

SH601AU

| Alarm pendant



INSTALLATION MANUAL

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We would like to thank you for buying an alarm pendant. To install the pendant in the best conditions, we advise you to do the following:

1. read the precautions to be taken (below) as well as the “Introduction” and “Operation” chapters,
2. follow the chronological order of the manual, which describes the different operations to be performed step by step.

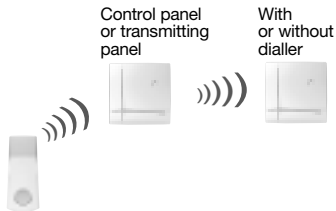
### Precautions to be taken:

- The pendant has been designed with a non-dismountable enclosure to guarantee that it is watertight. The batteries cannot be replaced. **Change the pendant at the end of its battery life.**
  - In its factory configuration, the pendant's battery life is 10 years (based on 1 activation per day). Depending on its use and possible reprogramming, **the pendant's battery life may be reduced to roughly 5 years (based on 5 activations per day).**
  - In normal conditions of use, **the sliding part of the pendant should be kept closed** to prevent premature battery wear.
  - If the user has a **pacemaker**, s/he must check with his/her doctor whether the device used is **compatible with the pendant**. The pendant's radio characteristics are given in the chapter entitled “Technical data” at the end of this manual.
- If the pendant's batteries are not used for long periods of time, this may stop the pendant working. To prevent this from happening, it is strongly advisable to **perform a weekly battery test**, as described in the chapter entitled “Battery status indication”. The user can also test the status of the batteries at any time to check that the pendant is working properly.
  - The pendant has an average radio range with respect to the control panel (or dialler) of 200 m in free field conditions. This means that it will not work outside of this range given that the control panel (or dialler) will not be able to receive the messages transmitted by the pendant. Likewise, the control panel (or dialler) will not transmit alarms to the pendant user if the user is located outside of this range. Furthermore, owing to the composition of certain types of construction materials (some of which prevent or distort the propagation of radio waves; see control panel manual), and depending on how the pendant is activated and worn (e.g. close to the body), the radio range can be reduced. Taking into account these requirements, and in order to guarantee the best operating conditions for the user, it is essential to **test the pendant's radio coverage as soon as it is installed**. This test is described in the chapter entitled “Testing operation and radio coverage in test mode”.
  - Alarms transmitted by the pendant are sent to the control panel (or dialler) installed in the user's home. They are taken into account according to the configuration chosen when the pendant is installed. **The pendant is not a medical tele-assistance device. It only enables a certain number of alarms defined in this manual to be triggered. However, whatever its configuration, it cannot guarantee that the user will receive personal or emergency assistance.** When the pendant is connected to a remotely monitored alarm system, the alarms transmitted to the remote monitoring service will be processed according to the provisions outlined in the remote monitoring contract. Unless the emergency calls issued by the pendant are transmitted to a remote monitoring centre fitted with a medical unit, the alarms issued will not be treated as medical emergencies. It is therefore up to pendant users wishing to be connected to a **remote monitoring company to ensure the company offers this type of service**, and notably to check whether it provides medical assistance.

## 1. Introduction

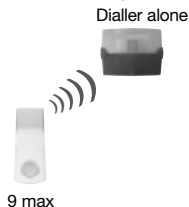
- The pendant can be used to send messages 24 hours a day whether the alarm system is armed or disarmed. Depending on its configuration, the pendant can be used to:
  - transmit alarm messages to a remote monitoring service or to an individual's phone via the telephone dialler,
  - trigger an audible alarm via the system's sirens,
  - activate beeping on the alarm control panel.
- It can be worn:
  - as a pendant using the neck cord,
  - or
  - clipped to a belt using the holder. The holder can also be fixed to a wall.
- The pendant is compatible with TwinBand® alarm systems (434.5/869 MHz). It transmits radio messages to the system (control panel or dialler) with which it has been programmed to operate:

### 1<sup>st</sup> configuration: with control panel



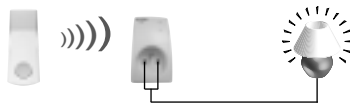
### 2<sup>nd</sup> configuration:

without control panel

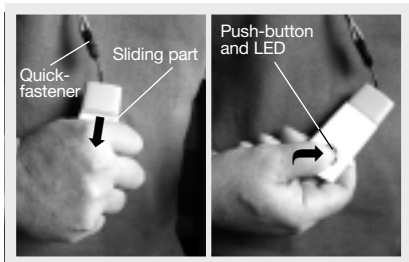


**IMPORTANT:** the pendant cannot be recognised directly by a dialler alone SH511AX, SH512AX, SH513AX and SH514AX.

**3<sup>rd</sup> configuration:** can be combined with the first two and makes it possible to use the pendant's push-button to operate electrical devices or lighting via control receivers or remote-controlled sockets.



## 2. Operation



- The pendant can be activated by pulling the **sliding part** down or by pressing on the **push-button** (for more than 2 sec.). If the sliding part stays in downward position, the message is transmitted every 15 min.
- The pendant is factory-configured to send the “Silent alarm” command. **The sliding part and push-button** can be programmed separately to send the “Alarm” or “Local call” command (see chapter on “Main configuration operations”).
- The **push-button** can **also** be reprogrammed to send “**Comfort**” type commands (see chapter on “Advanced programming”) in order to:
  - trigger a fire alarm,
  - activate beeping or the door bell function on the control panel,
  - operate an electrical device or lighting via external receivers or remote-controlled sockets.
- The push-button **LED** shows that the pendant is working properly:
  - it indicates the battery status when the button is briefly pressed,
  - it confirms the different radio commands transmitted by the **sliding part or the push-button**:
    - \* “**Call**” type (“Alarm”, “Silent alarm” or “Local call”): the LED flashes red,
    - \* “**Comfort**” type: the LED flashes green (push-button only).Each command sent by pressing the push-button for longer than 2 seconds (LED flashes green or red), is preceded by a “battery status test” indicated by the LED briefly flashing red.
- it confirms configuration and indicates the function allocated to the sliding part or push-button (in programming mode).

## 3. Preparation

### 3.1 Guarantee sticker to be returned

Guarantee sticker



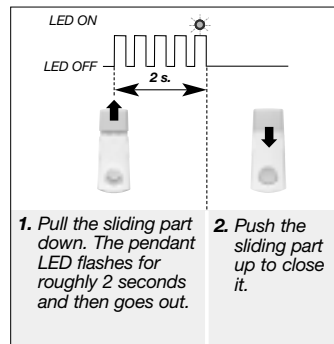
Remove the pre-cut part of the sticker and stick it to the guarantee certificate in the user manual supplied with the control panel. If you are adding the siren to an existing system, use the guarantee sticker provided with this product.

### 3.2 Product label to be kept

The product label, on the back page of the manual, should be kept. You will be asked to provide it should you need to get in contact with the technical support service regarding the pendant.

### 3.3. Activating the pendant

This operation should only be performed when the pendant is first used:



## 4. Recognition programming

**IMPORTANT:** when performing recognition programming, the product does not need to be placed next to the control panel (or dialler). In fact, we advise you to move it away slightly (place the product at least 2 m away).

### 4.1 Programming for use with the control panel

Programming makes it possible for the control panel to recognise the pendant.

1. When performing recognition programming, the control panel must be in installation mode. If it is not, enter:

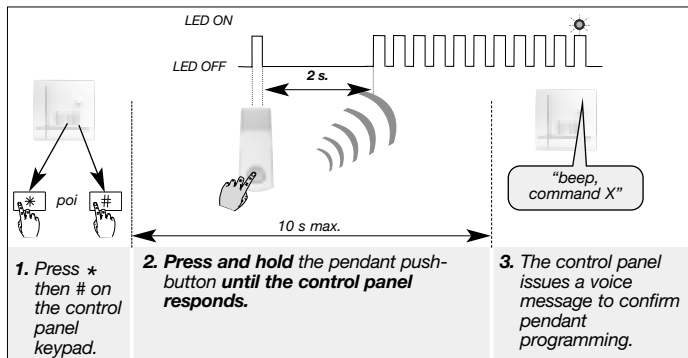
#  2  #  #  
master code

then

#  3  #  #  
installer code

**ADVICE:** before doing anything, study the step 2 programming sequence. Check the programming LED making sure to press the push-button for the required amount of time.

2. Perform the next programming step:



**IMPORTANT:** the control panel indicates a programming error by issuing 3 short beeps. When this happens, perform programming again from the start.

## 4.2 Programming for use with the dialler

**IMPORTANT:** the pendant cannot be recognised directly by a dialler alone SH511AX, SH512AX, SH513AX and SH514AX.

The pendant is **only** programmed to operate with a dialler **when there is no alarm control panel in the system.**

1. To perform the pendant programming operation, the dialler must be in installation mode. If it is not, enter:

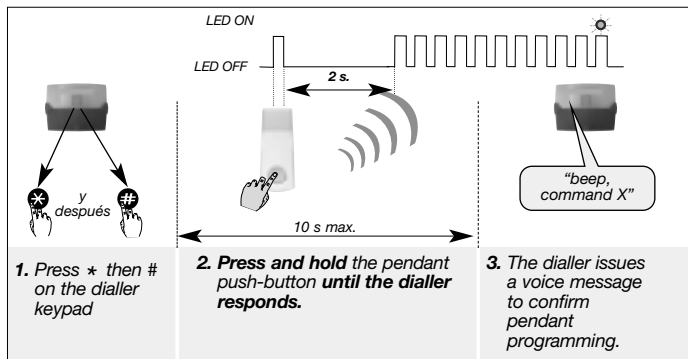
● ● ● ● ● # 2 # #  
master code

then

● ● ● ● ● # 3 # #  
installer code

**ADVICE:** before doing anything, study the step 2 programming sequence. Check the programming LED making sure to press the push-button for the required amount of time.

2. Perform the next programming step:



**IMPORTANT:** the dialler indicates a programming error by issuing 3 short beeps. When this happens, perform programming again from the start.



## 5. Main configuration operations

The sliding part and the push-button are factory-programmed for the **“Silent alarm”** command.

Pendant programming makes it possible to customise the command sent by the sliding part and/or push-button, depending on the user's needs:

1. **Choose whether you want the sliding part or the push-button to trigger the alarm.**
2. Choose a **command n°** from the table below **to correspond to the chosen trigger** (sliding part or push-button).

Command description	Command n°	System response in user mode depending on the command sent		
		Control panel	Siren	Dialler
Alarm	22	sounding + control panel relay triggering: 90 sec.	sounding: 90 sec.	transmission
<b>Silent alarm</b> (factory)	24	control panel relay triggering: 90 sec.	no response	transmission
Local call	28	“beep, beep, beep, beep, Urgent call...”: 3 min.	no response	no response

3. Perform programming according to the sequence described on the next page.

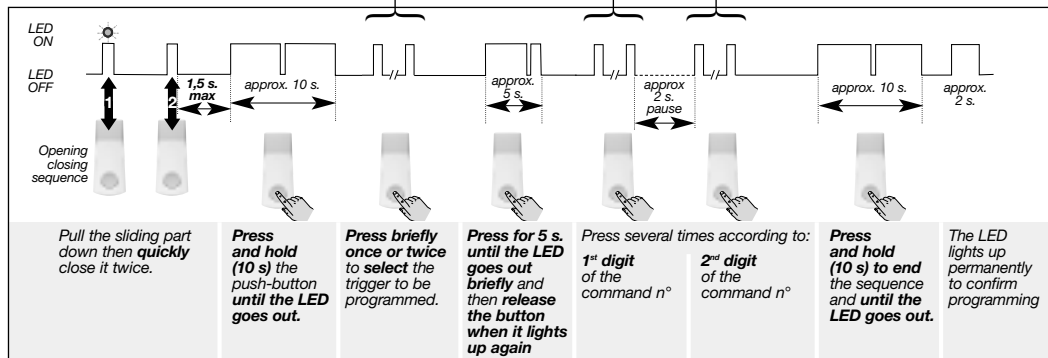
**ADVICE:** before doing anything, study the programming sequence and example on the next page. Check the programming LED making sure to press the push-button for the required amount of time.

**IMPORTANT:** when the LED flashes red 3 times in a row during or after programming, this indicates that there has been a programming error. When this happens, perform programming again from the start.

## A. Programming sequence

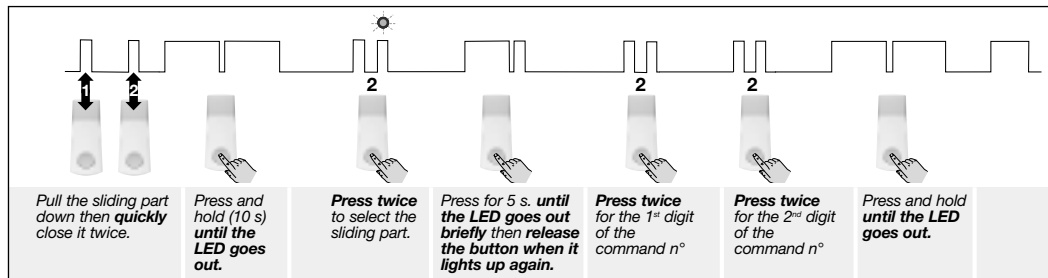
Each digit in the command n° corresponds to the number of times the push-button is pressed:

Trigger chosen		Choice of command n°	Number of times pressed	
			1 <sup>st</sup> digit	2 <sup>nd</sup> digit
Push-button	Press once	Alarm: 22	Press twice	Press twice
Sliding part	Press twice	<b>Silent alarm (factory): 24</b>	Press twice	Press 4 times
		Local call: 28	Press twice	Press 8 times

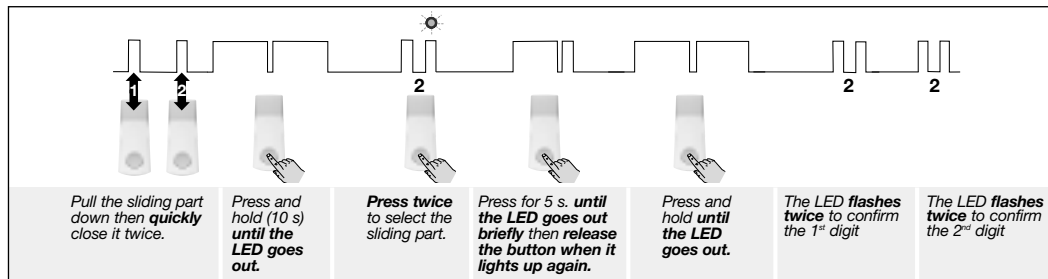


## B. Example of programming

- Programming the sliding part to trigger on “Alarm”:
  - to select the **sliding part**, press the push-button: twice
  - the **command n°** corresponding to the “Alarm” is: 22



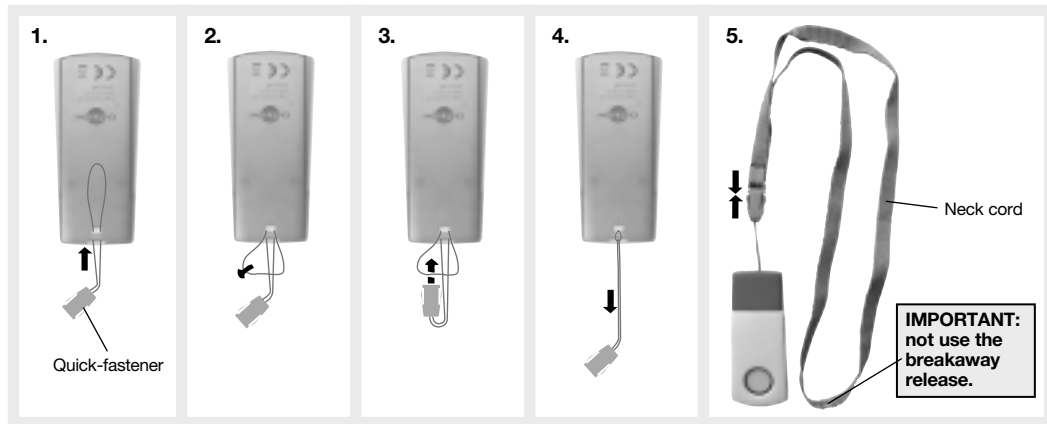
## • Checking programming



## 6. Assembly

### 6.1 Assembling the quick-fastener and neck cord

Assemble the quick-fastener and insert the neck cord as shown below:



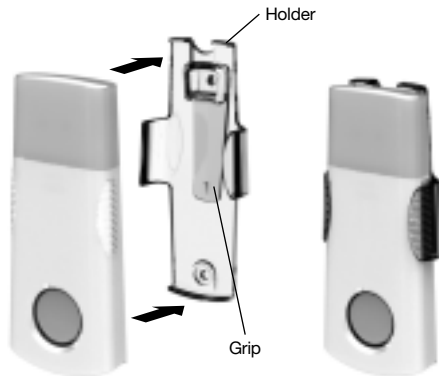
The breakaway release provides additional safety by releasing the neck cord if it is pulled on too hard. The neck cord and quick-fastener are delivered in the same box. They must only be replaced with the products available through the after-sale service.

## 6.2 Assembling the holder

The pendant can be clipped to the holder:

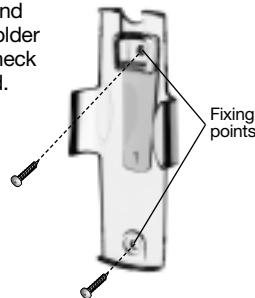
### 1. Holder clipped to a belt

Clip the pendant on the holder.



### 2. Holder fixed to a wall:

- A.** Before fixing the holder, place it with the pendant close to the fixing location and check the radio link with the control panel (or dialler).
- B.** Mark the fixing points.
- C.** Choose appropriate wall plugs in relation to the size of the screws and then drill holes in the holder and the wall.
- D.** Insert the plugs and then screw the holder to the wall and check it is properly fixed.
- E.** Clip the pendant on to it.



## 7. Testing operation and radio coverage in test mode

**IMPORTANT:** Whatever the command sent by the sliding part or push-button:

- the advantage of the test mode is being able to test the pendant without reducing the radio range and:
  - with sounding that lasts a shorter time: control panel (3 s.), siren (5 s.)
  - without triggering telephone transmission,
- the siren's sounding power can cause hearing disorders and the necessary precautions must therefore be taken during testing.

### 1. Switch the control panel (or dialler) to test mode:



"beep, test mode"

### 2. Test operation:

Each command sent when the push-button is pressed for more than 2 s (red or green flashing) is preceded by a "battery status test" which briefly causes the LED to light up red.

- Press **the push-button** for 2 seconds (or pull on **the sliding part**), the pendant LED flashes for roughly two seconds before going out.  
If the sliding part remains open, the message is re-transmitted every 15 min.
- Use the table opposite to check the **control panel** response. **The dialler, in test mode**, responds with a sharp beep and does not trigger transmission whatever the command sent by the pendant.

Command description	Control panel response in test mode
Alarm	sounding: 3 s.
<b>Silent Alarm</b> (factory setting)	"beep, alarm, command n°"
Local call	"beep, emergency call, command n°"
Fire alarm (1)	"beep, fire alarm, command n°"
Door bell (1)	"ding, dong, command n°"
Audible signal (1)	"beep, beep, beep, beep"

(1) "Comfort" type command (green). Only possible with push-button (see chapter on "Advanced programming").

### 3. Test radio coverage:

The procedure described below must be followed to test radio coverage:

Pull down on the sliding part of the pendant **in each place** occupied by the user (each room, garage, cellar, loft, garden, etc.) in order **to check that the radio link with the control panel (or dialler) works**. You will need to do this with the help of a second person.

**If necessary, and in order to increase radio coverage, it is possible to:**

- A.** adjust the position of the control panel (or dialler),
- B.** use the alarm control panel via the system's radio relay (see "Advanced programming/Programming a pendant relayed to the control panel").

### 4. Switch the control panel (or dialler) back to normal user mode:

#  1  #

master code



*"beep, off"*

**REMINDER:** during normal operation, make sure the pendant's sliding part is closed to prevent premature battery wear.

## 8. Performing a real test

### IMPORTANT

- You are now going to perform a real test in user mode. Depending on the command sent by the sliding part or the push-button, this test may trigger the alarm devices and telephone transmission.
- We advise you to warn your correspondents beforehand, as well as neighbours, and not to let the sirens sound for too long. The siren's sounding power can cause hearing disorders and the necessary precautions must therefore be taken.

1. Switch the control panel (or dialler) to user mode (see previous section).
2. **A.** Pull down on the sliding part. The pendant LED flashes for roughly 2 s and then goes out.
  - Close the sliding part.
  - Using the table opposite, check that the system responds to the command sent.
- B.** Press the push-button for several seconds and check the system responds.

Command description	System responses in user mode				
	Control panel	Outdoor siren	Dialler	Control panel alarm memory	Control panel events log
Alarm	sounding: 90 s (1)	sounding: 90 s	transmission: alarm	yes	yes
<b>Silent alarm</b> (factory setting)	no sounding (1)	no response	transmission: alarm	yes	yes
Local call	"beep, beep, beep, beep, Emergency call.." 3 min	no response	no response	yes	no
Fire alarm (2)	fire sounding: 5 min	fire sounding: 5 min	transmission: fire alarm, command n°	yes	yes
Door bell (2)	ding dong	no response	no response	no	no
Audible signal (2)	"beep, beep, beep, beep"	no response	no response	no	no

(1) For control panels with a relay, the control panel relay is triggered for 90 s.

(2) "Comfort" type command (green). Only possible with the push-button (see chapter on "Advanced programming").



## 9. Advanced programming

### 9.1 “Comfort” type application

**REMINDER:** the push-button can also be reprogrammed to send “Comfort” type commands (green LED).

- **General commands:** using the table below, choose a **command n°** then programme **the push-button** using the sequence described in step 3 of the chapter on “Main configuration operations”

Command description	Command n°	Control panel response	Outdoor siren	Dialler
Fire alarm	32	specific fire sounding: 5 min	fire sounding: 5 min	fire transmission
Door bell	38	ding dong	no response	no response
Audible signal	42	beep, beep, beep, beep	no response	no response
Trigger disabled	44	-	-	-

- **Commands from external receivers or remote-controlled sockets** (also consult the manual for these products)

1. Using the table opposite, choose a **command n°** and then configure **the push-button** according to the sequence described in step 3 of the chapter on “Main configuration operations”.

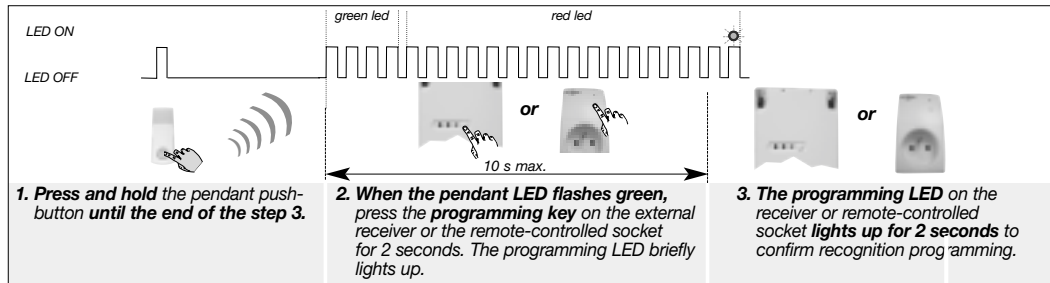
**Each digit of the command n° corresponds to the number of times the push-button is pressed (digit “0” = button pressed 10 times in a row).**

Command description	Command n°
Light pulse (*)	50
Light toggle switch	56
Light timer	58
Relay 1 pulse (*)	60
Relay 1 toggle switch	66
Relay 1 timer	68
Relay 2 pulse (*)	70
Relay 2 toggle switch	76

Command description	Command n°
Relay 2 timer	78
Relay 3 pulse (*)	80
Relay 3 toggle switch	86
Relay 3 timer	88
Relay 4 pulse (*)	90
Relay 4 toggle switch	96
Relay 4 timer	98

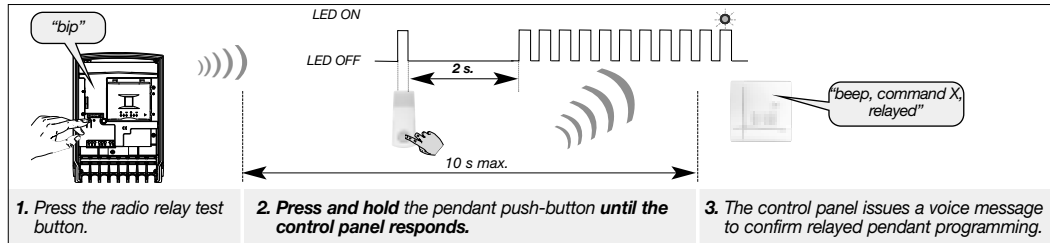
(\*) External receiver command only.

## 2. Configure the pendant to be recognised by the external receiver or remote-controlled socket.



## 9.2 Programming a pendant relayed to the control panel

To increase radio coverage, the pendant can be relayed to the control panel as a last resort. In this case, the pendant is no longer directly linked to the control panel. To perform this operation, the pendant must first be deleted from the control panel (like a command) and the radio relay must be programmed to be recognised by the control panel (see radio relay manual). **Next, the pendant must be programmed to be recognised by the control panel via the radio relay. To do this, perform the programming sequence below:**



## 10. Battery status indication

### Testing the battery status

**The system control panel or telephone dialler do not provide a “batteries flat” indication.**

- Briefly press (less than 2 s) the pendant push-button. The red LED should light up briefly indicating that the batteries are still charged.
- When the pendant's batteries are flat, the LED does not light up when the push-button is briefly pressed. When this is the case, the pendant must be changed within one month.

**REMINDER: The pendant has been designed with a non-dismountable enclosure to ensure it is watertight. The batteries cannot be replaced. The pendant must be replaced when it reaches the end of its battery life.**

## 11. Technical data

- Radio:
  - transmission: TwinBand® (434.5/869 MHz)
  - ERP (effective radiated power): 10 mW max.
  - average radio range: 200 m in free field conditions
- Customisation of commands issued: push-button and sliding part can be programmed separately
- Use: portable
- Enclosure: watertight and non-dismountable
- Power supply: 2 non-replaceable CR 2016 type 3 V lithium batteries
- Dual-coloured LED to indicate:
  - battery status
  - radio command transmission
  - programming
- Battery life = product service life:
  - 10 years based on 1 activation per day
  - 5 years based on 5 activations per day
- Degree of protection: IP 67 (can be immersed at a depth of 1 m for 30 min.)
- Colour: White and grey
- Weight: 33 g
- Operating temperature: + 0 °C to + 55 °C
- Dimensions (L x w x h): 37.3 x 14 x 88 mm
- Delivered with: 1 quick-fastener, 1 neck cord (fitted with a breakaway release) and 1 clip holder



## DECLARATION OF CONFORMITY

Manufacturer: **Hager Security SAS**

Address: **F-38926 Crolles Cedex - France**



Product type: **Alarm pendant**

Trade mark: **Daitem**

We declare under our sole responsibility that the product to which this declaration relates is compliant with the essential requirements of the following directives:

- **R&TTE Directive: 99/5/EEC**
- **Low voltage directive: 2006/95/EC**
- **Directive ROHS: 2002/95/EC**

in compliance with the following harmonised European standards:

Products code	SH601AU
EN 300 220-2 V3.2.1	X
EN 50130-4 (95) + A1 (98) + A2 (2002)	X
EN 60950 (2006)	X
EN 301 489-1 V1.8.1	X

This product can be used in all EU, EEA countries and Switzerland.

Crolles, 02.01.2013

Signature:

Patrick Bernard,  
Director of Research  
and Development

## TECHNICAL SUPPORT

*To obtain advice when installing this product or before returning equipment, please contact the technical support team.*

- *Product information can be found on the product label on the last page of this manual.*
- *The technical support telephone number is provided in the documents supplied with the main product (control panel or dialler).*

## Product label

This label must be kept as you may be asked to provide it when you contact the technical support team concerning the pendant.



**Waste processing of electrical and electronic devices at the end of their service life** (Applicable in European Union countries and other European countries with a waste collection system). Used on products or product packaging, this symbol indicates that the product must not be thrown out with household waste. It must be taken to a waste collection point for electrical and electronic product recycling. When you make sure that this product is disposed of in the most appropriate manner, you are helping to protect the environment and human health. If you would like additional information concerning the recycling of this product, please contact your town/city council, nearest waste collection centre or the shop where you bought the product.