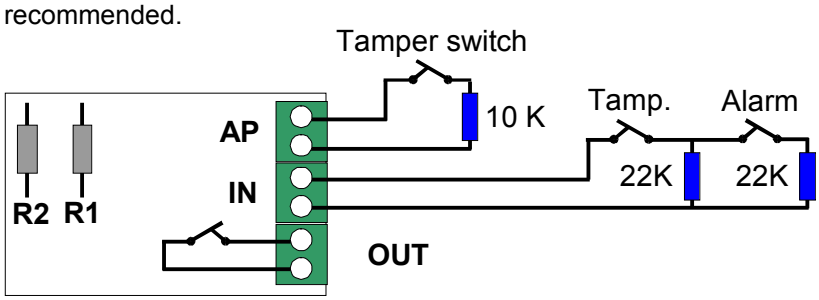


Restricted line: Make sure your customer does not have a restricted line and does not activate a restricted line by a code when leaving the premises.

6 Connecting hardwired devices

⊙ The hardwired device cables must be inserted through the punch-out hole **(11)** and be clamped in the anti-pulloff clamps **(8 and 10)**. All the cables must be secured by clamps such that they are at least 20 mm from the power terminals.

⊙ The use of foiled LY type telephone cables and of cables designed for alarm systems is recommended.



⊙ **Auxiliary tamper switch input:**

The auxiliary tamper switch input (**AP**) allows connection of an additional hardwired tamper switch.

Caution: This input is inserted in the tamper circuit of the alarm unit, which includes the door tamper switch and wall tamper switch.

The installer must integrate in the wiring, as shown on the diagram, the 10 kΩ resistor supplied with the extension card (*brown – black – orange)* and must disconnect resistor **R1** used as shunt when the auxiliary tamper switch is not used.

⊙ **Hardwired input:** The hardwired input **(IN)** allows connection of a hardwired contact and its tamper switch.

The installer must integrate in the wiring, as shown on the diagram, the two 22 kΩ resistors supplied with the alarm unit (*red – red – orange)* and must disconnect resistor **R2** used as shunt when the input is not used.

⊙ **Hardwired output:** The hardwired output **(OUT)** is used for connection of an indicator: siren, alarm light, etc.

The contact is a normally closed contact (NC) with a maximum interrupt rating of 100 mA – 48 volts.

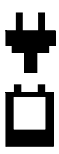
7 Power on

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.

When it is powered up, the alarm unit automatically connects to the phone line, analyses the level of this line and memorizes detected parameters. This assesment phase is necessary for the good operation of the "Call me" function.
It is thus essential that the phone line is connected when the alarm unit is powered up.

⊙ **Connect the 230 VAC input to the line power isolating switch:**

- The red LED flashes
- The **Power on** symbol comes on.
- The **Battery missing** symbol comes on.



⊙ **Install the battery pack:**

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

In order to enable you to make as soon as possible this system of safety completely operational, the battery of safeguard was charged in factory then placed in packing before the delivery. Respect the advised installation date which is indicated on the battery.

⊙ Connect the battery pack:

- The **Battery missing** symbol goes out after a few seconds.

The alarm unit is not operational until after a 16-hour battery charge period.

The alarm unit cannot be initialized and programmed until the line power and battery are connected and present.
If the battery is absent: The alarm unit does not start up. It generates one beep every second and the LED flashes.
If line power is missing: The LCD display remains blank.

⊙ Choosing a language:

- The alarm unit prompts you to choose one of the six available languages: French, English, German, Spanish, Italian.
- Use the ∧ and ∨ keys to run through the languages.
- To select a language, press **OK** when that language is displayed.

⊙ Selecting the Call Centre OR Protocol:

Depending on the alarm unit model, you are prompted to select the country call reception centre to which the calls will be directed or the transmission protocol used.

The selection is made when commissioning the alarm unit. It cannot be modified thereafter on the alarm unit. The only way of modifying it is from the Configurator.
Any modification of this choice can only be made by resetting the alarm unit and coming back to the initial factory programming.

1 - Selecting the call reception centre

- The alarm unit prompts you to select the call reception centre.
- Use the ∧ and ∨ keys to run through the call reception centres whose parameters are programmed in the alarm unit.
- To select a call reception centre, press **OK** and confirm when the required centre is displayed.
- The alarm unit opens the **Administrator menu.**

2 - Selecting the protocol

- The alarm unit prompts you to select the **Surtec** protocol, **Contact ID** protocol or transmission in **"Voice" mode**.
- Use the ∧ and ∨ keys to run through the protocols whose connection parameters are programmed in the alarm unit.
- To select a protocol, press **OK** and confirm when the required protocol is displayed.
- The alarm unit opens the **Administrator menu.**

◉ **Administrator menu:** The administrator menu includes seven submenus for customizing alarm unit operation.

- Use the ∧ and ∨ keys to run through the seven submenus of the administrator menu.

1 Tests	Test the detectors
2 Codes	Create and modify user codes
3 Set the Date and Time	Set the date and time
4 Log	View the log of the last 50 events
5 Parameter setting	Alarm unit remote parameter setting
6 Settings	Enable or inhibit audio echoes when using a remote control unit or wireless keypad.
7 Installer	Access the Installer menu

These submenus are described in the User Guide supplied with each alarm unit.

- Use the ∧ and ∨ keys to select the **Installer** submenu and press **OK** to confirm.
- Enter factory set installer code 2222 then press the **Menu** key. The installer submenu opens, the buzzer sounds and the siren generates a modulation.
- Press ↩ to exit the submenu or exit the administrator menu.

◉ **Installer menu:** Use the ∧ and ∨ keys to run through the 8 submenus of the **Installer** menu and press **OK** to access a submenu.

1 Radio	Store wireless components
2 Codes	Modify the installer code
3 Subscriber	Program the subscriber number
4 Park code	Program park code
5 Telephone	Program telephone numbers
6 Time delays	Program the time delays on entry and exit
7 Log	View the log of the last 500 events
8 Record	recording the 2 voice messages

- Press ↩ to exit a submenu and return to the administrator menu.

8 Radio: Store wireless components

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.

Reminder: The alarm unit manages **32 wireless channels:**

- **20 supervised channels** are reserved for the **detectors**
- **2 channels** are allocated to the **sirens**
- **5 channels** are allocated to the **keypads or remote control units**
- **5 channels** are preassigned to the **SOS transmitters**

The installer uses the factory programming to assign the detectors to the wireless channels according to the proposed scenarios.

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 different components should be memorised on a table in the vicinity of the unit before installing them. To avoid the risk of error or confusion between the various detectors or radio components, we recommend following the following order:

- Do not connect a battery to the radio components,
- Access sub-menu **" Radio ",**
- Enter the number of the channel to be recorded,
- Press the "OK" key **,**
  - if the unit displays **"Occupied",** select another channel or press the key « ✲ » " to clear this radio channel,
  - if the system displays **"Free"** it is possible to memorise a detector or radio component
- Press the "OK" key again**:** the unit displays **"Wait.... ",**
- Connect the battery(ies) - respecting polarities - to the detector or the element that you want to memorise on the selected channel,
- Wait for the stabilisation time required by some detectors,
- Follow the sefl-learning procedure specific to each component **(see section "Memorisation procedure" for each components),**
- When the alarm unit receives a radio signal, it displays the type of the radio peripheral. When the alarm control module memorises an opening detector it displays the management mode you have selected at the level of the detector:

  Status mode: In status mode, the control module receives a signal indicating that the detector is alarmed and it receives another signal when the detector returns to its standby state. In this mode, the control module continuously recognises the detector status and manages the latter.
  Impulse mode: In impulse mode, the detector only transmits a signal indicating its change of status into alarm mode and it is not managed by the control module.
- The central unit transmits:
  - an audible rejection signal (4 beeps) if the radio component is not recognised by the unit or if the radio component is already memorised on another channel. In this case, the unit displays **"Already recorded".**
  - an audible acceptance signal (long beep)
- Confirm the recording using the key **OK**,
- Disconnect the battery from the component,
- Perform the same operation for each component only connecting the battery to a single component at a time.

In case of an error during the memorisation procedure, we recommend removing the battery and maintaining the self-protection contact during 2 seconds in order to discharge residual voltage and then repeating the memorisation procedure.

9 Modifying the Installer Code

- **Access the Code submenu and press OK to confirm**
- **The alarm unit displays Installer and the installer code**
- **Enter the new 4-digit code and press OK to confirm**
- **The alarm unit acknowledges data entry by generating an acceptance signal if the code is accepted or a refusal signal if the code is rejected or is already used.**

10 Programming the Subscriber Number

- **Access the Subscriber submenu**
- **If the SurTec protocol is used for data transmission:**
  - Enter **2** and press **OK** to confirm
  - Enter the subscriber number on 8 digits. **If the subscriber number is on only 5 digits, enter 000 before the 5 digits.**
  - Press **OK** to confirm.
  - The alarm unit confirms data entry by generating an acceptance signal.
  - In case of an entry error, the alarm unit generates a refusal signal.
- **If the Contact ID protocol is used for data transmission:**
  - Enter **3** and press **OK** to confirm
  - Enter the subscriber number on 4 characters: numbers 0 to 9 and letters B (*), C (menu), D (chime), E (partial), F (total).
  - Press **OK** to confirm.
  - The alarm unit confirms data entry by generating an acceptance signal.
  - In case of an entry error, the alarm unit generates a refusal signal.

11 Programming the Park code

- **Access sub-menu and confirm by pressing the "OK" key,**
- **Enter the 4-digit park code and confirm by pressing the "OK" key**
- **The control unit confirms the data input by outputting an acceptance signal.**

Note: To delete an existing fleet code, press the "OK" key without entering a new code.

12 Programming the Telephone Numbers

To program a telephone number:

- **Access the Telephone submenu**
- **Enter the number corresponding to the position of the telephone number you wish to program (refer to the factory programming grid for the number to be programmed).**
- **Press OK to confirm.**

- ▲ **Depending on the number programmed, the alarm unit displays Alarm, Alarm backup, Technical, Technical backup, Remote parameter setting, etc.**
- ▲ **Press OK to confirm.**
- ▲ **Caution: To comply with the call procedure, the telephone number must be preceded by a wait for the dial tone (1) or a pause (2):**
  - ❑ **Press ✳ to program a wait for the dial tone. The letter W appears on the display.**
  - ❑ **Press the Menu key to program a pause. A comma appears on the display.**
- ▲ **Enter the telephone number and press OK to confirm**
- ▲ **The alarm unit confirms data entry by generating an acceptance signal.**

(1) **Wait for dial tone**: The alarm unit waits for the dial tone before dialling the telephone number.

(2) **Pause**: The alarm unit waits 2 seconds before dialling the telephone number.

If the alarm unit is connected to a PABX, it is necessary to dial 0 to access the outside line. The installer must enter the sequence: **w 0 w (or , 0,) followed by the telephone number.**

13 Programming the Time Delays on Entry and Exit

- ▲ **Access the Time delays submenu**
- ▲ **Enter the number of the radio channel for which you wish to program the time delays on entry and exit,**
- ▲ **Press OK to confirm: The alarm unit displays the channel number and the time delay on entry already programmed, if any**
- ▲ **Press OK to confirm.**
- ▲ **Enter or modify the time delay on entry and press OK to confirm,**
- ▲ **The alarm unit confirms data entry by generating an acceptance signal.**
- ▲ **Press ▼ to select the time delay on exit and press OK to confirm**
- ▲ **Enter or modify the time delay on exit and press OK to confirm,**
- ▲ **The alarm unit confirms data entry by generating an acceptance signal.**

No time delay must be programmed on channels 28 to 32, which are reserved for SOS transmitters.

14 Voice mode : Customization of voice messages

The alarm units allows to record two voice messages of 4 seconds each that you record yourself using the alarm unit microphone.

The first message, for instance “Intrusion Call”, can be assigned to “intrusion” alarms, the second message, for instance “Line power failure”, can be transmitted when a line power failure is detected.

▲ To record a message :

- ❑ Access menu of the installer menu **“Record”**
- ❑ Enter **“1”** to record message 1; or **“2”** to record message 2
- ❑ Confirm using the **“OK”** key
- ❑ Press the key  and hold it depressed
- ❑ Wait for a sound signal to be emitted before starting the recording
- ❑ Speak 30cm away from the alarm unit
- ❑ Stop pressing the key at the end of the message

▲ To listen to this message, briefly press on 

▲ To save this message, press the “OK” key : the storage of the message takes 10 seconds, after that the alarm unit deactivates supervision.

Once you have recorded and stored both messages, you have to set your alarm unit’s clock right again.

15 Log

The log contains all the events and the date and time settings of the alarm unit.

An event record includes the date, time, access code used and event that occurred: alarm, end of alarm, SOS, activations and deactivations of total and partial supervision, line power failures, completed calls with the number of attempts made, numbers called, installer actions, etc.

Use the ∧ and ∨ keys to run through the events.

16 Installation Test

▲ **Access the Test submenu of the administrator menu**

▲ **Proceed to test all the detectors:**

When a detector is triggered, the siren generates an audio signal and the alarm unit displays the channel number and detector status: Alarmed or End of alarm.

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.

▲ **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.

▲ **Perform an operational test of the sirens:**

Press the "✳ " key on the control unit: the siren of the control unit is activated for 1 second and the radio sirens are activated for 5 seconds.

▲ **Perform a operating test of the smoke detector**

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

▲ **Perform an operational test of the alarm unit self-protection**

▲ **Cut-off of the 230 VAC line power: The alarm unit displays the message Line power failure and the symbol a goes out.**

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.

Additional information on detector tamper switches

1/ Alarm unit using the SurTec protocol

- The alarm unit activates the siren whenever a detector tamper switch is triggered.
- The alarm unit makes a break-in alarm call whenever a detector tamper switch is triggered. The end of alarm call is not made until all the tamper switches of all the detectors are deactivated.

2/ Alarm unit using the Contact ID protocol

- The alarm unit activates the siren whenever a detector tamper switch is triggered.
- The alarm unit makes a break-in alarm call per detector when that detector tamper switch is triggered and when the tamper switch is deactivated.

17 Testing the Connection

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.

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 ▲ and ▼ keys. . This adjustment must be made with the loudspeaker on.

18 Resetting and coming back to the initial factory programming

You have the possibility to clear all alarm unit parameters and to come back to the initial factory programming.
Process to be followed :

- ▲ Disconnect the 230V main power supply and the battery,
- ▲ Press the « 0 » key and connect the main power supply while keeping the key pressed : the unit transmits an intermittent beep and the red indicator lamp flashes,
- ▲ Release the « 0 » key,
- ▲ Connect the battery : the indicator lamp goes out and the beep stops,

The unit displays « …… », clears all programmed data, comes back to the initial factory programming and displays the language menu

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.

Factory Settings

Telephone no.	No. 2 : Alarm No. 3 : Alarm backup No. 4 : Technical No. 5 : Technical backup No. 6 : Remote parameter setting No. 7: Service server:	 modem modem

Calling sequence	❑ Alarm sequence: 5 tests on No. 2, then 5 on No. 3, ❑ Technical sequence: 5 tests on No. 4, then 5 on No. 5, ❑ Remote parameter setting: 4 tests on No. 6 ❑ Service server sequence: 4 tests on No. 7

Cycle test = Once a day	

Settings RESIDENCIA 3		Partial	Sequence	Siren	Hardwired output	Chime	L: listening I: intercom	Audio alarm ack.	Audio call completion ack.	Time delay on entry	Time delay on exit	SURTEC alarm	SURTEC idle	ContactID
Group 1 (temporisé)	Hardwired	X	2	X	X		I	N	N	Ss condition		15	09	(130)
	Channel 1	X	2	X	X	X	I	N	N	30s	30s	32		(130)
	Channel 2	X	2	X	X		I	N	N	Ss condition		33		(130)
	Channel 3	X	2	X	X		I	N	N	Ss condition		34		(130)
	Channel 4	X	2	X	X		I	N	N	Ss condition		35		(130)
	Channel 5	X	2	X	X		I	N	N	Ss condition		36		(130)
Group 2 (immédiat)	Channel 6	X	2	X	X		I	N	N			61		(130)
	Channel 7	X	2	X	X		I	N	N			62		(130)
	Channel 8	X	2	X	X		I	N	N			63		(130)
	Channel 9	X	2	X	X		I	N	N			64		(130)
	Channel 10	X	2	X	X		I	N	N			65		(130)
	Channel 11	X	2	X	X		I	N	N			66		(130)
Group 3 (immédiat)	Channel 12		2	X	X	X	I	N	N			67		(130)
	Channel 13		2	X	X		I	N	N			68		(130)
	Channel 14		2	X	X		I	N	N			69		(130)
	Channel 15		2	X	X		I	N	N			70		(130)
	Channel 16		2	X	X		I	N	N			71		(130)
Group 4 (immédiat)	Channel 17		2	X	X		I	N	N			72		(130)
	Channel 18		2	X	X		I	N	N			73		(130)
	Channel 19		2	X	X		I	N	N			74		(130)
	Channel 20		2	X	X		I	N	N			75		(130)
SOS	Channel 28		2	Sil.	Sil.		I	N	N			01		(150)
	Channel 29		2	Sil.	Sil.		I	N	N			02		(150)
	Channel 30		2	Sil.	Sil.		I	N	N			03		(150)
	Channel 31		2	Sil.	Sil.		I	N	N			04		(150)
	Channel 32		2	Sil.	Sil.		I	N	N			04		(150)

Systèm	Total								O			94	95	401
	Partial								O			77	95	456
	Fraud		2									29		461
	Test		3									92		602
	Duress		2				E					30	09	121
	Battery		3							30mn		91	90	302
	Line power		3							1h		21	22	301
	Tamper		2	X	X		I					16	09	137
	Det. tamper		2	X	X		I					05	09	383
	Battery		3									06	09	384
	Superv											47	09	381
	SOS		2				E	O				11		120
	Fire		2	X	X		I					46		110
	Round		3									78		139

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